

APPENDIX E Wetland Technical Report Appendices B to E

Tier 2 Environmental Impact Statement

I-69 Section 6

Martinsville to Indianapolis

Section 6—Final Environmental Impact Statement

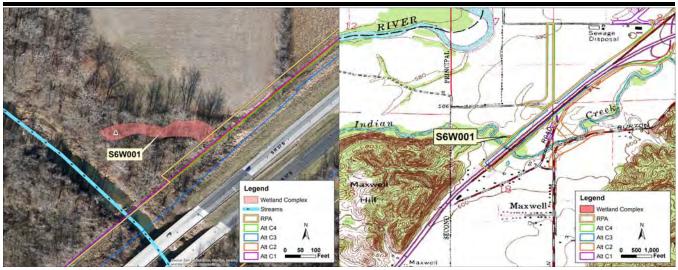




APPENDIX B

Wetland Site Forms and InWRAP Data Sheets

Wetland S6W001



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 County: Morgan **T11N** Physiographic Region: Martinsville Hills Township: Interior Plateau R1E **Ecoregion:** Range: **Natural Region:** Highland Rim Section: 18 Size of wetland complex (acres): 0.3087 Quarter: Ν

USACE JurisdictionYesLatitude:39.394297IDEM Jurisdiction:YesLongitude:-86.459918

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Seasonally Flooded Basin	PEM	0.3087	fair	fair		Alt C1	0.00	0.0%
							Alt C2 0.00 Alt C3 0.00	0.00	0.0%
S6W001A						fair		0.00	0.0%
							Alt C4	0.00	0.0%
							RPA	0.01	3.1%



Polygon S6W001A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017	
Wetland Site Name: N/A	
Data Reference #: S6W001	
Date of Site Visit: Wednesday, October 21, 2015	
Tier 1 Summary:	
a. Total Wetland Area (acres): 0.3087	
b. Wetland size and connectivity - contribution to animal habitat:	
Valuable More Favorable Favorabl	e Neutral
c. Surrounding land use - numerical rank (max. = 1): 0.76	
d. Value surrounding area adds to animal habitat: Valuable Favorabl	e Low
Tier 2 SUMMARY: Polygon ID	S6W001A
a. Indiana Wetland community type: Seasonally Flooded Basin	
b. Standing water - contribution to animal habitat: Valuable Favorabl	e Neutral
c. Disturbances to site:	
d. Exotic species rating: Good Medium	Poor
e. Special Hydrologic Conditions Observed: None	
f. Special Community Type: None	
g. Rare-Threatened-Endangered Species: None	
h. Polygon Quality Descriptor: Good Medium	Poor
Tier 3A SUMMARY:	
a: Dead woody material as indicator of animal habitat: Valuable Favorabl	e Neutral
b. Water quality protection - numerical rank (6 max.): Good Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma 4 Good Medium	Poor
Tier 3B SUMMARY:	
a. Zonation and interspersion as indicator of animal habitat: Valuable Favorabl	e Neutral
b. Stratification as indicator of animal habitat: Valuable Valuable	Neutral
c. Number of dominant plant taxa observed: 5 Good Medium	_
d. Average coefficient of conservatism: 3.8 Good Medium	
e. Tree canopy as indicator of animal habitat: Valuable	Neutral
f. Mature trees as indicator of animal habitat: Valuable Valuable Favorable	
g. Total hydrophytic taxa observed: 27 Good Medium	
6. Total Hydrophytic take observed:	

0 Residential - single family

Commercial or multifamily residential

30 Agricultural - tilled

0 Agricultural - pasture

Recreation - green space, mowed

NWI Polygon # S6W001A	Data Reference# S6W001
see table on page one)	
Tier 2: Individual Polygon: Preliminary Asto be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
DepressionalSlope✓ Floo Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	lygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom present	tArtificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
easonally Flooded Basin .6 Disturbances of Hydrology (check all that apply)):
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
 Phragmities	S Reed Canary Grass
Purple Loosestrife	S Other (list):
8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
lone	
9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
<u> </u>	
.11 Wetland Polygon Quality Descriptor (see: Wetl	
Good✓ _Medium	_Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	ı.1 I	Notal	ole Features that influence water quality and hydrology:
Es	stima	ated h	nerbaceouis plant cover (percentage) in the polygon100-7575-5050-25 $\underline{\checkmark}$ <25
Es	stima	ated \	woody plant foliar coverage in the polygon
Ar	nou	nt of	dead woody material on the soil surfacenilscatteredfrequen
3a	.2 \	Wate	r Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	Y (Y	(N) N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y) N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Υ	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0
3a	ı.3 l	Flood	I and Stormwater Storage / Attenuation Questions:
1.	Υ	(N)	If wetland in question is a depressional wetland answer 1a, in not, answer 1b 1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)
	Ŷ) N	that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y) N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y) N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y) N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

wetland site).

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:							
1. How may vegetation zones are evident in this wetland	polygon?1						
1b. If only one vegetation zone is evident, which best describes the site?							
Polygon compoosed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon.							
Polygon composed of a single vegettation type with more or less uniform texture across the polygon.							
2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone?							
Type One Interspersion	Type Two Interspersion						
3b.2 Dominant Plant Species: Vegetation Zone A							
What % of the polygon does this vegetative zone occupy	?						
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 75	5%						
Is there notable layering/stratification in this vegetation zo	one? No						
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms exte							
a. Symphyotrichum lanceolatum	d						
b. Bidens frondosa	e						
c. Persicaria punctata	f						
Dominant Shrub Species listed in order of relative abund	ance.						
a	C						
b	d						
Dominant Tree Species listed in order of relative abunda	nce.						
a. Acer saccharinum	c						
b. Platanus occidentalis	d						
Tree and shrub canopy: nil separate, seldom tou							
Mature trees (>12" dbh): ■ yes □ no							
Other remarks (include personal comments about what a	adds to or detracts from the quality of this						

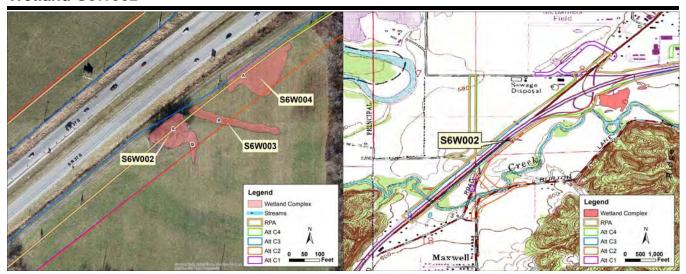
NWI Polygon # S6W001A	Data Reference# S6W001
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more the abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants horsetail, scouring rush spp. (Equisetum) 2 ferns: marsh shiled fern spp. (Dryopteris) 7 ferns: marsh shiled fern spp. (Osmunda cinnamomea) 9 froyal fern (Osmunda regalils) 8 ferns: fern (Onoclea sensibilis) 4 fother: species (if known marsh club moss (Selaginella apoda) 4 fothers: lvs. floating or submergent fbladderwort spp. (Utricularia) 10 focontail (Ceratophyllum demersum) 1 floating or submergent fbladderwort spp. (Utricularia) 10 floating or submergent fbladderwort spp. (Lemnaceae) 3 floating or submergent	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6arrow-head spp. (Sagittaria) 4*green dragon (Arisaema dracontium) 6Jack-in-the-pulpit (Arisaema triphyllum) 4 _pickerel weed (Pontederia cordata) 5 _*skunk cabbage (Symplocarpus foetidus) 8 _*water arum (Calla palustris) 10 _water plantain (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorled _*bedstraw spp. (Gallium) 6 _beggar's tick spp. (Bidens) 3 _blue vervain (Berbena hastata) 3 _boneset (Eupatorium perfoliatum) 4 _bugleweed spp. (Lycopus) 5
*water lily (Nymphaea tuberosa) 6	✓ clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	✓ giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	✓ moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Friophorum) 10	
	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
✓ b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2
✓ c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2 *additional = 8	Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3 additional	
*spiderlily (Hymenocallis occidentalis) 9	
	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5 *yellow-eyed grass (Xyris torta) 9	golden ragwort (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix Iaricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
✓ stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
✓ poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
water parentpe (Claim saave) s	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
SIGSIDOITY (OUTIDAGAS) A	

Wetland S6W002



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 Morgan County: T11N Physiographic Region: Martinsville Hills Township: Interior Plateau R1E **Ecoregion:** Range: **Natural Region:** Highland Rim Section: 8 Size of wetland complex (acres): 0.2079 Quarter: SW

USACE JurisdictionYesLatitude:39.398579IDEM Jurisdiction:YesLongitude:-86.452489

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
						fair	Alt C1	0.17	100.0%
S6W002A		PFO	0.1683	fair	fair		Alt C2	0.17	100.0%
	Floodplain Forest						Alt C3	0.00	0.0%
							Alt C4	0.09	52.2%
							RPA	0.09	52.4%
				poor			Alt C1	0.03	74.7%
	Seasonally	easonally PEM	0.0396		poor		Alt C2	0.03	75.5%
S6W002B						fair	Alt C3	0.00	0.0%
	Flooded						Alt C4	0.00	0.0%
	Basin						RPA	0.00	0.0%



Polygon S6W002A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W002			
Date of Site Visit: Tuesday, May 12, 2015			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.2079			
b. Wetland size and connectivity - contribution to animal ha	abitat:		
Valuable I	More Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1): 0.80)		
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID	6W002A
a. Indiana Wetland community type: Floodplain Forest			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: road/railroad			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species:			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma	3 Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	: Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 11	Good	Medium	Poor
d. Average coefficient of conservatism: 2.3	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable	,	Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed: 23	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

Tier 2 SUMMARY:	Polyg	S6W002B	
a. Indiana Wetland community type: Seasonally Flooded Basin			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site:			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species:			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed:1	Good	Medium	Poor
d. Average coefficient of conservatism:3	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:5	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

Tier 1: Assessment Overview 1.1 Site Identification:				
Wetland Site Name: N/A				
Ownership (if known): N/A				
USGS Topographic Quadran	gle: Martinsville			
USGS Watershed map 14-Di	git HUC: Indian Creek - Sand	d Creek		
Identify each NWI Polygon v	vithin the Wetland Site (Poly	gon specific data)		
NWI Polygon ID Number	Cowardin Classification	Polygon Size (acres)		
S6W002A	PFO1	0.1683		
S6W002B	PEM1	0.0396		
1.2 Site Visit				
Team Members: Rusty Yea	ger & Neal Goffinet			
Agency: Lochmueller Group)			
Date assessed: <u>5/12/2015</u>	Time as	sessed: 2:30:00 PM		
Weather conditions: Sunn	У			
Note any unusual weahter events that may have influenced the current conditions within this wetland system (e.g. recent heay rains, an unusually dry season, an especially early spring etc.)				
1.3 Wetland Size				
Size of site under assessment: 0.2079				
Size of wetland complex: 0.2079				
1.4 Site Setting Degree of isolation from other wetlands or wetland complexes: The site is connected upstream and downstream with other wetlands The site is only connected upstrrem with other wetlands The site is only connected downstream with other wetlands Other wetlands are nearby (within 0.25 mile) but not connected The wetland site is isolated				
General assessment of adjactive the wetland site (indicate the			f the perimeter of	
0 Native Vegetation	ı - woodland 0	Road / highway / railroad	d bed / parking lot	

100 Native Vegetation - old field / scrub 0 Industrial 0 Residential - single family 0 Agricultural - tilled

0 Agricultural - pasture 0 Commercial or multifamily residential

0 Recreation - green space, mowed

NWI Polygon # S6W002A	Data Reference# S6W002
see table on page one)	
Tier 2: Individual Polygon: Preliminary Asto be completted on-site for each NWI polygon pres	
2.1 Wetland Geomorphic Setting and Surface Wate	r Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
2.2 Presence of Standing Water:	
s standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
s standing water normally present in an adjacent po	olygon? <u>No</u>
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom present	tArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
2.5 Wetland Community Type for this NWI polygon Floodplain Forest 2.6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	***
2.7 Presence of Invasive Exotics (Score as: S = Scatto	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
 Phragmities	Reed Canary Grass
Purple Loosestrife	S Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e. s	seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
None observed or known to be presen	
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: Wet	land Quality Descriptions and check one):
Lill Wettand Folygon Quanty Descriptor (see: Wet	mana Quanty Descriptions and oncon oncy.

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 1	Notal	ole Features that influence water quality and hydrology:		
Es	tima	ated I	nerbaceouis plant cover (percentage) in the polygon <u>√</u> 100-7575-5050-25<25		
Es	tima	ated v	woody plant foliar coverage in the polygon		
An	nour	nt of	dead woody material on the soil surfacenilscatteredfrequent		
3а	.2 \	Nate	r Quality Protection Questions:		
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?		
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?		
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.		
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended		
	Υ	(N)	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before		
	•		entering a surface body of water down gradient?		
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?		
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?		
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.		
			width of buffer area (in meter25 approximate slope (percen2		
3a	.3 F	Flood	I and Stormwater Storage / Attenuation Questions:		
			If wetland in question is a depressional wetland answer 1a, in not, answer 1b		
1.		N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)		
	Y) IN	that will slow overland flow into the wetland?		
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?		
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?		
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?		
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?		
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?		

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland po	olygon?1
1b. If only one vegetation zone is evident, which best de	scribes the site?
Polygon compoosed of amosaic of small ventures across the polygon	egetation patches, hummocks, or tussocks, n.
Polygon composed of a single vegettation the polygon.	type with more or less uniform texture across
2. If more than one vegetation zone is present in the polygorepresents the distribuion of these zone?	on, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy?	
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 75%	75 - 90% >90%
Is there notable layering/stratification in this vegetation zone	e? No
Dominant Herbaceous Species (i.e., covering more than 10 abundance. (Mark with an * any species that forms extensi	
a. <u>Carex sp.</u> d.	Parthenocissus quinquefolia
b. <u>Cinna arundinacea</u> e.	Geum canadense
c. <u>Lysimachia nummularia</u> f.	
Dominant Shrub Species listed in order of relative abundan	ce.
a. <u>Cornus sp.</u> c.	
b. <u>Crataegus sp.</u> d.	
Dominant Tree Species listed in order of relative abundance	9.
a. Acer saccharinum c.	Celtis occidentalis
b. Fraxinus pennsylvanica d.	Ulmus americana
Tree and shrub canopy: nil separate, seldom touch	ning often touching more or less close
Mature trees (>12" dbh): ■ yes □ no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W002A	Data Reference# S6W002
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p		Herbs: wide-leaf	
	ng rush spp. (Equisetum) 2 niled fern spp. (Dryopteris) 7		Peltandra virginica) 6 pp. (Sagittaria) 4
	(Osmunda cinnamomea) 9		n (Arisaema dracontium) 6
*royal fern (Osm	•		ulpit (Arisaema triphyllum) 4
	Onoclea sensibilis) 4		(Pontederia cordata) 5
*other: species (ge (Symplocarpus foetidus) 8
	s (Selaginella apoda) 4		Calla palustris) 10
	s spp. (Sphagnum) 10		(Alisma plantago-aquatica) 2
Herbs: Ivs. floating	a or submeraent	Herbs: dicots - I	vs. opposite/whorled
	p. (Utricularia) 10	√ *bedstraw spr	
	phyllum demersum) 1	√ beggar's tick	· ·
duckweed spp.	• •		Berbena hastata) 3
	. (Potamogeton) 8		atorium perfoliatum) 4
	eed (Potamogeton crispus) 0	` .	pp. (Lycopus) 5
	phaea tuberosa) 6	clearweed sp	
water shield (Bra	asenia schreberi) 4		phium perfoliatum) 4
*yellow spatterd	ock spp. (Nuphar) 6	false nettle (B	oehmeria cylindrica) 3
		*fen betony (F	Pedicularis lanceolata) 6
Herbs: Ivs. floating	g or submergent	*gentian spp.	(Gentiana Gentianopsis) 8
*pitcher plant (S	arracenia purpurea (10)	giant ragweed	(Ambrosia trifida) 0
*sundew spp. (D	Prosera) 10	Indian hamp (Apocynum cannabinum) 2
		Joe-pye weed	l spp. (Eupatorium) 5
Herbs: linear-lvs.	or +/- leafless monocots	*loosestrife sp	pp. (Lysimachia) 6
*beak rush spp	(Rhynchospora) 10	meadow beau	ıty (Rhexia virginica) 5
blueflag iris (Iris		mint spp. e.g.	hedge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		ysimachia nummularia) 0
*bur reed spp. (\$			r spp. (Mimulus) 4
cat-tail spp. (Typ	•	nettle (Urtica	•
	pp. (Eriophorum) 10		trife (Lythrum salicaria) 0
	mineae) - indicate types and		ollinsonia canadensis) 8
number of species			rt spp. (Hypericum/Triandeum) 8
	zania aquatica) 10		(Helianthus) 4
	perennial grass spp. 4:		estrife (Decodon verticillatus) 8
foxtail (Alopecru	na-grass, Canada bluepoint,		eed (Asclepias incarnata) 4
	rass spp. 0:reed canary		(Ammania Rotala) 2
	reed (Phragmites),		pp. (Chelone) 8
	such as annual foxtail		(Clematis virginiana) 3 e (Ludwigia palustris) 3
<u> </u>	arnyard grass (Echinochloa)		e (Ludwigia paiustris) 3 strife (Lythrum alatum) 5
	pp. (Eleocharis) 1 sp. =2	winged looses	stille (Lytillulli alatulli) 5
*additional		Harbs (vines): di	cots - lvs. alternate or basal and
nutsedge spp. (flower (Campanula americana) 4
	species (if know		/ aster (Aser puniceus) 7
✓ rush spp. (Junct			ter (Aster umbellatus) 8
' ' '	rex) 1 sp. = 3 ✓ additional		p. (e.g. New England, panicled ast
	enocallis occidentalis) 9		susan (Rudbeckia fulgida) 8
sweet flag (Acor	,		r (Lobelia cardinalis) 4
	Oulichium arundinaceum) 10	cress spp. (Ca	,
	ium mariscoides) 10		amp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		d (Alliaria petiolata) 0
	amassia scilloides) 5		rt (Senecio aureus) 4
	ass (Xyris torta) 9	5	,

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) ✓ *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 ✓ smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed ✓ aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 ✓ poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp aprimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus nigra) 7 ✓ ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 ✓ silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 ✓ elm, American (Ulmus americana) 3 ✓ hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 sycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3
biaddernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwwod, red-osier (Cornus stolonifera) 4 *dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2 elderberry (Sambucus) 2	willow spp. (Salix) 1 sp. = 3additional sp. = 7

NWI Polygon # S6W002B	Data Reference# S6W002
see table on page one)	
Tier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon prese	
.1 Wetland Geomorphic Setting and Surface Water	Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	dplainLacustrine
.2 Presence of Standing Water:	
s standing water normally present in the polygon?	No
Is standing water is present, is the water greater	r than 2 meters n depth? No
s standing water normally present in an adjacent pol	ygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
2.5 Wetland Community Type for this NWI polygon (Seasonally Flooded Basin 2.6 Disturbances of Hydrology (check all that apply):	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	tile
2.7 Presence of Invasive Exotics (Score as: S = Scatte	red, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e. se	eeps, wet slopes, floating mat):
O Drosonco of Special Community Types	
2.9 Presence of Special Community Types:	Mark Control (NA of Electron 25 de
BogFen	Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Thre	eatened or Endangered Species:
None observed or known to be presen	
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: Wetla	and Quality Descriptions and check one):
Good Medium ✓	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

38	1.1	No	tak	ole Features that influence water quality and hydrology:
Es	stim	ate	d h	nerbaceouis plant cover (percentage) in the polygon 🗹 100-7575-5050-25<25
Es	stim	ate	d v	voody plant foliar coverage in the polygon100-7575-5050-25<25
Αı	nou	ınt	of o	dead woody material on the soil surfacenilscatteredfrequen
38	1.2	Wa	itei	r Quality Protection Questions:
1.	Y	(N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y)	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	Ŷ	′ .	N N	If wetland in question is a depressional wetland answer 3a, in not, answer 3b.3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland?3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	(N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Ŷ)	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Ŷ)	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
				width of buffer area (in meter0 approximate slope (percen0
38	1.3	Flo	od	I and Stormwater Storage / Attenuation Questions:
1.				If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Y)	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	(N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Ŷ)	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y		N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y		Ŋ	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y)	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description 3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Symphyotrichum lanceolatum f. Dominant Shrub Species listed in order of relative abundance. Dominant Tree Species listed in order of relative abundance. C. ____ d. _____

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

Mature trees (>12" dbh): yes

Tree and shrub canopy: nil separate, seldom touching often touching more or less close

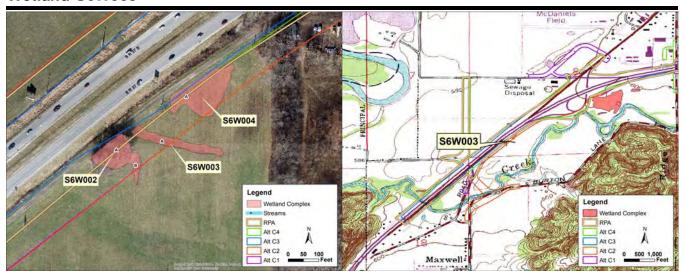
NWI Polygon # S6W002B	Data Reference# S6W002
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more the abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana)	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - Ivs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
 · · · · · · · · · · · · · · · · · ·	
curlyleaf pondweed (Potamogeton crispus) 0	bugleweed spp. (Lycopus) 5
*water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4	clearweed spp. (Pilea) 3
*yellow spatterdock spp. (Nuphar) 6	cup plant (Silphium perfoliatum) 4
yellow spatterdock spp. (Nupriar) 6	false nettle (Boehmeria cylindrica) 3
Harbar his floating as automorphy	*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
Harbas Brass has an all leafless managed	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
✓ bulrush spp. (Scirpus / Schoenoplectus) 5 **hurrand care (Spannarium) 0	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other	swamp milkweed (Asclepias incarnata) 4
	toothcup spp. (Ammania Rotala) 2
c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail	virgin's bower (Clematis virginiana) 3
(Setaria) and barnyard grass (Echinochloa)	water purslane (Ludwigia palustris) 3
· · · · · · · · · · · · · · · · · · ·	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	Harba (vinas), diasta dua alternata ar basal and
*additional = 8	Herbs (vines): dicots - Ivs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
✓ rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
✓ sedge spp. (Carex) 1 sp. = 3additional =	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
**************************************	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	✓ dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	· · · · · · · · · · · · · · · · · · ·
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
· · · · · · · · · · · · · · · · · · ·	

Wetland S6W003



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 County: Morgan T11N Physiographic Region: Martinsville Hills Township: Interior Plateau R1E **Ecoregion:** Range: **Natural Region:** Highland Rim Section: 8 Size of wetland complex (acres): 0.1408 Quarter: SW

USACE JurisdictionYesLatitude:39.398711IDEM Jurisdiction:YesLongitude:-86.452018

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
S6W003A	Seasonally Flooded Basin	PEM	0.1408	poor	poor	fair	Alt C1	0.07	49.0%
							Alt C2	0.07	49.1%
							Alt C3	0.00	0.0%
							Alt C4	0.01	8.9%
							RPA	0.01	8.9%



Polygon S6W103A



Polygon S6W103A

In-WRAP Summary Sheet

Date Report Generated: Friday, Sep	otember 15, 2017					
Wetland Site Name: N/A						
Data Reference #: S6W003						
Date of Site Visit: Tuesday, May 12	2, 2015					
Tier 1 Summary:						
a. Total Wetland Area (acres):	0.1408					
b. Wetland size and connectivit	ry - contribution to anim	al habita	t:			
	Valuab	ole More	e Favorable	Favorable	Neutral	
c. Surrounding land use - nume	rical rank (max. = 1):	0.80				
d. Value surrounding area adds	to animal habitat:		Valuable	Favorable	Low	
Tier 2 SUMMARY:			Polyg	on ID	6W003A	
a. Indiana Wetland community	type: Seasonally Flood	ed Basin				
b. Standing water - contribution	n to animal habitat:		Valuable	Favorable	Neutral	
c. Disturbances to site: road/ra	ailroad					
d. Exotic species rating:			Good	Medium	Poor	
e. Special Hydrologic Condition	e. Special Hydrologic Conditions Observed: None					
f. Special Community Type: No	one					
g. Rare-Threatened-Endangered	d Species: None					
h. Polygon Quality Descriptor:			Good	Medium	Poor	
Tier 3A SUMMARY:						
a: Dead woody material as indi	cator of animal habitat:		Valuable	Favorable	Neutral	
b. Water quality protection - nu	umerical rank (6 max.):	4	Good	Medium	Poor	
c. Flood and storm water storage	ge - numerical rank (5 m	ia <u>3</u>	Good	Medium	Poor	
Tier 3B SUMMARY:						
a. Zonation and interspersion a	s indicator of animal hal	bitat:	Valuable	Favorable	Neutral	
b. Stratification as indicator of	animal habitat:		Valuable		Neutral	
c. Number of dominant plant to	axa observed: 4		Good	Medium	Poor	
d. Average coefficient of conse	rvatism: 2.5		Good	Medium	Poor	
e. Tree canopy as indicator of a	nimal habitat:		Valuable		Neutral	
f. Mature trees as indicator of a	animal habitat:		Valuable	Favorable	Neutral	
g. Total hydrophytic taxa obser	ved: 6		Good	Medium	Poor	
h. Number of indicator taxa:	0		Good	Medium	Poor	

O Road / highway / railroad bed / parking lot 0 Native Vegetation - woodland 100 Native Vegetation - old field / scrub 0 Industrial 0 Agricultural - tilled 0 Residential - single family

0 Agricultural - pasture Commercial or multifamily residential

Recreation - green space, mowed

NWI Polygon # S6W003A	Data Reference# S6W003
see table on page one)	
Tier 2: Individual Polygon: Prelimin to be completted on-site for each NWI polygo	
.1 Wetland Geomorphic Setting and Surface	Water Flow (check one):
✓ Depressional Slope Riverine (within the river/stream ba	FloodplainLacustrine anks)
.2 Presence of Standing Water:	
standing water normally present in the polyg	gon? No
Is standing water is present, is the water	greater than 2 meters n depth? No
standing water normally present in an adjace	ent polygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom pr	resentArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mi	neralBoth Mineral and Organic Present
easonally Flooded Basin 2.6 Disturbances of Hydrology (check all that a	apply):
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
✓ Road or Railroad Embankment	
7 Presence of Invasive Exotics (Score as: S =	Scattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	S Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions	(i.e. seeps, wet slopes, floating mat):
None	
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Ra	r, Threatened or Endangered Species:
✓ None observed or known to be pres	sen
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see	: Wetland Quality Descriptions and check one):
Good Medium	√ Poor
	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 1	Notak	ole Features that influence water quality and hydrology:					
Es	Estimated herbaceouis plant cover (percentage) in the polygon vec-100-75 75-5050-25<25							
Es	Estimated woody plant foliar coverage in the polygon100-7575-5050-25✓ <25							
An	Amount of dead woody material on the soil surface nil scattered frequent							
3а	.2 ۱	Nate	r Quality Protection Questions:					
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?					
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?					
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.					
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended					
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?					
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?					
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?					
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.					
			width of buffer area (in meter25 approximate slope (percen2					
3a.3 Flood and Stormwater Storage / Attenuation Questions:								
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b					
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?					
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?					
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?					
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?					
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?					
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?					

Mature trees (>12" dbh): yes

Tier 3b Individual Polygon: Rapid Vegetation Description

Tier ob marvidual i orygon. Rapid veg	
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this v	vetland polygon?1
1b. If only one vegetation zone is evident, which	ch best describes the site?
Polygon composed of amosaic of heterogeneous textures across the	of small vegetation patches, hummocks, or tussocks, ne polygon.
Polygon composed of a single ve the polygon.	gettation type with more or less uniform texture across
2. If more than one vegetation zone is present in trepresents the distribuion of these zone?	the polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zon	ne A
What % of the polygon does this vegetative zone	occupy?
☐ 10 - 25% ☐ 25 - 50%	50 - 75%
Is there notable layering/stratification in this vegeta	ation zone? No
Dominant Herbaceous Species (i.e., covering morabundance. (Mark with an * any species that form	
a. Symphyotrichum lanceolatum	d. <i>Juncus effusus</i>
b. Carex sp.	e
c. Lysimachia nummularia	f.
Dominant Shrub Species listed in order of relative	
a	C
b	d
Dominant Tree Species listed in order of relative a	abundance.
a	c
b	d
Tree and shrub canopy: nil separate, selo	dom touching often touching more or less close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

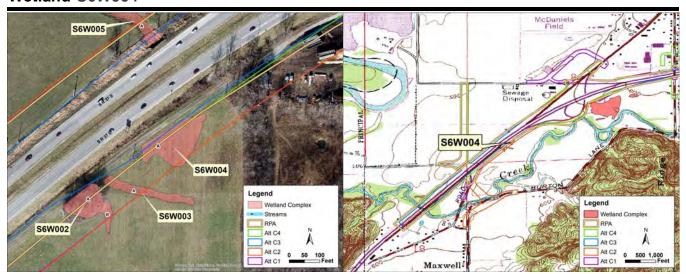
no

NWI Polygon # S6W003A	Data Reference# S6W003
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plantshorsetail, scouring rush spp. (Equisetum) 2 _*ferns: marsh shiled fern spp. (Dryopteris) 7 _*cinnamon fern (Osmunda cinnamomea) 9 _*royal fern (Osmunda regalils) 8 _sensitive fern (Onoclea sensibilis) 4 _*other: species (if known _marsh club moss (Selaginella apoda) 4 _Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent _*bladderwort spp. (Utricularia) 10 _coontail (Ceratophyllum demersum) 1 _duckweed spp. (Lemnaceae) 3 _*pondweed spp. (Potamogeton) 8	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 arrow-head spp. (Sagittaria) 4 *green dragon (Arisaema dracontium) 6 Jack-in-the-pulpit (Arisaema triphyllum) 4 pickerel weed (Pontederia cordata) 5 _*skunk cabbage (Symplocarpus foetidus) 8 _*water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorled *bedstraw spp. (Gallium) 6 beggar's tick spp. (Bidens) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6	bugleweed spp. (Lycopus) 5 clearweed spp. (Pilea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6
*pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10	*gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species	<pre>*loosestrife spp. (Lysimachia) 6eadow beauty (Rhexia virginica) 5mint spp. e.g. hedge nettle, mtn. mint, skullcap 5moneywort (Lysimachia nummularia) 0monkey flower spp. (Mimulus) 4nettle (Urtica procera) 1purple loosestrife (Lythrum salicaria) 0*richweed (Collinsonia canadensis) 8st. John's wort spp. (Hypericum/Triandeum) 8</pre>
a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other ✓ c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)	sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2*additional = 8nutsedge spp. (Cyperus) 2*orchid spp. 10; species (if know/rush spp. (Juncus) 4sedge spp. (Carex) 1 sp. = 3/additional =*spiderlily (Hymenocallis occidentalis) 9sweet flag (Acorus calamus) 0*3-way sedge (Dulichium arundinaceum) 10*twig rush (Cladium mariscoides) 10*twig rush (Cladium mariscoides) 10*umbrella sedge (Fuirena squarrosa) 10wild hyacinth (Camassia scilloides) 5*yellow-eyed grass (Xyris torta) 9	Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4*asters: bristly aster (Aser puniceus) 7flat-topped aster (Aster umbellatus) 8 = 7 ✓ other aster spp. (e.g. New England, panicled ast*black-eyed Susan (Rudbeckia fulgida) 8cardinal flower (Lobelia cardinalis) 4cress spp. (Cardamine) 4dock spp.: swamp, water, pale (Rumex) 4garlic mustard (Alliaria petiolata) 0golden ragwort (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	,
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
a.c. paropo (o.a o.a.vo) o	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
ciderberry (Jarribucus) Z	



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 County: Morgan T11N Physiographic Region: Martinsville Hills Township: Interior Plateau R1E **Ecoregion:** Range: **Natural Region:** Highland Rim Section: 8 Size of wetland complex (acres): 0.3455 Quarter: SW

USACE JurisdictionYesLatitude:39.399157IDEM Jurisdiction:YesLongitude:-86.451757

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted							
								Alt C1	0.34	97.7%						
			0.3455	:M 0.3455		poor								Alt C2	0.34	97.7%
S6W004A	Seasonally PE	PEM 0.3			poor		poor	fair	Alt C3	0.03	7.5%					
	Flooded													Alt C4	0.08	24.3%
	Basin						RPA	0.08	24.2%							



Polygon S6W004A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W004			
Date of Site Visit: Tuesday, May 12, 2015			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.3455			
b. Wetland size and connectivity - contribution to animal habita	t:		
Valuable More	e Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1): 0.80			
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID	66W004A
a. Indiana Wetland community type: Seasonally Flooded Basin			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site:			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species:			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.): 4	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 4	Good	Medium	Poor
d. Average coefficient of conservatism: 3	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed: 7	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

- O Road / highway / railroad bed / parking lot 0 Native Vegetation - woodland 100 Native Vegetation - old field / scrub 0 Industrial
- 0 Agricultural tilled 0 Residential - single family
- O Agricultural pasture Commercial or multifamily residential
- Recreation green space, mowed

NWI Polygon # S6W004A	Data Reference# S6W004
see table on page one)	
ier 2: Individual Polygon: Preliminary As o be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
s standing water normally present in an adjacent po	lygon? No
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	<u> </u>
Saturated (surface water seldom present	tArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
Seasonally Flooded Basin 2.6 Disturbances of Hydrology (check all that apply)):
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
None observed or known to be presen	
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: Wet	land Quality Descriptions and check one):
Good Medium ✓	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a.1 Nota	ble Features that influence water quality and hydrology:
Estimated	nerbaceouis plant cover (percentage) in the polygon 75-50 50-25<25
Estimated	woody plant foliar coverage in the polygon100-7575-5050-25 <u>√</u> <25
Amount of	dead woody material on the soil surfacenilscatteredfrequen
3a.2 Wate	r Quality Protection Questions:
1. Y (N)	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2. Y N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3. Y N Y N	If wetland in question is a depressional wetland answer 3a, in not, answer 3b.3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland?3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4. Y N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5. Y N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6. Y N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
	width of buffer area (in meter0 approximate slope (percen0
3a.3 Floor	d and Stormwater Storage / Attenuation Questions:
1.	If wetland in question is a depressional wetland answer 1a, in not, answer 1b
Ý N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
Y N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2. Y N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3. Y N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4. Y N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5. Y N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:		
1. How may vegetation zones are evident in this wetland	d polygon?1	
1b. If only one vegetation zone is evident, which bes	t describes the site?	
heterogeneous textures across the poly	· -	
Polygon composed of a single vegettation the polygon.	on type with more or less uniform texture across	
2. If more than one vegetation zone is present in the po represents the distribuion of these zone?	lygon, which intersperision diagram most closely	
Type One Interspersion	Type Two Interspersion	
3b.2 Dominant Plant Species: Vegetation Zone A		
What % of the polygon does this vegetative zone occup	y?	
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 7	75%	
s there notable layering/stratification in this vegetation a	zone? Yes	
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms exte		
a. Scirpus atrovirens	d. <i>Juncus effusus</i>	
o. Carex vulpinoidea	e	
c. Lysimachia nummularia	f	
Dominant Shrub Species listed in order of relative abundance.		
a.	C	
b	d	
Dominant Tree Species listed in order of relative abund		
a	C	
0	d	
Tree and shrub canopy: I nil separate, seldom to	ouching often touching more or less close	
Mature trees (>12" dbh): yes no		

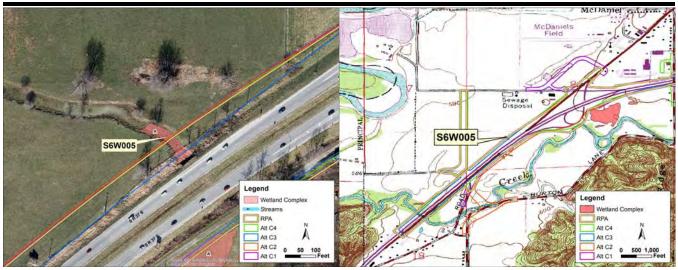
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W004A	Data Reference# S6W004
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)		
Herbs: non-seed	olants	Herbs: wide-leafe	d monocots		
horsetail, scour	ing rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6		
*ferns: marsh s	hiled fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4		
*cinnamon fern	(Osmunda cinnamomea) 9	*green dragon (*green dragon (Arisaema dracontium) 6		
*royal fern (Osn	nunda regalils) 8	Jack-in-the-pulp	Jack-in-the-pulpit (Arisaema triphyllum) 4		
sensitive fern (C	Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5			
*other: species	(if known	*skunk cabbage	e (Symplocarpus foetidus) 8		
marsh club mos	ss (Selaginella apoda) 4	*water arum (C	alla palustris) 10		
Sphagnum mos	ss spp. (Sphagnum) 10	water plantain ((Alisma plantago-aquatica) 2		
Herbs: Ivs. floatin	a or submergent	Herbs: dicots - lvs	s. opposite/whorled		
	p. (Utricularia) 10	*bedstraw spp.			
	phyllum demersum) 1	beggar's tick sp	,		
duckweed spp.			erbena hastata) 3		
	. (Potamogeton) 8		torium perfoliatum) 4		
	reed (Potamogeton crispus) 0		•		
	phaea tuberosa) 6	clearweed spp.			
	asenia schreberi) 4		nium perfoliatum) 4		
	lock spp. (Nuphar) 6		ehmeria cylindrica) 3		
yellow spattero	iock spp. (Nuprial) o		edicularis lanceolata) 6		
Herbs: Ivs. floatin	a or submorgant		Gentiana Gentianopsis) 8		
	Sarracenia purpurea (10)		(Ambrosia trifida) 0		
*sundew spp. ([,		pocynum cannabinum) 2		
Sundew Spp. (L	Dioseia) io		spp. (Eupatorium) 5		
Harbar linear luc	or // loofloss managets		b. (Lysimachia) 6		
	or +/- leafless monocots (Rhynchospora) 10		y (Rhexia virginica) 5		
blueflag iris (Iris			nedge nettle, mtn. mint, skullcap 5		
	cirpus / Schoenoplectus) 5		•		
			simachia nummularia) 0		
*bur reed spp. (Ty			spp. (Mimulus) 4		
cat-tail spp. (Ty	• •	nettle (Urtica pr	·		
	op. (Eriophorum) 10 amineae) - indicate types and		ife (Lythrum salicaria) 0 insonia canadensis) 8		
number of species	ammeae) - mulcate types and		,		
•	zania aquatica) 10		spp. (Hypericum/Triandeum) 8		
	• •	sunflower sp. (I			
	perennial grass spp. 4: na-grass, Canada bluepoint,		trife (Decodon verticillatus) 8 ed (Asclepias incarnata) 4		
foxtail (Alopecru					
	rass spp. 0:reed canary	turtlehead spp. (/	Ammania Rotala) 2		
	reed (Phragmites),		Clematis virginiana) 3		
• •	such as annual foxtail	•	(Ludwigia palustris) 3		
	arnyard grass (Echinochloa)	•	, ,		
,	, , ,	williged loosesti	rife (Lythrum alatum) 5		
*additional	pp. (Eleocharis) 1 sp. =2	Harba (vinas), dia	ata lua alternata ar basal and		
			ots - Ivs. alternate or basal and ower (Campanula americana) 4		
nutsedge spp. (species (if know	· · · · · · · · · · · · · · · · · · ·	` '		
			aster (Aser puniceus) 7		
✓ rush spp. (Junc			er (Aster umbellatus) 8		
	rex) 1 sp. = 3 additional		. (e.g. New England, panicled ast		
	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8		
sweet flag (Aco	•		(Lobelia cardinalis) 4		
	Dulichium arundinaceum) 10	cress spp. (Car	· · · · · · · · · · · · · · · · · · ·		
	dium mariscoides) 10		mp, water, pale (Rumex) 4		
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0		
` `	camassia scilloides) 5 ass (Xyris torta) 9	golden ragwort	(Senecio aureus) 4		
yellow-eyed gra	ass (Ayris wila) y				

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 *swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwwod, red-osier (Cornus stolonifera) 4 *dogwood, blue-fruited or silky (Cornus obliqua)	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus nigra) 7 ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, eastern (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 sycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3 _additional sp. = 7



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 County: Morgan T11N Physiographic Region: Martinsville Hills Township: Interior Plateau R1E **Ecoregion:** Range: **Natural Region:** Highland Rim Section: 8 Size of wetland complex (acres): 0.1109 Quarter: SW

USACE JurisdictionYesLatitude:39.400224IDEM Jurisdiction:YesLongitude:-86.452072

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted						
							Alt C1	0.06	53.4%						
							Alt C2	0.06	53.2%						
S6W005A	Deep Marsh	PEM	0.1109	0.1109	poor	poor	poor	poor	poor	poor	poor poor	poor	Alt C3	0.02	15.3%
							Alt C4	0.06	50.1%						
							RPA	0.06	50.2%						



Polygon S6W005A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W005			
Date of Site Visit:	Thursday, May 14, 2015			
Tier 1 Summar	·y:			
a. Total Wetlar	nd Area (acres): 0.1109			
b. Wetland siz	e and connectivity - contribution to animal habita	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1): 0.38			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	gon ID S	6W005A
a. Indiana We	tland community type: Deep Marsh/Shallow Op	en Water		
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	s to site: road/railroad culvert			
d. Exotic speci	es rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	ened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	ARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quali	ty protection - numerical rank (6 max.): 2	Good	Medium	Poor
c. Flood and st	torm water storage - numerical rank (5 ma1	Good	Medium	Poor
Tier 3B SUMM	ARY:			
a. Zonation an	d interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratificatio	n as indicator of animal habitat:	Valuable		Neutral
c. Number of o	dominant plant taxa observed: 2	Good	Medium	Poor
d. Average coe	efficient of conservatism: 0.5	Good	Medium	Poor
e. Tree canopy	y as indicator of animal habitat:	Valuable		Neutral
f. Mature tree	s as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed:1	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

5 Road / highway / railroad bed / parking lot 0 Native Vegetation - woodland

- O Native Vegetation old field / scrub O Industrial
- 0 Agricultural tilled 0 Residential - single family
- 95 Agricultural pasture Commercial or multifamily residential
- Recreation green space, mowed

	olygon # S6W005	5A	Data Reference# S6W005
(see tal	ole on page one)		
			minary Assessment lygon present in the wetland)
2.1 We	tland Geomorphi	ic Setting and Surfa	ace Water Flow (check one):
√		Slope 1 the river/strean	FloodplainLacustrine m banks)
Is stand Is	standing water is	lly present in the p present, is the wa	polygon? Yes ster greater than 2 meters n depth? No djacent polygon? Yes
2.3 App	oarent Hydroperi	od (check one):	
√	Permanently Fl Seasonally Floo	oded	Artificially Flooded
	_Saturated (surf	ace water seldon	n presentArtificailly Drained
2.4 Soil	Туре		
	Organic (i.e. pe	at, etc.)	MineralBoth Mineral and Organic Present
2.6 Dist	turbances of Hyd Ditching Tiles Dams	rology (check all th	hat apply): Culvert Other Human Distrubances to the
√	=	nd Embankment	tile
2.7 Pre	sence of Invasive _Garlic Mustard _Phragmities _Purple Loosest		S = Scattered, F = Frequent, or C = Common): Glossy Buckthorn C Reed Canary Grass Other (list):
2.8 Pre None	sence of Special I	Hydrologic Conditi	ions (i.e. seeps, wet slopes, floating mat):
2.9 Pre	sence of Special (Community Types:	:
	Bog	Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Pr	esence of Known	Federal or Indiana	a Rar, Threatened or Endangered Species:
√		or known to be	•
2.11 W	etland Polygon O	Quality Descriptor ((see: Wetland Quality Descriptions and check one):
		Medium	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 N	Notak	ole Features that influence water quality and hydrology:
			nerbaceouis plant cover (percentage) in the polygon 100-75 75-50 50-25 √ <25
			voody plant foliar coverage in the polygon100-7575-5050-25 _✓ <25
AII	iloui	it Oi (dead woody material on the soil surface nilscatteredfrequent
3а	.2 V	Nate	Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.
	Υ	(N)	3a. Does the wetland have a shape or flow that allows for the settling out of suspended
	Υ		materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before
	ı	(N)	entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter 100 approximate slope (percen 1
			· · · · · · · · · · · · · · · · · · ·
3a	.3 F	Flood	and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Υ	(N)	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)
	v		that will slow overland flow into the wetland? 1h Is there a significant amount of microtopography or vegetative density within the wetland
	Y	(N)	1b. Is there a significant amount of microtopography of vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
2	.,		Is the flood potential high in the local watershed in which the wetland is located (history of
3.	Y	(N)	flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this we	etland polygon?1
1b. If only one vegetation zone is evident, which	best describes the site?
Polygon composed of amosaic of heterogeneous textures across the	small vegetation patches, hummocks, or tussocks, e polygon.
Polygon composed of a single veg the polygon.	ettation type with more or less uniform texture across
2. If more than one vegetation zone is present in the represents the distribuion of these zone?	e polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone	: A
What % of the polygon does this vegetative zone of	ccupy?
☐ 10 - 25% ☐ 25 - 50% ☐ §	50 - 75%
Is there notable layering/stratification in this vegetar	tion zone? No
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms	than 10% of the area) listed in order of relative extensive monocultural patches).
a. Phalaris arundinacea	d
ь. <i>Typha angustifolia</i>	e
C	f
Dominant Shrub Species listed in order of relative a	abundance.
a	C
b	d
Dominant Tree Species listed in order of relative at	
a	C
b	d
Tree and shrub canopy: nil separate, seldo	om touching often touching more or less close
Mature trees (>12" dbh): yes no	· — · · · · ·

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

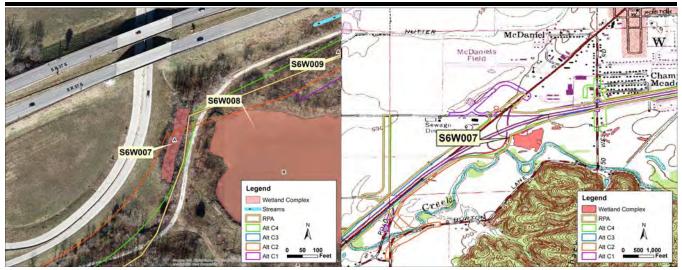
Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a	NWI Polygon # S6W005A	Data Refer	rence# <u>S6W005</u>	
10 - 25%	3b.2 Dominant Plant Species: Vegetation Zo	ne B		
Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a.	What % of the polygon does this vegetative zone	e occupy?		
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a.	☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
abundance. (Mark with an * any species that forms extensive monocultural patches). a	Is there notable layering/stratification in this vege	etation zone?		
b				of relative
c	a	d		
Dominant Shrub Species listed in order of relative abundance. a	b	e		
Dominant Shrub Species listed in order of relative abundance. a	C.	f.		
b				
b	a	C		
Dominant Tree Species listed in order of relative abundance. a				
a				
b d	·			
Tree and shrub canopy: nil separate, seldom touching often touching more or less closed Mature trees (>12" dbh): yes no Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site). 3b.2 Dominant Plant Species: Vegetation Zone C What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a d b e C Dominant Shrub Species listed in order of relative abundance. a				
Mature trees (>12" dbh): yes no Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site). 3b.2 Dominant Plant Species: Vegetation Zone C What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% 90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a.				
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site). 3b.2 Dominant Plant Species: Vegetation Zone C What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. d. b. e. c. f. Dominant Shrub Species listed in order of relative abundance. a	·· — — <u>-</u>		j orton todoming me	70 01 1000 01000
wetland site). 3b.2 Dominant Plant Species: Vegetation Zone C What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. d. b. e. c. f. Dominant Shrub Species listed in order of relative abundance. a. C. b. d. Dominant Tree Species listed in order of relative abundance. a. C. b. d.	· · · · · — · · —		datus ata fuana tha avali	h, of this
What % of the polygon does this vegetative zone occupy? 10 - 25%		ut what adds to or	detracts from the qualit	ly Or Itils
□ 10 - 25% □ 25 - 50% □ 50 - 75% □ 75 - 90% □ >90% Is there notable layering/stratification in this vegetation zone? □ Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. d. b. e. c. f. Dominant Shrub Species listed in order of relative abundance. a. c. b. d. Dominant Tree Species listed in order of relative abundance. a. c. b. d. b. d.	3b.2 Dominant Plant Species: Vegetation Zo	ne C		
Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a	What % of the polygon does this vegetative zone	e occupy?		
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a d	☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
abundance. (Mark with an * any species that forms extensive monocultural patches). a d	Is there notable layering/stratification in this vege	etation zone?		
b				of relative
b	a	d		
c	b.			
Dominant Shrub Species listed in order of relative abundance. a				
a c d Dominant Tree Species listed in order of relative abundance. a c c c				
b d Dominant Tree Species listed in order of relative abundance. a C b d	•			
Dominant Tree Species listed in order of relative abundance. a				
a	h			
b d		d		
	Dominant Tree Species listed in order of relative	d abundance.		
TENN AND AND DEPONIE IN THE PROPERTY AND	Dominant Tree Species listed in order of relative a.	d abundance. c		
	Dominant Tree Species listed in order of relative a b	d abundance. c d		

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana) $SW = southwestern Indiana$	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - lvs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0	bugleweed spp. (Lycopus) 5
*water lily (Nymphaea tuberosa) 6	clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
yollow opatioration opp. (Naphar) o	*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
candow opp. (Broodia) 10	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Friophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2
✓ c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	
*additional = 8	Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3 additional =	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	√ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 Morgan County: **T11N** Physiographic Region: Martinsville Hills Township: Interior Plateau R1E **Ecoregion:** Range: **Natural Region:** Highland Rim Section: 8 Size of wetland complex (acres): 0.1721 Quarter: SE

USACE JurisdictionYesLatitude:39.402443IDEM Jurisdiction:YesLongitude:-86.444983

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted							
							Alt C1	0.06	33.6%							
							Alt C2	0.06	33.6%							
S6W007A	Floodplain	PFO	0.1721	0.1721	0.1721	0.1721 fair	0.1721 fair	fair	fair	0.1721 fair	0.1721 fair	fair	fair	Alt C3	0.17	100.0%
	Forest						Alt C4	0.17	100.0%							
							RPA	0.17	100.0%							



Polygon S6W007A

In-WRAP Summary Sheet

Date Report Generated	d: Friday, September 15, 2017			
Wetland Site Name: _	N/A			
Data Reference #: S6V	V007			
Date of Site Visit: Tue	esday, May 12, 2015			
Tier 1 Summary:				
a. Total Wetland A	rea (acres): 0.1721			
b. Wetland size an	d connectivity - contribution to animal habita	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding lan	d use - numerical rank (max. = 1):0.40			
d. Value surround	ng area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY	*	Polyg	on ID	6W007A
a. Indiana Wetlan	d community type: Floodplain Forest			
b. Standing water	- contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to	site:			
d. Exotic species ra	ating:	Good	Medium	Poor
e. Special Hydrolo	gic Conditions Observed: None			
f. Special Commur	nity Type: None			
g. Rare-Threatene	d-Endangered Species:			
h. Polygon Quality	Descriptor:	Good	Medium	Poor
Tier 3A SUMMAR	Y:			
a: Dead woody ma	aterial as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality p	rotection - numerical rank (6 max.):3	Good	Medium	Poor
c. Flood and storm	n water storage - numerical rank (5 ma4	Good	Medium	Poor
Tier 3B SUMMAR	Y:			
a. Zonation and in	terspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as	indicator of animal habitat:	Valuable		Neutral
c. Number of dom	inant plant taxa observed: 7	Good	Medium	Poor
d. Average coeffic	ient of conservatism: 1.8	Good	Medium	Poor
e. Tree canopy as	indicator of animal habitat:	Valuable		Neutral
f. Mature trees as	indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophyt	ic taxa observed: 20	Good	Medium	Poor
h. Number of indi	cator taxa: 0	Good	Medium	Poor

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of

The wetland site is isolated

the wet	cland site (indicate the % abundance of ea	ach type	e):
0	Native Vegetation - woodland	50	Road / highway / railroad bed / parking lot
50	Native Vegetation - old field / scrub	0	Industrial
0	Agricultural - tilled	0	Residential - single family
0	Agricultural - pasture	0	Commercial or multifamily residential
0	Recreation - green space mowed		

2.6 Disturbances of Hydrology (check all that apply): Ditching Tiles Dams Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Phragmities Purple Loosestrife Other (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	NWI Polygon # S6W007A	Data Reference# S6W007
to be completted on-site for each NWI polygon present in the wetland) .1 Wetland Geomorphic Setting and Surface Water Flow (check one): ✓ Depressional Slope Floodplain Lacustrine Riverine (within the river/stream banks) .2 Presence of Standing Water: s standing water normally present in the polygon? Yes Is standing water normally present in an adjacent polygon? Yes s standing water normally present in an adjacent polygon? Yes .3 Apparent Hydroperiod (check one): Permanently Flooded ✓ Artificially Flooded Seasonally Flooded Seasonally Flooded Saturated (surface water seldom present Artificially Drained Artificially Drained Artificially Drained Seasonally Flooded Seasonally Flo	see table on page one)	
Depressional Slope Floodplain Lacustrine Riverine (within the river/stream banks)		
Riverine (within the river/stream banks) 2. Presence of Standing Water: 5. standing water normally present in the polygon? Yes 5. standing water is present, is the water greater than 2 meters n depth? No 5. standing water normally present in an adjacent polygon? Yes 3. Apparent Hydroperiod (check one): Permanently Flooded Seasonally Flooded Seasonally Flooded Saturated (surface water seldom present Artificially Produced Aftificially Drained 4. Soil Type Organic (i.e. peat, etc.) Mineral Both Mineral and Organic Present 5. Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): 1. loodplain Forest 6. Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to the Road or Railroad Embankment 7. Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Purple Loosestrife Other (list): 8. Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): 10 lone 9. Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 1.0 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 1.1 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	.1 Wetland Geomorphic Setting and Surface Wa	ter Flow (check one):
Is standing water normally present in the polygon? Yes Is standing water is present, is the water greater than 2 meters n depth? No Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally Ploaded Is standing water normally Ploaded Is standing water normally Ploaded Is standing water in an adjacent polygon? Yes In standing water water in an adjacent polygon? Yes In standing water water in an adjacent polygon? Yes In standing water water in an adjacent polygon? Yes In standing water water in an adjacent polygon? Yes In standing water water water water in adjacent polygon? Yes In standing water water water water in adjacent polygon? Yes In standing water water water water water in adjacent polygon? Yes In standing water water water	· ·	•
Is standing water is present, is the water greater than 2 meters n depth? No standing water normally present in an adjacent polygon? Yes 3 Apparent Hydroperiod (check one): Permanently Flooded Seasonally Flooded Artificially Flooded Artificially Flooded Seasonally Flooded Seasonally Flooded Seasonally Flooded Seasonally Flooded Seasonally Flooded Artificially Flooded Seasonally Flooded Se	.2 Presence of Standing Water:	
.3 Apparent Hydroperiod (check one): Permanently Flooded Seasonally Flooded Artifically Drained 4 Soil Type Organic (i.e. peat, etc.) Mineral Both Mineral and Organic Present 5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): loodplain Forest 6 Disturbances of Hydrology (check all that apply): Ditching Tiles Other Human Distrubances to the Road or Railroad Embankment 7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Phragmities Reed Canary Grass Purple Loosestrife Other (list): 8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): lone 9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	standing water normally present in the polygon	? Yes
Permanently Flooded Seasonally Flooded Saturated (surface water seldom present Artificailly Drained Artificailly Plooded Artificailly Flooded Artificai	Is standing water is present, is the water gre	ater than 2 meters n depth? No
Permanently Flooded Seasonally Flooded Seasonally Flooded Saturated (surface water seldom present	s standing water normally present in an adjacent	polygon? Yes
Seasonally Flooded Saturated (surface water seldom present	.3 Apparent Hydroperiod (check one):	
Saturated (surface water seldom present	Permanently Flooded	Artificially Flooded
Organic (i.e. peat, etc.) ✓ Mineral Both Mineral and Organic Present .5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana):	Seasonally Flooded	
Organic (i.e. peat, etc.) ✓ Mineral Both Mineral and Organic Present 2.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): 2.6 Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to Dams the Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Purple Loosestrife Other (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): 3.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Saturated (surface water seldom prese	entArtificailly Drained
### Second Community Type for this NWI polygon (see Key to Wetland Communities of Indiana):	.4 Soil Type	
Ditching	Organic (i.e. peat, etc.) Miner	ralBoth Mineral and Organic Present
Ditching Tiles Dams Road or Railroad Embankment C.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Phragmities Purple Loosestrife C.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): C.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps C.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): C.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Floodplain Forest	
Tiles Other Human Distrubances to Dams the Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Purple Loosestrife Other (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):		
Dams Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Phragmities Reed Canary Grass Purple Loosestrife Other (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	<u> </u>	
Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Phragmities Reed Canary Grass Purple Loosestrife Other (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):		
2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Phragmities Purple Loosestrife 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): Some 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):		tne
Garlic Mustard Phragmities Purple Loosestrife Other (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): One 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Road or Railroad Embankment	
Phragmities Purple Loosestrife C.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): Some C.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps C.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): C.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	2.7 Presence of Invasive Exotics (Score as: S = Sca	ittered, F = Frequent, or C = Common):
Purple LoosestrifeOther (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Garlic Mustard	Glossy Buckthorn
2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Phragmities	Reed Canary Grass
Rone 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Purple Loosestrife	Other (list):
Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	2.8 Presence of Special Hydrologic Conditions (i.e	e. seeps, wet slopes, floating mat):
Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	O Dressance of Special Community Types	
2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):		
None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	BogFen	Wet Sand / Muck Flats or Mari Seeps
RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	10 Presence of Known Federal or Indiana Rar, T	hreatened or Endangered Species:
2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	None observed or known to be presen	l
	RTES Present (list):	
	2.11 Wetland Polygon Quality Descriptor (see: W	etland Quality Descriptions and check one):
Good Medium ✓ Poor	Good Medium ✓	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 I	Notal	ole Features that influence water quality and hydrology:						
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25						
Es	tima	ated v	woody plant foliar coverage in the polygon						
Ar	noui	nt of	dead woody material on the soil surfacenilscatteredfrequent						
3а	.2 \	V ate	r Quality Protection Questions:						
1.	Y) N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?						
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?						
3.		If wetland in question is a depressional wetland answer 3a, in not, answer 3b.							
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended						
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?						
4.	Υ	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?						
5.	Y) N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?						
6.	Y) N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.						
			width of buffer area (in meter10 approximate slope (percen12						
3а	.3 F	Flood	I and Stormwater Storage / Attenuation Questions:						
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b						
	Y) N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?						
	Υ	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?						
2.	Y) N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?						
3.	Y) N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?						
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?						
5.	Y) N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?						

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 25 - 50% 50 - 75% 10 - 25% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). f. Dominant Shrub Species listed in order of relative abundance. c. Morus alba a. Acer negundo b. Cornus sp. Dominant Tree Species listed in order of relative abundance. c. Platanus occidentalis a. Acer saccharinum b. Fraxinus pennsylvanica d. Celtis occidentalis Tree and shrub canopy: nil separate, seldom touching fiten touching more or less close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

☐ no

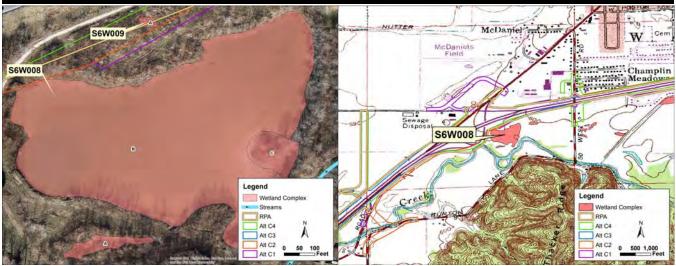
Mature trees (>12" dbh): yes

NWI Polygon # S6W007A	Data Reference# S6W007					
3b.2 Dominant Plant Species: Vegetation Zone B						
What % of the polygon does this vegetative zone occur	py?					
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%					
Is there notable layering/stratification in this vegetation	zone?					
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).						
a	d					
b	e					
C	f					
Dominant Shrub Species listed in order of relative abu						
a	C					
b	d					
Dominant Tree Species listed in order of relative abundance	dance.					
a	c					
b	d					
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close					
Mature trees (>12" dbh): yes no						
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this					
3b.2 Dominant Plant Species: Vegetation Zone C						
What % of the polygon does this vegetative zone occur	py?					
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%					
Is there notable layering/stratification in this vegetation	zone?					
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).						
a	d					
b	e					
C	f					
Dominant Shrub Species listed in order of relative abu						
a	C					
b	d					
Dominant Tree Species listed in order of relative abundance	dance.					
a	c					
b	d					
Tree and shrub canopy: nil separate, seldom						
Mature trees (>12" dbh): yes no						
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).						

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p	olants	Herbs: wide-leaf	ed monocots
	ng rush spp. (Equisetum) 2		Peltandra virginica) 6
	niled fern spp. (Dryopteris) 7		pp. (Sagittaria) 4
	(Osmunda cinnamomea) 9		(Arisaema dracontium) 6
*royal fern (Osm			ılpit (Arisaema triphyllum) 4
	Onoclea sensibilis) 4	·	(Pontederia cordata) 5
*other: species (ge (Symplocarpus foetidus) 8
	s (Selaginella apoda) 4		Calla palustris) 10
Sphagnum mos	s spp. (Sphagnum) 10	water plantain	(Alisma plantago-aquatica) 2
Herbs: Ivs. floating	g or submergent	Herbs: dicots - I	vs. opposite/whorled
*bladderwort sp	p. (Utricularia) 10	*bedstraw spp	o. (Gallium) 6
coontail (Cerato	phyllum demersum) 1	beggar's tick s	spp. (Bidens) 3
duckweed spp.	,		Berbena hastata) 3
	(Potamogeton) 8		atorium perfoliatum) 4
	eed (Potamogeton crispus) 0		p. (Lycopus) 5
	phaea tuberosa) 6	clearweed spr	
	asenia schreberi) 4		hium perfoliatum) 4
*yellow spatterd	ock spp. (Nuphar) 6		oehmeria cylindrica) 3
			edicularis lanceolata) 6
Herbs: Ivs. floating			(Gentiana Gentianopsis) 8
	arracenia purpurea (10)		(Ambrosia trifida) 0
*sundew spp. (D	rosera) 10		Apocynum cannabinum) 2
			spp. (Eupatorium) 5
	or +/- leafless monocots		pp. (Lysimachia) 6
	(Rhynchospora) 10		ity (Rhexia virginica) 5
blueflag iris (Iris			hedge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		ysimachia nummularia) 0
*bur reed spp. (\$			r spp. (Mimulus) 4
cat-tail spp. (Typ	•	nettle (Urtica p	
	pp. (Eriophorum) 10		rife (Lythrum salicaria) 0
number of species	mineae) - indicate types and		ollinsonia canadensis) 8
•	zania aguatica) 10		t spp. (Hypericum/Triandeum) 8
	zania aquatica) 10 perennial grass spp. 4:		(Helianthus) 4 strife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		eed (Asclepias incarnata) 4
foxtail (Alopecru			(Ammania Rotala) 2
, ,	rass spp. 0:reed canary		p. (Chelone) 8
	reed (Phragmites),		(Clematis virginiana) 3
	such as annual foxtail		e (Ludwigia palustris) 3
<u> </u>	rnyard grass (Echinochloa)		strife (Lythrum alatum) 5
	pp. (Eleocharis) 1 sp. =2	wiilged 1000cc	dine (Lytinam diatam) o
*additional =		Herhs (vines): di	cots - lvs. alternate or basal and
nutsedge spp. (flower (Campanula americana) 4
	species (if know		aster (Aser puniceus) 7
rush spp. (Junci			ter (Aster umbellatus) 8
	•		p. (e.g. New England, panicled ast
	enocallis occidentalis) 9		usan (Rudbeckia fulgida) 8
sweet flag (Acor	•		r (Lobelia cardinalis) 4
	Oulichium arundinaceum) 10	cress spp. (Ca	•
	ium mariscoides) 10		amp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		I (Alliaria petiolata) 0
	amassia scilloides) 5		rt (Senecio aureus) 4
	ass (Xyris torta) 9 [′]	5	,

_*ash, black (Fraxinus nigra) 7 _ ash, green (Fraxinus pensylvanica) 3 _*ash, pumpkin (Fraxinus tomentosa) 8 _ boxelder (Acer negundo) 1 _ hickory, bitternut (Carya cordiformis) 5 _ hickory, shellbark (Carya laciniosa) 8 _ honey locust (Gleditsia triacanthos) 1 _ *poison sumac (Rhus vernix) 10 ees - leaves simple and opposite _ red maple (Acer rubrum) 5 _ silver maple (Acer saccharinum) 1 ees - leaves simple and alternate _ *alder, speckled (Alnus rugosa) 9 _ river birch (Betula nigra) 2 _ black, gum (Nyssa sylvatica) 5 _ cottonwood, eastern (Populus deltoides) 1 _ cottonwood, swamp (Populus heterophylla) 8 _ elm, American (Ulmus americana) 3 _ hackberry (Celtis occidentalis) 3 _ ironwood (Carpinus caroliniana) 5 _ oak, pin or white (Quercus) 4 _ *oak, Shumard's, swamp chestnut, swamp white _ *pawpaw (Asimina triloba) 6 _ *sugarberry (Celtis laevigata) 7 _ sweet gum (Liquidambar styraciflua) 4
_*pawpaw (Asimina triloba) 6 _*sugarberry (Celtis laevigata) 7
sweet gum (Elquidambar styracilida) 4 /_sycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3 additional sp. = 7



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 Morgan County: **T11N** Physiographic Region: Martinsville Hills Township: Interior Plateau R1E **Ecoregion:** Range: **Natural Region:** Highland Rim Section: 8 Size of wetland complex (acres): 8.1381 Quarter: SE

USACE JurisdictionYesLatitude:39.402288IDEM Jurisdiction:YesLongitude:-86.443205

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Floodplain Forest	PFO	0.1785	fair	fair	good	Alt C1	0.00	0.0%
							Alt C2	0.00	0.0%
S6W008A							Alt C3	0.00	0.0%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%
	Shallow Open Water	_	7.6507	fair	poor	good	Alt C1	0.01	0.1%
							Alt C2	0.01	0.1%
S6W008B							Alt C3	0.00	0.0%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%
	Floodplain Forest		0.3089	fair	poor	good	Alt C1	0.00	0.0%
							Alt C2	0.00	0.0%
S6W008C							Alt C3	0.00	0.0%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%



Polygon S6W008B



Polygon S6W008A



Polygon S6W008C

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W008			
Date of Site Visit:	Tuesday, May 12, 2015			
Tier 1 Summar	y:			
a. Total Wetlar	nd Area (acres): 8.1381			
b. Wetland siz	e and connectivity - contribution to animal habita	at:		
	Valuable Mon	re Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1):1.00			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	on ID	6W008A
a. Indiana We	tland community type: Floodplain Forest			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	es to site:			
d. Exotic speci	ies rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	tened-Endangered Species:			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	IARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quali	ity protection - numerical rank (6 max.):5	Good	Medium	Poor
c. Flood and s	torm water storage - numerical rank (5 ma4_	Good	Medium	Poor
Tier 3B SUMM	ARY:			
a. Zonation an	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratificatio	on as indicator of animal habitat:	Valuable		Neutral
c. Number of	dominant plant taxa observed: 14	Good	Medium	Poor
d. Average co	efficient of conservatism: 1.8	Good	Medium	Poor
e. Tree canopy	y as indicator of animal habitat:	Valuable		Neutral
f. Mature tree	es as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed:33	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

Tier 2 SUMMARY:	Polyg	on ID	S6W008B
a. Indiana Wetland community type: Deep Marsh/Shallow Op	en Water		
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site:			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):5_	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma4	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed:1	Good	Medium	Poor
d. Average coefficient of conservatism:0	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:0	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

Tier 2 SUMMARY:	Polygon ID		S6W008C
a. Indiana Wetland community type: Floodplain Forest			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site:			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed:			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):5	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed:3	Good	Medium	Poor
d. Average coefficient of conservatism:3.3	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:3	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

Tier 1: Assessment Overview

1.1 Site	Identification:	

Wetland Site Name: N/A

Ownership (if known): N/A

USGS Topographic Quadrangle: Martinsville

USGS Watershed map 14-Digit HUC: Indian Creek - Sand Creek

Identify each NWI Polygon within the Wetland Site (Polygon specific data)

NWI Polygon ID Number	Cowardin Classification	Polygon Size (acres)	
S6W008A	PFO1	0.1785	
S6W008B	PUBHx	7.6507	
S6W008C	PFO1	0.3089	

1.2 Site Visit

Team Members:	Rusty '	Yeager	&	Neal	Goffinet
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Agency: Lochmueller Group

Date assessed: 5/12/2015 Time assessed: 5:00:00 PM

Weather conditions: Sunny

Note any unusual weahter events that may have influenced the current conditions within this wetland system (e.g. recent heay rains, an unusually dry season, an especially early spring etc.)

1.3 Wetland Size

Size of site under assessment: 8.1381

Size of wetland complex: 8.1381

1.4 Site Setting

Degree of isolation from other wetlands or wetland complexes:

 _The site is connected upstream and downstream with other wetlands
The site is only connected upstrrem with other wetlands
 The site is only connected downstream with other wetlands
 Other wetlands are nearby (within 0.25 mile) but not connected
The wetland site is isolated

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type):

100	Native Vegetation - woodland	0	Road / highway / railroad bed / parking lot
0	Native Vegetation - old field / scrub	0	Industrial

- 0 Agricultural tilled 0 __ Residential single family
- 0 Agricultural pasture 0 Commercial or multifamily residential
- ____0___ Recreation green space, mowed

NWI Polygon # S6W008A	Data Reference# S6W008
see table on page one)	
Fier 2: Individual Polygon: Preliminary to be completted on-site for each NWI polygon pre	
2.1 Wetland Geomorphic Setting and Surface Wate	er Flow (check one):
DepressionalSlopeFlo Riverine (within the river/stream banks)	•
2.2 Presence of Standing Water:	
s standing water normally present in the polygon?	No
Is standing water is present, is the water great	ter than 2 meters n depth? No
s standing water normally present in an adjacent p	olygon? No
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom preser	ntArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Minera	IlBoth Mineral and Organic Present
2.5 Wetland Community Type for this NWI polygon	
2.6 Disturbances of Hydrology (check all that apply	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Scat	tered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	F Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e. None	seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, Th	reatened or Endangered Species:
None observed or known to be presen	
RTES Present (list):	_
2.11 Wetland Polygon Quality Descriptor (see: We	tland Quality Descriptions and check one):
Good ✓ Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

За	.1 N	lotak	ole Features that influence water quality and hydrology:
Es	tima	ited h	nerbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25
Es	tima	ited v	voody plant foliar coverage in the polygon
An	nour	nt of o	dead woody material on the soil surfacenilscatteredfrequent
3а	.2 V	Vate	Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended
	(Y)	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before
	U	14	entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter100 approximate slope (percen1
За	.3 F	lood	and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
1.	Υ	(N)	1a Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)
		•	that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland	d polygon?1
1b. If only one vegetation zone is evident, which best	describes the site?
Polygon composed of amosaic of sma heterogeneous textures across the poly	Ill vegetation patches, hummocks, or tussocks, gon.
Polygon composed of a single vegettation the polygon.	on type with more or less uniform texture across
2. If more than one vegetation zone is present in the pol represents the distribuion of these zone?	ygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy	y?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 7	75%
Is there notable layering/stratification in this vegetation z	rone? No
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms exte	
a. Solidago gigantea	d. Helianthus sp.
b. Laportea canadensis	e. Impatiens capensis
c. Phalaris arundinacea	f. Cinna arundinacea
Dominant Shrub Species listed in order of relative abund	dance.
a. Acer saccharinum	c. Sambucus nigra
b. Populus deltoides	d. Acer negundo
Dominant Tree Species listed in order of relative abunda	ance.
a. Acer saccharinum	c. Salix nigra
b. Populus deltoides	d. Platanus occidentalis
Tree and shrub canopy: nil separate, seldom to	ouching often touching more or less close
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W008A	Data Referen	ce# S6W008	
3b.2 Dominant Plant Species: Vegetation Zone B			
What % of the polygon does this vegetative zone occ	upy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	n zone?		
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms expecies the forms expecies that the forms expecies that forms expecies that expecies the forms expecies that forms expecies that expecies the forms expecies the expecies that expecies the expec			relative
a	d		
b	e		
c	f.		
Dominant Shrub Species listed in order of relative about			
a	C		
b	d.		
Dominant Tree Species listed in order of relative abuse			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seldom			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about wh wetland site).	at adds to or det	tracts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone C			
What % of the polygon does this vegetative zone occ	upy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	n zone?		
Dominant Herbaceous Species (i.e., covering more thabundance. (Mark with an * any species that forms e	nan 10% of the a	rea) listed in order of ultural patches).	relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative abo			
a			
b			
Dominant Tree Species listed in order of relative abu			
a			
b Tree and shrub canopy: nil separate, seldom		ten touching \square more	
·· — — —		ton todoming more	, or 1633 01036
Mature trees (>12" dbh): yes no Other remarks (include personal comments about wh	at adds to or det	tracts from the quality	of this

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plantshorsetail, scouring rush spp. (Equisetum) 2 _*ferns: marsh shiled fern spp. (Dryopteris) 7 _*cinnamon fern (Osmunda cinnamomea) 9 _*royal fern (Osmunda regalils) 8 _sensitive fern (Onoclea sensibilis) 4 _*other: species (if known _marsh club moss (Selaginella apoda) 4 _Sphagnum moss spp. (Sphagnum) 10	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 arrow-head spp. (Sagittaria) 4 *green dragon (Arisaema dracontium) 6 Jack-in-the-pulpit (Arisaema triphyllum) 4 pickerel weed (Pontederia cordata) 5 *skunk cabbage (Symplocarpus foetidus) 8 _*water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6	Herbs: dicots - Ivs. opposite/whorled ✓ *bedstraw spp. (Gallium) 6 ✓ beggar's tick spp. (Bidens) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 ✓ bugleweed spp. (Lycopus) 5 ✓ clearweed spp. (Pilea) 3 cup plant (Silphium perfoliatum) 4 ✓ false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10	*gentian spp. (Gentiana Gentianopsis) 8 ✓ giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10blueflag iris (Iris virginica) 5bulrush spp. (Scirpus / Schoenoplectus) 5*bur reed spp. (Sparganium) 9cat-tail spp. (Typha) 1*cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of speciesa. *wild rice (Zizania aquatica) 10✓ b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other✓ c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)	*loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2*additional = 8nutsedge spp. (Cyperus) 2*orchid spp. 10; species (if know rush spp. (Juncus) 4sedge spp. (Carex) 1 sp. = 3additional =	Herbs (vines): dicots - Ivs. alternate or basal andAmerican bellflower (Campanula americana) 4*asters: bristly aster (Aser puniceus) 7flat-topped aster (Aster umbellatus) 8 = 7 ✓ other aster spp. (e.g. New England, panicled ast*black-eyed Susan (Rudbeckia fulgida) 8cardinal flower (Lobelia cardinalis) 4cress spp. (Cardamine) 4dock spp.: swamp, water, pale (Rumex) 4✓ garlic mustard (Alliaria petiolata) 0golden ragwort (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	tamaraon (Lanx lanoma) To
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
✓ stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	✓ boxelder (Acer negundo) 1
waternerip (Amarantius tuberculatus) 1wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstern (Actinomens alterniona) 5	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	Trans. Issues simula and supposite
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	✓ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	✓ cottonwood, eastern (Populus deltoides) 1
✓ poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
	*oak, Shumard's, swamp chestnut, swamp white
	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
✓ elderberry (Sambucus) 2	

Tier 2: Individual Polygon: Preliminary Assessment (to be completted on-site for each NWI polygon present in the wetland) 2.1 Wetland Geomorphic Setting and Surface Water Flow (check one): Depressional Slope Floodplain
to be completted on-site for each NWI polygon present in the wetland) 2.1 Wetland Geomorphic Setting and Surface Water Flow (check one): Depressional Slope Floodplain Lacustrine Riverine (within the river/stream banks) 2.2 Presence of Standing Water: s standing water normally present in the polygon? Yes Is standing water is present, is the water greater than 2 meters n depth? Yes s standing water normally present in an adjacent polygon? Yes 2.3 Apparent Hydroperiod (check one): Permanently Flooded Artificially Flooded Seasonally Flooded Saturated (surface water seldom present Artificailly Drained 2.4 Soil Type Organic (i.e. peat, etc.) Mineral Both Mineral and Organic Present 2.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana Deep Marsh/Shallow Open Water 2.6 Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to the Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn
Depressional Slope Floodplain ✓ Lacustrine Riverine (within the river/stream banks) 2.2 Presence of Standing Water: 5 standing water normally present in the polygon? Yes 1 Is standing water is present, is the water greater than 2 meters n depth? Yes 5 standing water normally present in an adjacent polygon? Yes 2.3 Apparent Hydroperiod (check one): ✓ Permanently Flooded Artificially Flooded Seasonally Flooded Artificially Drained 3.4 Soil Type Organic (i.e. peat, etc.) ✓ Mineral Both Mineral and Organic Present 2.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indianal Deep Marsh/Shallow Open Water 2.6 Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to the Dams Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn
Riverine (within the river/stream banks) 2.2 Presence of Standing Water: 5 standing water normally present in the polygon? Yes 1 Is standing water is present, is the water greater than 2 meters n depth? Yes 5 standing water normally present in an adjacent polygon? Yes 2.3 Apparent Hydroperiod (check one):
Is standing water normally present in the polygon? Yes Is standing water is present, is the water greater than 2 meters n depth? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes Is standing water normalized polygon? Yes Is standing water polygon? Yes Is standing
Is standing water is present, is the water greater than 2 meters n depth? Yes standing water normally present in an adjacent polygon? Yes 2.3 Apparent Hydroperiod (check one): Permanently Flooded Seasonally Flooded Saturated (surface water seldom present Organic (i.e. peat, etc.) Mineral Both Mineral and Organic Present 2.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana Deep Marsh/Shallow Open Water 2.6 Disturbances of Hydrology (check all that apply): Ditching Tiles Dams Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn
Standing water normally present in an adjacent polygon? ## Permanently Flooded Seasonally Flooded
Permanently Flooded
Permanently Flooded Seasonally Flooded Saturated (surface water seldom present
Seasonally Flooded Saturated (surface water seldom present Artificailly Drained .4 Soil Type Organic (i.e. peat, etc.) ✓ Mineral Both Mineral and Organic Present .5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indianal Deep Marsh/Shallow Open Water .6 Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to the Road or Railroad Embankment .7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn
Saturated (surface water seldom presentArtificailly Drained 2.4 Soil Type Organic (i.e. peat, etc.)✓ MineralBoth Mineral and Organic Present 2.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indianal Deep Marsh/Shallow Open Water 2.6 Disturbances of Hydrology (check all that apply): DitchingCulvert TilesOther Human Distrubances to Dams the Mineral and Organic Present 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic MustardGlossy Buckthorn
Organic (i.e. peat, etc.) ✓ Mineral Both Mineral and Organic Present S.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana) Deep Marsh/Shallow Open Water S.6 Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to the Road or Railroad Embankment S.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn
Organic (i.e. peat, etc.) ✓ Mineral Both Mineral and Organic Present S.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana Deep Marsh/Shallow Open Water S.6 Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to Dams the Road or Railroad Embankment S.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn
.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana Deep Marsh/Shallow Open Water .6 Disturbances of Hydrology (check all that apply): Ditching Tiles Other Human Distrubances to the Road or Railroad Embankment .7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn
.6 Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to Dams the Road or Railroad Embankment .7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn
Tiles Dams Road or Railroad Embankment The Road or Railroad Embankment The Road or Railroad Embankment Garlic Mustard Other Human Distrubances to the the Glossy Buckthorn
Tiles Dams Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn
Dams the Road or Railroad Embankment 7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic MustardGlossy Buckthorn
.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Glossy Buckthorn
Garlic Mustard Glossy Buckthorn
Dhyanmitias Dood Conomy Cross
Phragmities Reed Canary Grass
Purple Loosestrife Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat):
9 Presence of Special Community Types:
BogFenWet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species:
✓ None observed or known to be presen
RTES Present (list):
2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):
Good Medium √ Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	lotak	able Features that influence water quality and hydrology:			
Estimated herbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25						<u>√</u> <25
Es	tima	ited v	woody plant foliar coverage in the polygon100-7	'575-	5050-25	✓ <25
An	nour	nt of o	dead woody material on the soil surfacenil	scattere	d	frequent
3а	.2 V	Vate	er Quality Protection Questions:			
1.	Y	N	Does the wetland have a significant amount of vegetative (sp woody plant) density to potentially uptake dissolved nutients?		herbaceous a	nd
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, industrial or municipal wastewater) is not discharged into the			utlet,
3.			If wetland in question is a depressional wetland answer 3a, in	n not, ans	wer 3b.	
	Υ	N	3a. Does the wetland have a shape or flow that allows for the		out of suspend	ded
	Y	N	materials before teh water reaches the center of the wetl 3b. Is the position of the wetland in the landscape such that entering a surface body of water down gradient?		neld or filtered	before
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, cropping, or areas with severe overgrazing within 100 me			OW
5.	Y	N	Are there recreational lakes, fishable or navigable watercourdown gradient in the local watershed?	ses, or wa	iter supply sou	urces
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas be filtered) located upland and adjacent to the wetland polygarea width and slope.			
			width of buffer area (in meter100 approximate slope	(percen _	0	
3a.3 Flood and Stormwater Storage / Attenuation Questions:						
			If wetland in question is a depressional wetland answer 1a, in	n not ane	wor 1h	
1.	Υ	(N)		•		d, scrub)
			that will slow overland flow into the wetland?			
	Y	N	1b. Is there a significant amount of microtopography or vege to reduce the veolocity of the water leaving the wetland?	tative den	sity within the	wettand
2.	Y	N	Does the wetland lack man-made structure that would speed wetland (tiles, culverts, ditches)?	the flow o	of water from	the
3.	Y	N	Is the flood potential high in the local watershed in which the flood damages)?	wetland is	s located (hist	ory of
4.	Y	N	Is the wetland located in a watershed where the majority f the impermeable, or is bedrock within two feet of the top of the s			and
5.	Y	N	Is the wetland located in a local watershed which has highly to existing development?	modified r	unoff conditio	ns due

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland	polygon?1
1b. If only one vegetation zone is evident, which best	describes the site?
Polygon composed of amosaic of small heterogeneous textures across the polygon	vegetation patches, hummocks, or tussocks, gon.
Polygon composed of a single vegettation the polygon.	n type with more or less uniform texture across
2. If more than one vegetation zone is present in the poly represents the distribuion of these zone?	gon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy	?
■ 10 - 25% □ 25 - 50% □ 50 - 75	5%
Is there notable layering/stratification in this vegetation zo	one? No
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms external terms)	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abund	ance.
a	C
b	d
Dominant Tree Species listed in order of relative abunda	nce.
a. Salix interior	C
b	d
Tree and shrub canopy: nil separate, seldom tou	
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W008B	Data Reference# S6W008
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom to	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
c	f
Dominant Shrub Species listed in order of relative abur	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osm sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floating *bladderwort sp coontail (Cerato	ng rush spp. (Equisetum) 2 hiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 hunda regalils) 8 Dnoclea sensibilis) 4 (if known is (Selaginella apoda) 4 is spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 phyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (F*skunk cabbage*water arum (Cawater plantain (A) Herbs: dicots - lvs*bedstraw sppbeggar's tick sp	d monocots eltandra virginica) 6 c. (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 c. opposite/whorled (Gallium) 6 p. (Bidens) 3
duckweed spp.	(Lemnaceae) 3 . (Potamogeton) 8		erbena hastata) 3 orium perfoliatum) 4
curlyleaf pondw *water lily (Nym water shield (Br	eed (Potamogeton) 6 eed (Potamogeton crispus) 0 phaea tuberosa) 6 asenia schreberi) 4 ock spp. (Nuphar) 6	bugleweed spp. clearweed spp. cup plant (Silphi false nettle (Boe	(Lycopus) 5 (Pilea) 3 ium perfoliatum) 4 ehmeria cylindrica) 3
*sundew spp. (E	arracenia purpurea (10) Orosera) 10	*gentian spp. (G giant ragweed (A Indian hamp (Ap Joe-pye weed s	dicularis lanceolata) 6 Gentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9	mint spp. e.g. he moneywort (Lys monkey flower s	r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 simachia nummularia) 0 spp. (Mimulus) 4
Grasses (family Granumber of species a. *wild rice (Zizb. most natuve cut-grass, mann foxtail (Alopecruc. introduced grass (Phalaris, annual grasses (Setaria) and ba	zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint,	*richweed (Collii St. John's wort s sunflower sp. (F *swamp loosest swamp milkwee toothcup spp. (F *turtlehead spp. virgin's bower (C water purslane (nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8 Helianthus) 4 trife (Decodon verticillatus) 8 ed (Asclepias incarnata) 4 Ammania Rotala) 2
*additional =nutsedge spp. (*orchid spp. 10;rush spp. (Junctsedge spp. (Cai _*spiderlily (Hymoles)*sweet flag (Acoi _**a-way sedge (E*twig rush (Clad _*umbrella sedgewild hyacinth (C	= 8 Cyperus) 2 species (if know us) 4 rex) 1 sp. = 3additional enocallis occidentalis) 9	American bellflom *asters: bristly a flat-topped aster other aster spp. *black-eyed Sustardinal flower (cress spp. (Cardinal flower) dock spp.: swan garlic mustard (ots - Ivs. alternate or basal and ower (Campanula americana) 4 aster (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4 damine) 4 mp, water, pale (Rumex) 4 Alliaria petiolata) 0 (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstorii (/totinoriiona alterniiona) o	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poison sumac (ithus vernix) to
*buttercup spp.: cursed b., hooked b., swamp	Trace leaves simple and appeals
b.(Ranunculus) 6	Trees - leaves simple and opposite
·	red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1
chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7	Silver maple (Acer Sacchamillum) i
	Trace leaves simple and alternate
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

NWI Polygon # S6W008C	Data Reference# S6W008
(see table on page one)	
Tier 2: Individual Polygon: Preliminary at the becompletted on-site for each NWI polygon pre	
2.1 Wetland Geomorphic Setting and Surface Wate	er Flow (check one):
Depressional Slope ✓ Floor Riverine (within the river/stream banks)	•
2 Presence of Standing Water:	
s standing water normally present in the polygon?	No
Is standing water is present, is the water great	er than 2 meters n depth? No
s standing water normally present in an adjacent po	olygon? <u>No</u>
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	· ·
Saturated (surface water seldom presen	tArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	IBoth Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon loodplain Forest.6 Disturbances of Hydrology (check all that apply	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Scatt	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
 Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e.	seeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Th	reatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wet	tland Quality Descriptions and check one):
Good ✓ Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	Notak	ole Features that influence water quality and hydrology:		
Estimated herbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25					
Es	tima	ited v	voody plant foliar coverage in the polygon100-7575-5050-25<25		
An	nour	nt of o	dead woody material on the soil surfacenilscatteredfrequent		
3а	.2 V	Vate	Quality Protection Questions:		
1.	Υ	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?		
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?		
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.		
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended		
		. NI	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before		
	U	N	entering a surface body of water down gradient?		
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?		
5	\bigcirc	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources		
٦.	U	14	down gradient in the local watershed?		
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.		
			width of buffer area (in meter25 approximate slope (percen0_		
3a.3 Flood and Stormwater Storage / Attenuation Questions:					
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b		
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)		
	Υ	(N)	that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland		
	•	W	to reduce the veolocity of the water leaving the wetland?		
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?		
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?		
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?		
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?		

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wet	land polygon?1
1b. If only one vegetation zone is evident, which be	pest describes the site?
Polygon composed of amosaic of sheterogeneous textures across the p	small vegetation patches, hummocks, or tussocks, polygon.
Polygon composed of a single veget the polygon.	ttation type with more or less uniform texture across
2. If more than one vegetation zone is present in the represents the distribuion of these zone?	polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone	4
What % of the polygon does this vegetative zone occ	cupy?
☐ 10 - 25% ☐ 25 - 50% ☐ 50	D - 75%
Is there notable layering/stratification in this vegetation	on zone? No
Dominant Herbaceous Species (i.e., covering more tabundance. (Mark with an * any species that forms	
a. <u>Justicia americana</u>	d
b	e
C	f
Dominant Shrub Species listed in order of relative ab	oundance.
a	c
b	d
Dominant Tree Species listed in order of relative abu	indance.
a. <u>Salix nigra</u>	c
b. Acer saccharinum	d
Tree and shrub canopy: nil separate, seldor	m touching often touching more or less close
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

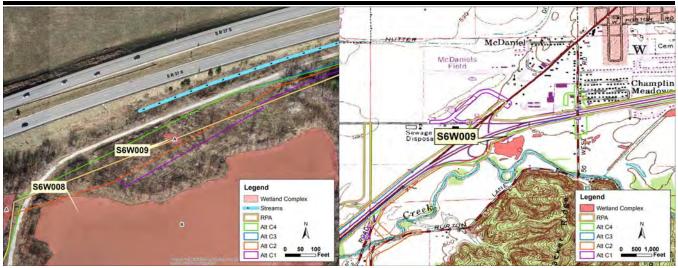
NWI Polygon # S6W008C	Data Reference# S6W008
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom to	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
c	f
Dominant Shrub Species listed in order of relative abur	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osm sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floating *bladderwort sp coontail (Cerato	ng rush spp. (Equisetum) 2 hiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 hunda regalils) 8 Dnoclea sensibilis) 4 (if known is (Selaginella apoda) 4 is spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 phyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (F*skunk cabbage*water arum (Cawater plantain (A) Herbs: dicots - lvs*bedstraw sppbeggar's tick sp	d monocots eltandra virginica) 6 c. (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 c. opposite/whorled (Gallium) 6 p. (Bidens) 3
duckweed spp.	(Lemnaceae) 3 . (Potamogeton) 8		erbena hastata) 3 orium perfoliatum) 4
curlyleaf pondw *water lily (Nym water shield (Br	eed (Potamogeton) 6 eed (Potamogeton crispus) 0 phaea tuberosa) 6 asenia schreberi) 4 ock spp. (Nuphar) 6	bugleweed spp. clearweed spp. cup plant (Silphi false nettle (Boe	(Lycopus) 5 (Pilea) 3 ium perfoliatum) 4 ehmeria cylindrica) 3
*sundew spp. (E	arracenia purpurea (10) Orosera) 10	*gentian spp. (G giant ragweed (A Indian hamp (Ap Joe-pye weed s	dicularis lanceolata) 6 Gentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9	mint spp. e.g. he moneywort (Lys monkey flower s	r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 simachia nummularia) 0 spp. (Mimulus) 4
Grasses (family Granumber of species a. *wild rice (Zizb. most natuve cut-grass, mann foxtail (Alopecruc. introduced grass (Phalaris, annual grasses (Setaria) and ba	zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint,	*richweed (Collii St. John's wort s sunflower sp. (F *swamp loosest swamp milkwee toothcup spp. (F *turtlehead spp. virgin's bower (C water purslane (nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8 Helianthus) 4 trife (Decodon verticillatus) 8 ed (Asclepias incarnata) 4 Ammania Rotala) 2
*additional =nutsedge spp. (*orchid spp. 10;rush spp. (Junctsedge spp. (Cai _*spiderlily (Hymoles)*sweet flag (Acoi _**a-way sedge (E*twig rush (Clad _*umbrella sedgewild hyacinth (C	= 8 Cyperus) 2 species (if know us) 4 rex) 1 sp. = 3additional enocallis occidentalis) 9	American bellflom *asters: bristly a flat-topped aster other aster spp. *black-eyed Sustardinal flower (cress spp. (Cardinal flower) dock spp.: swan garlic mustard (ots - Ivs. alternate or basal and ower (Campanula americana) 4 aster (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4 damine) 4 mp, water, pale (Rumex) 4 Alliaria petiolata) 0 (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstern (Actinomens alternitolia) 5	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
	poison sumac (Knus vernix) 10
aven spp.: round, white (Geum) 2	Trace leaves simple and appeals
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	✓ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	Tours 1
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W009



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 Morgan County: **T11N** Physiographic Region: Martinsville Hills Township: Interior Plateau R1E **Ecoregion:** Range: **Natural Region:** Highland Rim Section: 8 Size of wetland complex (acres): 0.0301 Quarter: SE

USACE JurisdictionYesLatitude:39.403258IDEM Jurisdiction:YesLongitude:-86.443436

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.03	100.0%
							Alt C2	0.03	100.0%
S6W009A	Seasonally	PEM	0.0301	poor	poor	good	Alt C3	0.00	0.0%
	Flooded						Alt C4	0.00	0.0%
	Basin						RPA	0.02	66.1%

Wetland S6W009



Polygon S6W009A

In-WRAP Summary Sheet

Date Report Generate	d: Friday, September 15, 2017			
Wetland Site Name:	N/A			
Data Reference #: S6\	W009			
Date of Site Visit: Tue	esday, May 12, 2015			
Tier 1 Summary:				
a. Total Wetland A	rea (acres): 0.0301			
b. Wetland size ar	nd connectivity - contribution to animal habita	at:		
	Valuable Moi	re Favorable	Favorable	Neutral
c. Surrounding lan	nd use - numerical rank (max. = 1): 0.80			
d. Value surround	ing area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY	:	Polyg	on ID	6W009A
a. Indiana Wetlan	d community type: Seasonally Flooded Basin	1		
b. Standing water	- contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to	site: other			
d. Exotic species r	ating:	Good	Medium	Poor
e. Special Hydrolo	gic Conditions Observed: None			
f. Special Commu	nity Type: None			
g. Rare-Threatene	d-Endangered Species:			
h. Polygon Quality	/ Descriptor:	Good	Medium	Poor
Tier 3A SUMMAR	Y:			
a: Dead woody ma	aterial as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality p	rotection - numerical rank (6 max.): 4	Good	Medium	Poor
c. Flood and storn	n water storage - numerical rank (5 ma4	Good	Medium	Poor
Tier 3B SUMMAR	v ·			
	terspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
	s indicator of animal habitat:	Valuable	Tavorable	Neutral
	ninant plant taxa observed: 5	Good	Medium	Poor
	ient of conservatism: 2.4	Good	Medium	Poor
· ·	indicator of animal habitat:	Valuable	ivicululli	Neutral
• •	indicator of animal habitat:	Valuable	Favorable	Neutral
	tic taxa observed: 18	Good	Medium	Poor
h. Number of indi		Good	Medium	Poor
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Native Vegetation - woodland 0 Road / highway / railroad bed / parking load 100 Native Vegetation - old field / scrub 0 Industrial 0 Agricultural - tilled 0 Residential - single family 0 Agricultural - pasture 0 Commercial or multifamily residential

Recreation - green space, mowed

NWI Polygon # S6W009A	Data Reference# S6W009
see table on page one)	
Tier 2: Individual Polygon: Preliminary Associates to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Wate	r Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	olygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom present	tArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
easonally Flooded Basin 2.6 Disturbances of Hydrology (check all that apply)):
Ditching	Culvert
Tiles	✓ Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	S Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. s	seeps, wet slopes, floating mat):
O Drosonco of Special Community Types	
2.9 Presence of Special Community Types:	Mai Caral / NA - 1 51 :
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
None observed or known to be presen	
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: Wet	land Quality Descriptions and check one):
Good Medium ✓	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	Notak	ole Features that influence water quality and hydrology:
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon 75-50 50-25<25
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25<25
An	noui	nt of o	dead woody material on the soil surface nilscattered frequent
3а	.2 ۱	Nate	Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	ү ү	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter10 approximate slope (percen2
3а	.3 F	Flood	and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)
	Y	N	that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Mature trees (>12" dbh): yes

Tier 3b Individual Polygon: Rapid Vegetation Description

The community of the contract
3b.1 Zonation and Interspersion:
How may vegetation zones are evident in this wetland polygon?
1b. If only one vegetation zone is evident, which best describes the site?
Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon.
Polygon composed of a single vegettation type with more or less uniform texture across the polygon.
2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone?
Type One Interspersion Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A
What % of the polygon does this vegetative zone occupy?
□ 10 - 25% □ 25 - 50% □ 50 - 75% □ 75 - 90%
Is there notable layering/stratification in this vegetation zone? No
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).
a. Phyla lanceolata d. Juncus dudleyi
b. Scirpus cyperinus e.
c. Juncus torreyi f
Dominant Shrub Species listed in order of relative abundance.
a C
b d
Dominant Tree Species listed in order of relative abundance.
a. <u>Salix interior</u> c
b d
Tree and shrub canopy: nil separate, seldom touching often touching more or less close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

no

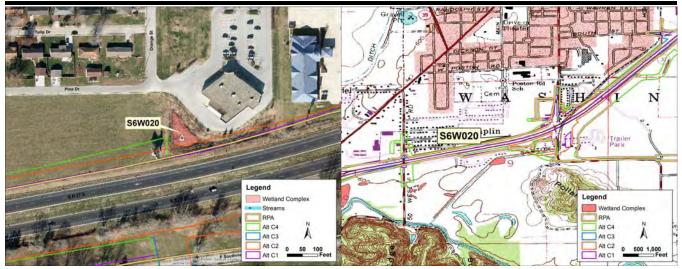
NWI Polygon # S6W009A	Data Reference# S6W009
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
c	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom to	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

Herbs: non-seed plants horsetall, scouring rush spp. (Equisetum) 2 'ferns: marsh shiled fern spp. (Dryopteris) 7 'cinnamon fern (Osmunda cinamomea) 9 'royal fern (Calla palustris) 10 ✓ water plantia (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorled 'bedstraw spp. (Gallium) 6 buglewed spp. (Lepatorium perfoliatum) 4 buglewed spp. (Lyopus) 5 olearweed spp. (Eleopatorium) 5 clearweed spp. (Eleopatorium) 4 dalse nettle (Boehmeria cynditica) 3 'fen betory (Pedicularis lanceolata) 6 'gentian spp. (Gentiana Centianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Lyusimachia) 6 mater al yalvatica) 10 bulletlag iris (lis virginica) 5 "bur reed spp. (Sarganium) 9 ✓ cat-tali spp. (Typha) 1 'cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cul-grass, (Phalans, reed (Phragmites), annu	(N = northern Indiana) $SW = southwestern Indiana$	numbers = C-coefficents *= species with high conservatism)
Terms: marsh shiled fern spp. (Dryopteris) 7 Teinnamon fern (Osmunda cinnamomea) 9 Troyal fern (Osmunda regalilis) 8 sensitive fern (Onoclea sensibilis) 4 Tother: species (if known marsh club moss (Selaginelia apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent bladderwort spp. (Utricularia) 10 contail (Ceratophyllum demersum) 1 duckweed spp. (Lemancaea) 3 Tonodweed spp. (Lemancaea) 3 Tonodweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 Twater liliy (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 Tyellow spatterdock spp. (Nuphar) 6 Herbs: Inear-Ivs. or +I- leafless monocots Teak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 Tour reed spp. (Sperganium) 9 ✓ cat-tail spp. (Typha) 1 Totton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus), other ✓ c. introduced grass spp. (Teriophorum) 10 Grasses (Findinoal = 8 nutsedge spp. (Cyperus) 2 Torchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 Torchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 Torchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 Torchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 Torchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 Torchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 Torchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 Torchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 Torchid spp. (Lycioania aloue) Torchid spp. (Lycioania aloue) Torchid spp. (Lycioania aloue) Torchid spp. (Lycioania) Torchid spp. (L	Herbs: non-seed plants	Herbs: wide-leafed monocots
"cinnamon fern (Osmunda cinnamomea) 9 "royal fern (Osmunda regalils) 8 sensitive fern (Oncolea sensibilis) 4 "other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent "bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 "pondweed spp. (Lemnaceae) 3 "pondweed spp. (Potamogeton orispus) 0 "water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent "pitcher plant (Sarracenia purpurea (10) "sundew spp. (Crosarea) 10 "bulledlag iris (ris virginica) 5 "bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 "cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus), other v. c. introduced grass spp. (Elecoharis) 1 sp. =2 "additional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (1); pospositif (Iris) virginical is (Iris virginical) 3 "incheed (Collinsonia canadersis) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 "turtlehead spp. (Elecoharis) 3 winged loosestrife (Lythrum alatum) 5 seed spp. (Carey) 1 sp. = 3 "dditional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (1); pospositif (Iris) virginical is 3 winged loosestrife (Lythrum alatum) 5 seed spp. (Carey) 1 sp. = 3 "dditional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (1); pospositif (Iris) virginical) 3 winged loosestrife (Lythrum alatum) 5 search star spr. (2); pospositife (Iris) virginical) 3 winged loosestrife (Lythrum alatum) 5 search star spr. (2); pospositife (Iris) virginical) 3 winged loosestrife (Lythrum alatum) 5 search star spr. (2); pospositife (Iris) virginical) 4 "orchid spp. (1); pospositife (Iris) virginical) 3 winged loosestrife (Lythrum alatum) 5 search star spr. (1); pospositife (Iris) virginical) 3 winged loosestrife (Lythr	horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
r'royal fern (Osmunda regalis) 8 sensitive fern (Onoclea sensibilis) 4	*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
sensitive fern (Onoclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton 8 curlyleaf pondweed (Potamogeton 68 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 blueflag iris (Iris viriginica) 5 *bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Fleiophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other ✓c. introduced grass spp. 0. rreed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual toxtail (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Eleocharis) 1 sp. =2 *additional = 8 nutsedge spp. (Cycerus) 2 *orchid spp. (1) species (if know ✓vrichid spp. (1) species (if know ✓vrichid spp. (1) species (if know √stensity spitcher plantain (Alisina patiotalia) 4 vigin sbower (Clemtais virginiana) 3 water plantain (Calla palustris) 10 vigentian agentian (2 spl.) (2 species (2 spp. (1) species (3 spl.) (2 s	*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
"skunk cabbage (Symplocarpus foetidus) 8 marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent "bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 "pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 "water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent "plitcher plant (Sarracenia purpurea (10) "sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots "beak rush spp. (Rhynchospora) 10 blueflag ris (firs virginica) 5 pulrush spp. (Scirpus / Schoenoplectus) 5 "bur reed spp. (Spagnaium) 9 _cat-tail spp. (Typha) 1 "cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Allopecrus); other _c introduced grass spp. (Erecharis) 1 sp. =2 _radditional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (Secencial) 1 sp. =2 _radditional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (Cycerus) 2 "orchid spp. (Cycerus) 2 "orchid spp. (Gleendaris) 1 sp. =2 _radditional = 8 nutsedge spp. (Cycerus) 2 "orchid spp. (Cycerus) 2 "	*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
Marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent 'bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 'pondweed (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 "water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent 'pitcher plant (Sarracenia purpurea (10) 'sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/ leafless monocots 'beak rush spp (Rhynchospora) 10 blueflag iris (fits virginica) 5 'bur reed spp. (Scirgus / Schoenoplectus) 5 'bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 'cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, fottail (Alopecrus); other ✓ c. introduced grass spp. Dreed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barmyard grass (Echimochloa) needle sedge spp. (Eleocharis) 1 sp. =2 "additional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Carex) 1 sp. = 3 ✓ additional = 7 '3-way sedge (Dulichium arundinaceum) 10 'twig rush (Cladium mariscoides) 10 'umbrella sedge (Fuirena squarrosa) 10 wild hyacinth (Camassia scilloides) 5 Herbs: dicots - Ivs. opposite/whorled 'bedstraw spp. (Bilean) 3 blue vervain (Berbena hastata) 3 blue vervain (Berbena hastata) 3 blue vervain (Berbena hastata) 3 bueglewed spp. (Lycopus) 5 cleaweed spp. (Leyopus) 5 cleaweed spp. (Pilea) 3 cup plant (Siphium perfoliatum) 4 false nettle (Boelmeria cylindrica) 3 "fen betony (Pedicularis lanceolata) 6 "gentian spp. (Lysimachia) 6 "gentian spp. (Lysimachia) 6 "gentian spp. (Lysimachia) 7 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 meadow beauty (Rhexia vi	sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
Herbs: Ivs. floating or submergent 'bladderwort spp. (Utricularia) 10 contail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 'pondweed spp. (Potamogeton or rispus) 0 "water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent "yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent "pitcher plant (Sarracenia purpurea (10) "sundew spp. (Drosera) 10 blueflag iris (Iris virginica) 5 _bulrush spp. (Scirpus / Schoenoplectus) 5 "bur read spp. (Sparganium) 9 _cat-tail spp. (Typha) 1 "cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alisma plantago-aquatica) 2 water plantain (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorled "bedstraw spp. (Gallium) 6 begga's tick spp. (Bidnes) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 buglewed spp. (Lycopus) 5 clearweed spp. (Picapoliam) 4 false nettle (Boehmeria cylindrica) 3 "fen betony (Pedicularis lanceolata) 6 "gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Jose-ye weed spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Hymerium/Triandeum) 8 sunflowers p. (Helainthus) 4 "swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 "swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 "stotcup spp. (Ammania Rotala) (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Cyperus) 2 "orchid spp. (Typerus) 2 "orchid spp. (Typerus) 1 "yelderliny (Hymenocallis occidentalis) 9 sweet fla	*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
Herbs: Ivs. floating or submergent	marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
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blueflag iris (Iris virginica) 5 ✓ bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other ✓ c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Eleocharis) 1 sp. =2 **additional = 8 **nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know **sedge spp. (Carex) 1 sp. = 3 ✓ additional = 7 **rush spp. (Juncus) 4 **sedge spp. (Carex) 1 sp. = 3 ✓ additional = 7 **spiderlily (Hymenocallis occidentalis) 9 **sweet flag (Acorus calamus) 0 **twig rush (Cladium mariscoides) 10 **wild hyacinth (Camassia scilloides) 5 *moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 **richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Hypericum/Triandeum) 8 sunflower spp. (Hypericum/Triandeum) 8 sunflower spp. (Hypericum/Triandeum) 8 **swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 *toothcup spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5 **asters: bristly aster (Aser umbellatus) 8 **asters: bristly aster (Aser umbellatus) 8 **aters: bristly aster (Aser umbellatus) 8 cardinal flower (Lobelia cardinalis) 4 cress spp. (Cardamine) 4 ✓ dock spp.: swamp, water, pale (Rumex) 4 garlic mustard (Alliaria petiolata) 0 golden ragwort (Senecio aureus) 4	Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
 ✓ bulrush spp. (Scirpus / Schoenoplectus) 5		meadow beauty (Rhexia virginica) 5
*bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other ✓ c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Eleocharis) 1 sp. =2 — *additional = 8 — nutsedge spp. (Cyperus) 2 * orchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 — sedge spp. (Carex) 1 sp. = 3 ✓ additional = 7 ✓ rush spp. (Juncus) 4 — sedge spp. (Carex) 1 sp. = 3 ✓ additional = 7 * swamp loosestrife (Decodon verticillatus) 8 — swamp milkweed (Asclepias incarnata) 4 † toothcup spp. (Ammania Rotala) 2 * turtlehead spp. (Chelone) 8 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5 Herbs (vines): dicots - Ivs. alternate or basal and American belliflower (Campanula americana) 4 * *asters: bristly aster (Aser umbellatus) 8 sedge spp. (Carex) 1 sp. = 3 ✓ additional = 7 ✓ rush spp. (Juncus) 4 — *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Chelone) 8 wirgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5 Herbs (vines): dicots - Ivs. alternate or basal and American belliflower (Campanula americana) 4 * *asters: bristly aster (Aser umbellatus) 8 * sedge spp. (Carex) 1 sp. = 3 ✓ atlatitopped aster (Aster umbellatus) 8 * sunflowed (Collinsonia canadensis) 9 * swamp loosestrife (Lythrum alatum) 5 Water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5 * asters: bristly aster (Aser puniceus) 7 flat-topped aster (Aster umbellatus) 8 * acardinal flower (Lobelia cardinalis) 4 cress spp. (Cardamine) 4 dock spp.: swamp, water, pale (Rumex) 4 dock spp.: swamp in items and in the purple loos	blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Eleocharis) 1 sp. =2 _*additional = 8 nutsedge spp. (Cyperus) 2 *orchid spp. 10; species (if know *rorchid spp. 10; species (if know *syniderlily (Hymenocallis occidentalis) 9 sweet flag (Acorus calamus) 0 *3-way sedge (Dulichium arundinaceum) 10 *twmbrella sedge (Fuirena squarrosa) 10 mettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 winged loosestrife (Lythrum alatum) 5 mettle (Urtica procera) 1 purple loosestrife (Lythrum cleosestrife (Lythrum salicaria) 0 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 wirgin's bower (Clematis virginiana) 3 winged loosestrife (Lythrum alatum) 5 mettle (Urtica procera) 1 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5 dictors - Ivs. alternate or basal and American belliflower (Campanula	✓ bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
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Grasses (family Gramineae) - indicate types and number of species*richweed (Collinsonia canadensis) 8a. *wild rice (Zizania aquatica) 10St. John's wort spp. (Hypericum/Triandeum) 8b. most natuve perennial grass spp. 4:*swamp loosestrife (Decodon verticillatus) 8cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other*swamp loosestrife (Decodon verticillatus) 8✓ c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)*turtlehead spp. (Chelone) 8needle sedge spp. (Eleocharis) 1 sp. =2*water purslane (Ludwigia palustris) 3**additional = 8winged loosestrife (Lythrum alatum) 5nutsedge spp. (Cyperus) 2*additional = 7**rorchid spp. 10; species (if know*asters: bristly aster (Aser puniceus) 7**rorchid spp. 10; species (if know*asters: bristly aster (Aster umbellatus) 8*sedge spp. (Carex) 1 sp. = 3*additional = 7*syniderlily (Hymenocallis occidentalis) 9*black-eyed Susan (Rudbeckia fulgida) 8*sweet flag (Acorus calamus) 0*black-eyed Susan (Rudbeckia fulgida) 8*3-way sedge (Dulichium arundinaceum) 10*cress spp. (Cardamine) 4*twig rush (Cladium mariscoides) 10dock spp.: swamp, water, pale (Rumex) 4*umbrella sedge (Fuirena squarrosa) 10garlic mustard (Alliaria petiolata) 0wild hyacinth (Camassia scilloides) 5golden ragwort (Senecio aureus) 4	✓ cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
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a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Eleocharis) 1 sp. =2 *additional = 8 nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know*rush spp. (Juncus) 4 sedge spp. (Carex) 1 sp. = 3	Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other	number of species	St. John's wort spp. (Hypericum/Triandeum) 8
cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other	 a. *wild rice (Zizania aquatica) 10 	sunflower sp. (Helianthus) 4
cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other	b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
 ✓ c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Eleocharis) 1 sp. =2	cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
 ✓ c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Eleocharis) 1 sp. =2 *additional = 8	foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2
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annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)		virgin's bower (Clematis virginiana) 3
meedle sedge spp. (Eleocharis) 1 sp. =2 *additional = 8nutsedge spp. (Cyperus) 2*orchid spp. 10; species (if knowrush spp. (Juncus) 4sedge spp. (Carex) 1 sp. = 3additional = 7*spiderlily (Hymenocallis occidentalis) 9sweet flag (Acorus calamus) 0*3-way sedge (Dulichium arundinaceum) 10*twig rush (Cladium mariscoides) 10*tumbrella sedge (Fuirena squarrosa) 10wild hyacinth (Camassia scilloides) 5*additional = 7*american bellflower (Campanula americana) 4*asters: bristly aster (Aster umbellatus) 8*asters: bristly aster (Aster	annual grasses such as annual foxtail	
*additional = 8	(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
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*orchid spp. 10; species (if know *asters: bristly aster (Aser puniceus) 7 ✓ rush spp. (Juncus) 4	nutsedge spp. (Cyperus) 2	
rush spp. (Juncus) 4 sedge spp. (Carex) 1 sp. = 3		
sedge spp. (Carex) 1 sp. = 3		
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*umbrella sedge (Fuirena squarrosa) 10 garlic mustard (Alliaria petiolata) 0 wild hyacinth (Camassia scilloides) 5 golden ragwort (Senecio aureus) 4		
wild hyacinth (Camassia scilloides) 5 golden ragwort (Senecio aureus) 4		

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstern (/telinemens alterniolia) o	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poison sumae (renus vernix) 10
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	silver maple (Acer sacchamidm) i
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, eastern (Populus deitoides) 1 cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	
	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4
*swamp thistle (Cirsium muticum) 8	
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
Church a lagrana anno aita an urbanlad	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W020



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 County: Morgan **T11N** Physiographic Region: Martinsville Hills Township: Ecoregion: Interior Plateau R1E Range: **Natural Region:** Highland Rim Section: 9 Size of wetland complex (acres): 0.0930 Quarter: NE

USACE JurisdictionNoLatitude:39.407611IDEM Jurisdiction:YesLongitude:-86.4276

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.00	0.0%
							Alt C2	0.00	2.8%
S6W020A	Shallow	PEM	0.0930	poor	poor	poor	Alt C3	0.00	0.0%
	Marsh						Alt C4	0.00	0.0%
							RPA	0.00	0.0%



Polygon S6W020A

In-WRAP Summary Sheet

Wetland Site Name: N/A Data Reference #: S6W020 Date of Site Visit: Friday, May 15, 2015 Tier 1 Summary: a. Total Wetland Area (acres): 0.0930 b. Wetland size and connectivity - contribution to animal habitat: Valuable More Favorable Favorable Neutral c. Surrounding land use - numerical rank (max. = 1): 0.24 d. Value surrounding area adds to animal habitat: Valuable Favorable Low Tier 2 SUMMARY: a. Indiana Wetland community type: Shallow Marsh b. Standing water - contribution to animal habitat: Valuable Favorable Neutral c. Disturbances to site: ditches road/railroad culvert d. Exotic species rating: Good Medium Poor e. Special Hydrologic Conditions Observed: None f. Special Community Type: None g. Rare-Threatened-Endangered Species: None h. Polygon Quality Descriptor: Good Medium Poor Tier 3A SUMMARY: a: Dead woody material as indicator of animal habitat: b. Water quality protection - numerical rank (6 max.): 1 Good Medium Poor Tier 3B SUMMARY:
Date of Site Visit: Friday, May 15, 2015 Tier 1 Summary: a. Total Wetland Area (acres): 0.0930 b. Wetland size and connectivity - contribution to animal habitat: Valuable More Favorable Favorable Neutral c. Surrounding land use - numerical rank (max. = 1): 0.24 d. Value surrounding area adds to animal habitat: Valuable Favorable Low Tier 2 SUMMARY: Polygon ID S6W020A a. Indiana Wetland community type: Shallow Marsh b. Standing water - contribution to animal habitat: C. Disturbances to site: ditches road/railroad culvert d. Exotic species rating: Good Medium Poor e. Special Hydrologic Conditions Observed: None f. Special Community Type: None g. Rare-Threatened-Endangered Species: None h. Polygon Quality Descriptor: Good Medium Poor Tier 3A SUMMARY: a: Dead woody material as indicator of animal habitat: b. Water quality protection - numerical rank (6 max.): 1 Good Medium Poor c. Flood and storm water storage - numerical rank (5 ma 1 Good Medium Poor
Tier 1 Summary: a. Total Wetland Area (acres): 0.0930 b. Wetland size and connectivity - contribution to animal habitat: Valuable More Favorable Favorable Neutral c. Surrounding land use - numerical rank (max. = 1): 0.24 d. Value surrounding area adds to animal habitat: Valuable Favorable Low Tier 2 SUMMARY: Polygon ID S6W020A a. Indiana Wetland community type: Shallow Marsh b. Standing water - contribution to animal habitat: Valuable Favorable Neutral c. Disturbances to site: ditches road/railroad culvert d. Exotic species rating: Good Medium Poor e. Special Hydrologic Conditions Observed: None f. Special Community Type: None g. Rare-Threatened-Endangered Species: None h. Polygon Quality Descriptor: Good Medium Poor Tier 3A SUMMARY: a: Dead woody material as indicator of animal habitat: Valuable Favorable Neutral b. Water quality protection - numerical rank (6 max.): 1 Good Medium Poor c. Flood and storm water storage - numerical rank (5 ma 1 Good Medium Poor
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C. Surrounding land use - numerical rank (max. = 1):
c. Surrounding land use - numerical rank (max. = 1):
d. Value surrounding area adds to animal habitat: Valuable Favorable Low **Tier 2 SUMMARY:** a. Indiana Wetland community type: Shallow Marsh b. Standing water - contribution to animal habitat: c. Disturbances to site: ditches road/railroad culvert d. Exotic species rating: e. Special Hydrologic Conditions Observed: None f. Special Community Type: None g. Rare-Threatened-Endangered Species: None h. Polygon Quality Descriptor: Good Medium Poor **Tier 3A SUMMARY:** a: Dead woody material as indicator of animal habitat: b. Water quality protection - numerical rank (6 max.): 1 Good Medium Poor C. Flood and storm water storage - numerical rank (5 ma 1 Good Medium Poor
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g. Rare-Threatened-Endangered Species: None h. Polygon Quality Descriptor: Good Medium Poor Tier 3A SUMMARY: a: Dead woody material as indicator of animal habitat: Valuable Favorable Neutral b. Water quality protection - numerical rank (6 max.): 1 Good Medium Poor c. Flood and storm water storage - numerical rank (5 ma 1 Good Medium Poor
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a: Dead woody material as indicator of animal habitat: b. Water quality protection - numerical rank (6 max.): 1 Good Medium Poor c. Flood and storm water storage - numerical rank (5 ma 1 Good Medium Poor
b. Water quality protection - numerical rank (6 max.): 1 Good Medium Poor c. Flood and storm water storage - numerical rank (5 ma 1 Good Medium Poor
c. Flood and storm water storage - numerical rank (5 ma 1 Good Medium Poor
Tier 3B SUMMARY:
a. Zonation and interspersion as indicator of animal habitat: Valuable Favorable Neutral
b. Stratification as indicator of animal habitat: Valuable Neutral
c. Number of dominant plant taxa observed: 3 Good Medium Poor
d. Average coefficient of conservatism: 2.7 Good Medium Poor
e. Tree canopy as indicator of animal habitat: Valuable Neutral
f. Mature trees as indicator of animal habitat: Valuable Favorable Neutral
g. Total hydrophytic taxa observed: 13 Good Medium Poor
h. Number of indicator taxa: 0 Good Medium Poor

0 Recreation - green space, mowed

-:	-	_		_	•
liar	7.	Λεερε	mant		
1161	1.	Assess		OVE	VIEW

Tier 1: Assessment Ov 1.1 Site Identification:	<i>r</i> erview							
Wetland Site Name: N/A								
Ownership (if known): N/A								
·								
	USGS Topographic Quadrangle: Martinsville USGS Watershed map 14-Digit HUC: Indian Creek - Sand Creek							
Identify each NWI Polygon w	·							
NWI Polygon ID Number	Cowardin Classifica	• •	Polygon Size (acres)	1				
S6W020A	PEM1	tion	0.0930	-				
				J				
1.2 Site Visit								
Team Members: Rusty Yeag	ger							
Agency: Lochmueller Group								
Date assessed: 5/15/2015	Т	ime as	sessed: 2:28:00 AM					
Weather conditions: sunny	. previous showers							
Note any unusual weahter ex		influor	and the current conditions	within this wotland				
system (e.g. recent heav rain	•							
			, , , , , -	•				
4.234/								
1.3 Wetland Size Size of site under assessment	t: 0.093							
Size of wetland complex: 0	.093							
1.4 Site Setting								
Degree of isolation from other	er wetlands or wetla	nd com	nplexes:					
The site is connected	ed upstream and do	ownst	ream with other wetlands	;				
The site is only con	nected upstrrem w	ith otl	her wetlands					
The site is only con	nected downstrear	n with	other wetlands					
Other wetlands are	nearby (within 0.2	.5 mil€	e) but not connected					
The wetland site is	isolated							
General assessment of adjace the wetland site (indicate the				of the perimeter of				
0 Native Vegetation	- woodland	20	Road / highway / railroad	d bed / parking lot				
0 Native Vegetation	-	0	Industrial					
0 Agricultural - tilled		0	Residential - single family	у				
0 Agricultural - pastu	ure	80	Commercial or multifami	ily residential				

NWI Polygon # S6W020A	Data Reference# S6W020
see table on page one)	
ier 2: Individual Polygon: Preliminary As to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	Yes
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	llygon? <u>Yes</u>
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	tArtificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon hallow Marsh .6 Disturbances of Hydrology (check all that apply)	
✓ Ditching	√ Culvert
Tiles	Other Human Distrubances to
Dams	the
✓ Road or Railroad Embankment	tile
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
 Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
11 Wetland Polygon Quality Descriptor (see: Wet	land Quality Descriptions and check one):
in welland tolygon quality bescriptor (see. well	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	Notak	ole Features that influence water quality and hydrology:						
Es	stimated herbaceouis plant cover (percentage) in the polygon100-7575-50<50-25<25								
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25<25						
An	nour	nt of o	dead woody material on the soil surfacenilscatteredfrequent						
3а	.2 V	Vate	Quality Protection Questions:						
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?						
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?						
3.	Υ	(N)	If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended						
	Υ	(N)	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?						
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?						
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?						
6.	Υ	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.						
			width of buffer area (in meter0 approximate slope (percen0						
3а	.3 F	Flood	and Stormwater Storage / Attenuation Questions:						
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b						
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?						
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?						
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?						
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?						
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?						
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?						

Tier 3b Individual Polygon: Rapid Vegetation Description

1. How may vegetation zones are evident in this we	tland polygon?1
1b. If only one vegetation zone is evident, which	best describes the site?
Polygon composed of amosaic of heterogeneous textures across the	small vegetation patches, hummocks, or tussocks, polygon.
Polygon composed of a single vegethe polygon.	ettation type with more or less uniform texture across
2. If more than one vegetation zone is present in the represents the distribuion of these zone?	e polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone	A
What % of the polygon does this vegetative zone or	ecupy?
☐ 10 - 25% ☐ 25 - 50% ☐ 5	50 - 75%
Is there notable layering/stratification in this vegetat	ion zone? No
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms	
a. <i>Typha angustifolia</i>	d
b. Eleocharis sp.	e
c. Carex bebbii	f
Dominant Shrub Species listed in order of relative a	bundance.
a	C
b	d
Dominant Tree Species listed in order of relative ab	undance.
a	C
b	d
	om touching often touching more or less close
Mature trees (>12" dbh): yes no	

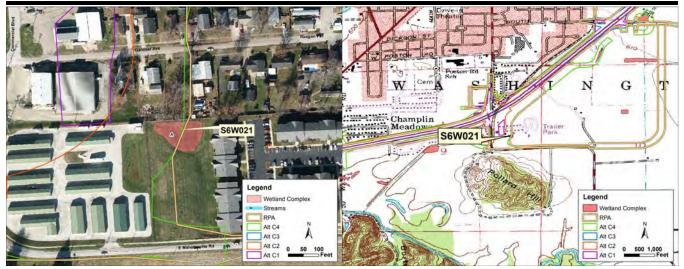
3b.2 Dominant Plant Species: Vegetation Zone B What % of the polygon does this vegetative zone occupy? □ 10 - 25% □ 25 - 50% □ 50 - 75% □ 75 - 90% □ >90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an *anv species that forms extensive monocultural patches). a. □ d. □ □ b. □ e. □ c. □ f. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ b. □ d. □ Dominant Tree Species listed in order of relative abundance. a. □ c. □ b. □ d. □ Tree and shrub canopy: □ nil □ separate, seldom touching □ often touching □ more or less close well and site). 3b.2 Dominant Plant Species: Vegetation Zone C What % of the polygon does this vegetative zone occupy? □ 10 - 25% □ 25 - 50% □ 50 - 75% □ 75 - 90% □ >90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an *any species that forms extensive monocultural patches). a. □ d. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ Dominant Tree Species listed in order of relative abundance. a. □ c. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ Dominant Tree Species listed in order of relative abundance. a. □ c. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ Dominant Shrub Species listed in order of relative abundance. a. □ c. □ Dominant Shrub Speci	NWI Polygon # S6W020A	Data Refer	ence# <u>S6W020</u>	
10 - 25%	3b.2 Dominant Plant Species: Vegetation Zo	ne B		
Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a.	What % of the polygon does this vegetative zone	occupy?		
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a.	☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
abundance. (Mark with an * any species that forms extensive monocultural patches). a	Is there notable layering/stratification in this vege	tation zone?		
b				of relative
c	a	d		
Dominant Shrub Species listed in order of relative abundance. a	b	e		
Dominant Shrub Species listed in order of relative abundance. a	c.	f.		
b				
Dominant Tree Species listed in order of relative abundance. a	a	C		
Dominant Tree Species listed in order of relative abundance. a	b.	d.		
b				
b	·			
Tree and shrub canopy: nil separate, seldom touching often touching more or less close Mature trees (>12" dbh): yes no Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site). 3b.2 Dominant Plant Species: Vegetation Zone C What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a d b e C Dominant Shrub Species listed in order of relative abundance. a				
Mature trees (>12" dbh):				
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wetland site). 3b.2 Dominant Plant Species: Vegetation Zone C What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. d. b. e. c. f. Dominant Shrub Species listed in order of relative abundance. a. C. b. d. Dominant Tree Species listed in order of relative abundance. a. C. b. d. Dominant Tree Species listed in order of relative abundance. a. C. b. d.	·		datus ata fuana tha annali	u . af Alaia
What % of the polygon does this vegetative zone occupy? 10 - 25%		it what adds to or	detracts from the qualif	ty of this
□ 10 - 25% □ 25 - 50% □ 50 - 75% □ 75 - 90% □ >90% Is there notable layering/stratification in this vegetation zone? □ Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. d. b. e. c. f. Dominant Shrub Species listed in order of relative abundance. a. c. b. d. Dominant Tree Species listed in order of relative abundance. a. c. b. d. b. d.	3b.2 Dominant Plant Species: Vegetation Zo	ne C		
Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a	What % of the polygon does this vegetative zone	occupy?		
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a d	☐ 10 - 25% ☐ 25 - 50% ☐	50 - 75%	75 - 90%	Section >90%
abundance. (Mark with an * any species that forms extensive monocultural patches). a d	Is there notable layering/stratification in this vege	tation zone?		
b				of relative
b	a	d		
c	b.			
Dominant Shrub Species listed in order of relative abundance. a				
a c d Dominant Tree Species listed in order of relative abundance. a c c c b d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d		• • • • • • • • • • • • • • • • • • • •		
b d Dominant Tree Species listed in order of relative abundance. a c b d	Dominant Shrub Species listed in order of relative	e abundance.		
Dominant Tree Species listed in order of relative abundance. a	•			
a	a	C		
b d	b	c d		
	a b Dominant Tree Species listed in order of relative	c d abundance.		
TIPE AND STITIN CANON' I I NII I I I SENATATE SEIDOM TOLICNING I LIGHT TOLICNING I LIMOTE OF IESS SIGN	a b Dominant Tree Species listed in order of relative a	c d abundance. c		
	a b Dominant Tree Species listed in order of relative a b	c d abundance. c d		

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)				
Herbs: non-seed p		Herbs: wide-leafe					
	ing rush spp. (Equisetum) 2		eltandra virginica) 6				
	hiled fern spp. (Dryopteris) 7	arrow-head spp					
	(Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6					
*royal fern (Osm	nunda regalils) 8	Jack-in-the-pulp	oit (Arisaema triphyllum) 4				
sensitive fern (C	Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5				
*other: species	(if known	*skunk cabbage	e (Symplocarpus foetidus) 8				
marsh club mos	ss (Selaginella apoda) 4	*water arum (C	alla palustris) 10				
Sphagnum mos	s spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2				
Herbs: Ivs. floating	a or submergent	Herbs: dicots - lvs	s. opposite/whorled				
	p. (Utricularia) 10	*bedstraw spp.	• •				
	phyllum demersum) 1	beggar's tick sp	•				
duckweed spp.			erbena hastata) 3				
	. (Potamogeton) 8		orium perfoliatum) 4				
	eed (Potamogeton crispus) 0	bugleweed spp	. ,				
	phaea tuberosa) 6	clearweed spp.					
	• • • • • • • • • • • • • • • • • • • •		· ·				
	asenia schreberi) 4		nium perfoliatum) 4				
yellow spatterd	ock spp. (Nuphar) 6		ehmeria cylindrica) 3				
			dicularis lanceolata) 6				
Herbs: Ivs. floating		•	Gentiana Gentianopsis) 8				
	Sarracenia purpurea (10)		(Ambrosia trifida) 0				
*sundew spp. (D	Prosera) 10		pocynum cannabinum) 2				
			spp. (Eupatorium) 5				
	or +/- leafless monocots		. (Lysimachia) 6				
	(Rhynchospora) 10		y (Rhexia virginica) 5				
blueflag iris (Iris			edge nettle, mtn. mint, skullcap 5				
	cirpus / Schoenoplectus) 5		simachia nummularia) 0				
*bur reed spp. (spp. (Mimulus) 4				
✓ cat-tail spp. (Type)		nettle (Urtica pr	•				
	pp. (Eriophorum) 10		fe (Lythrum salicaria) 0				
	amineae) - indicate types and		insonia canadensis) 8				
number of species			spp. (Hypericum/Triandeum) 8				
	zania aquatica) 10	sunflower sp. (I	•				
	perennial grass spp. 4:		trife (Decodon verticillatus) 8				
<u> </u>	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4				
foxtail (Alopecru	·		Ammania Rotala) 2				
	rass spp. 0:reed canary	*turtlehead spp	· ·				
• •	reed (Phragmites),		Clematis virginiana) 3				
	such as annual foxtail	•	(Ludwigia palustris) 3				
,	arnyard grass (Echinochloa)	winged loosesti	rife (Lythrum alatum) 5				
	op. (Eleocharis) 1 sp. =2						
*additional =			ots - lvs. alternate or basal and				
nutsedge spp. (• •		ower (Campanula americana) 4				
	species (if know		aster (Aser puniceus) 7				
✓ rush spp. (Junc)	•		er (Aster umbellatus) 8				
✓ sedge spp. (Car	, . <u>—</u>	_ -	. (e.g. New England, panicled ast				
*spiderlily (Hymo	enocallis occidentalis) 9	*black-eyed Su	san (Rudbeckia fulgida) 8				
sweet flag (Acor	•	cardinal flower	(Lobelia cardinalis) 4				
	Dulichium arundinaceum) 10	cress spp. (Car	damine) 4				
	lium mariscoides) 10		mp, water, pale (Rumex) 4				
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0				
	amassia scilloides) 5	golden ragwort	(Senecio aureus) 4				
*yellow-eyed gra	ass (Xyris torta) 9						

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	✓ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W021



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 County: Morgan **T11N** Physiographic Region: Martinsville Hills Township: Ecoregion: Interior Plateau R1E Range: **Natural Region:** Highland Rim Section: 9 Size of wetland complex (acres): 0.2086 Quarter: NE

USACE JurisdictionYesLatitude:39.406523IDEM Jurisdiction:YesLongitude:-86.42155

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted		
				Alt C1	0.09	45.1%					
				poor			Alt C2	0.00	0.0%		
S6W021A	Scrub-Carr	PSS 0.2086	0.2086		poor	poor	fair	fair	Alt C3	0.09	45.0%
							Alt C4	0.09	45.2%		
							RPA	0.10	48.6%		



Polygon S6W021A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 20	17			
Wetland Site Name: N/A				
Data Reference #: S6W021				
Date of Site Visit: Thursday, May 14, 2015				
Tier 1 Summary:				
a. Total Wetland Area (acres): 0.2086				
b. Wetland size and connectivity - contribution	າ to animal habita	at:		
	Valuable Mor	e Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max	. = 1): 0.30			
d. Value surrounding area adds to animal habi	tat:	Valuable	Favorable	Low
Tier 2 SUMMARY:		Polyg	on ID	66W021A
a. Indiana Wetland community type: Shrub-C	arr			
b. Standing water - contribution to animal hab	itat:	Valuable	Favorable	Neutral
c. Disturbances to site: culvert				
d. Exotic species rating:		Good	Medium	Poor
e. Special Hydrologic Conditions Observed: N	lone			
f. Special Community Type: None				
g. Rare-Threatened-Endangered Species: No	one			
h. Polygon Quality Descriptor:		Good	Medium	Poor
Tier 3A SUMMARY:				
a: Dead woody material as indicator of animal	habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6	5 max.):5	Good	Medium	Poor
c. Flood and storm water storage - numerical	rank (5 ma <u>1</u>	Good	Medium	Poor
Tier 3B SUMMARY:				
a. Zonation and interspersion as indicator of a	nimal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:		Valuable		Neutral
c. Number of dominant plant taxa observed:	4	Good	Medium	Poor
d. Average coefficient of conservatism: 2.3		Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:		Valuable	·	Neutral
f. Mature trees as indicator of animal habitat:		Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed: 26		Good	Medium	Poor
h. Number of indicator taxa: 0		Good	Medium	Poor

✓ Other wetlands are nearby (within 0.25 mile) but not connected The wetland site is isolated

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type):

- O Road / highway / railroad bed / parking lot 0 Native Vegetation - woodland O Native Vegetation - old field / scrub O Industrial 0 Agricultural - tilled 0 Residential - single family
- O Agricultural pasture 100 Commercial or multifamily residential
- 0 Recreation green space, mowed

NWI Polygon # S6W021A	Data Reference# S6W021
see table on page one)	
Tier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	· Flow (check one):
✓ Depressional Slope Floo Riverine (within the river/stream banks)	dplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	r than 2 meters n depth? No
standing water normally present in an adjacent pol	lygon? No
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon hrub-Carr .6 Disturbances of Hydrology (check all that apply)	
Ditching	✓ Culvert
Tiles	Other Human Distrubances to the
Dams Road or Railroad Embankment	trie
7 Presence of Invasive Exotics (Score as: S = Scatte	
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. so	eeps, wet slopes, floating mat):
Q Presence of Special Community Types	
.9 Presence of Special Community Types:	Wat Card / No. of Electronic Act Co.
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thre	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	and Quality Descriptions and check one):
Good ✓ Medium	Poor
	-

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	Notak	ole Features that influence water quality and hydrology:						
Es	stimated herbaceouis plant cover (percentage) in the polygon <pre>75-5050-25<25</pre>								
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25<25						
An	nour	nt of o	dead woody material on the soil surface nilscatteredfrequent						
3а	.2 V	Vate	Quality Protection Questions:						
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?						
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?						
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.						
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended						
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?						
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?						
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?						
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.						
			width of buffer area (in meter0 approximate slope (percen0						
3а	.3 F	Flood	and Stormwater Storage / Attenuation Questions:						
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b						
1.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?						
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?						
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?						
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?						
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?						
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?						

Tier 3b Individual Polygon: Rapid Vegetation Description 3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Typha latifolia b. Symphyotrichum lanceolatum c. Solidago gigantea f. Dominant Shrub Species listed in order of relative abundance. a. Salix interior

Dominant Tree Species listed in order of relative abundance.

d. ____ Tree and shrub canopy:

nil separate, seldom touching often touching more or less close

Mature trees (>12" dbh): yes

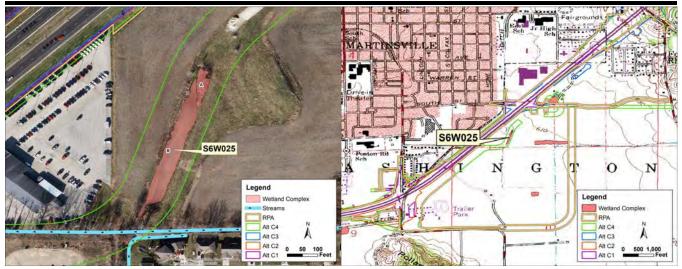
3b.2 Dominant Plant Species: Vegetation Zone B What % of the polygon does this vegetative zone occupy? □ 10 - 25% □ 25 - 50% □ 50 - 75% □ 75 - 90% □ >90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an *any species that forms extensive monocultural patches). a.	NWI Polygon # S6W021A	Data Refer	rence# <u>S6W021</u>	
10 - 25%	3b.2 Dominant Plant Species: Vegetation Zo	ne B		
Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a.	What % of the polygon does this vegetative zone	e occupy?		
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a.	☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
abundance. (Mark with an * any species that forms extensive monocultural patches). a	Is there notable layering/stratification in this vege	etation zone?		
b				of relative
c	a	d		
Dominant Shrub Species listed in order of relative abundance. a	b	e		
Dominant Shrub Species listed in order of relative abundance. a	C.	f.		
b				
Dominant Tree Species listed in order of relative abundance. a	a	C		
Dominant Tree Species listed in order of relative abundance. a	b.	d.		
b d ft d often touching often touching more or less close to the control of the cont				
b d ft d often touching often touching more or less close to the control of the cont	·			
Tree and shrub canopy: nil separate, seldom touching often touching more or less closed Mature trees (>12" dbh): yes no Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site). 3b.2 Dominant Plant Species: Vegetation Zone C What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a d				
Mature trees (>12" dbh):				
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site). 3b.2 Dominant Plant Species: Vegetation Zone C What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. d. b. e. c. f. Dominant Shrub Species listed in order of relative abundance. a	·· — — <u> </u>		j orton todoming me	70 01 1000 01000
wetland site). 3b.2 Dominant Plant Species: Vegetation Zone C What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. d. b. e. c. f. Dominant Shrub Species listed in order of relative abundance. a. C. b. d. Dominant Tree Species listed in order of relative abundance. a. C. b. d.	· · · · · · · · · · · · · · · · · · ·		datus ata fuana tha acceli	h, of this
What % of the polygon does this vegetative zone occupy? 10 - 25%		ut what adds to or	detracts from the qualit	ly Or Itils
□ 10 - 25% □ 25 - 50% □ 50 - 75% □ 75 - 90% □ >90% Is there notable layering/stratification in this vegetation zone? □ Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. d. b. e. c. f. Dominant Shrub Species listed in order of relative abundance. a. c. b. d. Dominant Tree Species listed in order of relative abundance. a. c. b. d. b. d.	3b.2 Dominant Plant Species: Vegetation Zo	ne C		
Is there notable layering/stratification in this vegetation zone? Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a	What % of the polygon does this vegetative zone	e occupy?		
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a d	☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
abundance. (Mark with an * any species that forms extensive monocultural patches). a	Is there notable layering/stratification in this vege	etation zone?		
b				of relative
b	a	d		
c f Dominant Shrub Species listed in order of relative abundance. a C b d Dominant Tree Species listed in order of relative abundance. a C b d d	b.			
Dominant Shrub Species listed in order of relative abundance. a		-		
a c d Dominant Tree Species listed in order of relative abundance. a c c c b d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d d	C.	f.		
b d Dominant Tree Species listed in order of relative abundance. a c b d				
Dominant Tree Species listed in order of relative abundance. a	Dominant Shrub Species listed in order of relativ	e abundance.		
a	Dominant Shrub Species listed in order of relativ	e abundance. c		
b d	Dominant Shrub Species listed in order of relative a	e abundance. _		
	Dominant Shrub Species listed in order of relative a	e abundance. c. d. abundance.		
TIPE SIGNERFIN CSDON'T THILL LEGASTATA CAIROM TALICNING L. LATTON TALICNING L. LMATA OF LOCA ALACA	Dominant Shrub Species listed in order of relative a	e abundance. c d abundance. c		
	Dominant Shrub Species listed in order of relative a	e abundance. c. d. abundance. c. d.		

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana)	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plantshorsetail, scouring rush spp. (Equisetum) 2 _*ferns: marsh shiled fern spp. (Dryopteris) 7 _*cinnamon fern (Osmunda cinnamomea) 9 _*royal fern (Osmunda regalils) 8 _sensitive fern (Onoclea sensibilis) 4 _*other: species (if known _marsh club moss (Selaginella apoda) 4 _Sphagnum moss spp. (Sphagnum) 10	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 arrow-head spp. (Sagittaria) 4 *green dragon (Arisaema dracontium) 6 Jack-in-the-pulpit (Arisaema triphyllum) 4 pickerel weed (Pontederia cordata) 5 _*skunk cabbage (Symplocarpus foetidus) 8 _*water arum (Calla palustris) 10 _✓ water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10coontail (Ceratophyllum demersum) 1duckweed spp. (Lemnaceae) 3*pondweed spp. (Potamogeton) 8curlyleaf pondweed (Potamogeton crispus) 0*water lily (Nymphaea tuberosa) 6water shield (Brasenia schreberi) 4*yellow spatterdock spp. (Nuphar) 6	Herbs: dicots - Ivs. opposite/whorled _*bedstraw spp. (Gallium) 6 _beggar's tick spp. (Bidens) 3 _blue vervain (Berbena hastata) 3 _boneset (Eupatorium perfoliatum) 4 _/ bugleweed spp. (Lycopus) 5 _clearweed spp. (Pilea) 3 _cup plant (Silphium perfoliatum) 4 _false nettle (Boehmeria cylindrica) 3 _*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10	 *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10blueflag iris (Iris virginica) 5/ bulrush spp. (Scirpus / Schoenoplectus) 5*bur reed spp. (Sparganium) 9/ cat-tail spp. (Typha) 1*cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10/ b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)needle sedge spp. (Eleocharis) 1 sp. =2*additional = 8nutsedge spp. (Cyperus) 2*orchid spp. 10; species (if knowrush spp. (Juncus) 4	*Ioosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5 Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4 *asters: bristly aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3 ✓ additional = *spiderlily (Hymenocallis occidentalis) 9 sweet flag (Acorus calamus) 0 *3-way sedge (Dulichium arundinaceum) 10 *twig rush (Cladium mariscoides) 10 *umbrella sedge (Fuirena squarrosa) 10 wild hyacinth (Camassia scilloides) 5 *yellow-eyed grass (Xyris torta) 9	 T

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poison sumas (rinas romin) re
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	✓ red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	w onver maple (/teer easermannam)
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
✓ poison ivy (Rhus radicans) 1	cottonwood, eastern (Fopulus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	✓ elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7
water parsnips (Sium suave) 5	
Chruba laguas appasita ar urbarlad	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W025



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 County: Morgan Physiographic Region: Martinsville Hills **T11N** Township: Ecoregion: Interior Plateau R1E Range: **Natural Region:** Highland Rim Section: 3 Size of wetland complex (acres): 0.4435 Quarter: SW

USACE JurisdictionYesLatitude:39.413757IDEM Jurisdiction:YesLongitude:-86.413662

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.06	100.0%
							Alt C2	0.06	100.0%
S6W025A	Scrub-Carr	PSS	0.0618	fair	poor	fair	Alt C3	0.06	100.0%
							Alt C4	0.06	100.0%
								RPA	0.00
				poor			Alt C1	0.38	100.0%
							Alt C2	0.38	100.0%
S6W025B	Shallow		0.3817 poor		· fair	fair	Alt C3	0.38	100.0%
	Open Water						Alt C4	0.38	100.0%
							RPA	0.00	0.0%



Polygon S6W025A



Polygon S6W025B

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W025			
Date of Site Visit:	Friday, May 15, 2015			
Tier 1 Summaı	ry:			
a. Total Wetla	nd Area (acres): 0.4435			
b. Wetland siz	e and connectivity - contribution to animal habit	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1):0.44			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	IRY:	Polyg	gon ID S	6W025A
a. Indiana We	tland community type: Shrub-Carr			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	es to site: culvert			
d. Exotic spec	ies rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threa	tened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	IARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water qual	ity protection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and s	torm water storage - numerical rank (5 ma2	Good	Medium	Poor
Tier 3B SUMM	JARY:			
a. Zonation ar	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification	on as indicator of animal habitat:	Valuable		Neutral
c. Number of	dominant plant taxa observed: 3	Good	Medium	Poor
d. Average co	efficient of conservatism: 2	Good	Medium	Poor
e. Tree canop	y as indicator of animal habitat:	Valuable	· .	Neutral
f. Mature tree	es as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed:16	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

Tier 2 SUMMARY:	Polyg	S6W025B				
a. Indiana Wetland community type: Deep Marsh/Shallow Open Water						
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral			
c. Disturbances to site: culvert						
d. Exotic species rating:	Good	Medium	Poor			
e. Special Hydrologic Conditions Observed: None						
f. Special Community Type: None						
g. Rare-Threatened-Endangered Species: None			,			
h. Polygon Quality Descriptor:	Good	Medium	Poor			
Tier 3A SUMMARY:						
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral			
b. Water quality protection - numerical rank (6 max.):2	Good	Medium	Poor			
c. Flood and storm water storage - numerical rank (5 ma2	Good	Medium	Poor			
Tier 3B SUMMARY:						
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral			
b. Stratification as indicator of animal habitat:	Valuable		Neutral			
c. Number of dominant plant taxa observed:2	Good	Medium	Poor			
d. Average coefficient of conservatism:1.5	Good	Medium	Poor			
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral			
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral			
g. Total hydrophytic taxa observed:8	Good	Medium	Poor			
h. Number of indicator taxa: 0	Good	Medium	Poor			

Tier 1: Assessment O 1.1 Site Identification:	verview		
Wetland Site Name: N/A			
Ownership (if known): N/A	1		
USGS Topographic Quadran	gle: Martinsville		
USGS Watershed map 14-Di	git HUC: Indian Creek - Sand	d Creek	
•	vithin the Wetland Site (Poly		
NWI Polygon ID Number	Cowardin Classification	Polygon Size (acres)	
S6W025A	PSS1	0.0618	
S6W025B	PUBHx	0.3817	
1.2 Site Visit			
Team Members: Rusty Yea	ger & Neal Goffinet		
Agency: Lochmueller Group)		
Date assessed: <u>5/15/2015</u>	Time ass	sessed: 10:30:00 AM	
Weather conditions: over	cast		
-		ced the current conditions wit an especially early spring etc.)	
1.3 Wetland Size			
Size of site under assessmer	nt: 0.4435		
Size of wetland complex:	0.4435		
The site is connect The site is only con The site is only con	ner wetlands or wetland com ted upstream and downstr nnected upstrrem with oth nnected downstream with e nearby (within 0.25 mile s isolated	ream with other wetlands ner wetlands other wetlands	
	cent land use / land cover in e % abundance of each type	the area within 50 meters of t):	he perimeter of
Native Vegetation	o - woodland 0	Road / highway / railroad h	ned / narking lot

 0
 Native Vegetation - woodland
 0
 Road / highway / railroad bed / parking load

 40
 Native Vegetation - old field / scrub
 0
 Industrial

 60
 Agricultural - tilled
 0
 Residential - single family

 0
 Agricultural - pasture
 0
 Commercial or multifamily residential

O Recreation - green space, mowed

IWI Polygon # S6W025A	Data Reference# S6W025
see table on page one)	
Tier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	Flow (check one):
✓ Depressional Slope Floo Riverine (within the river/stream banks)	dplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	r than 2 meters n depth? No
s standing water normally present in an adjacent pol	lygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon hrub-Carr .6 Disturbances of Hydrology (check all that apply)	
Ditching	✓ Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	S Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. so	eeps, wet slopes, floating mat):
9 Processo of Special Community Types	
.9 Presence of Special Community Types:	Mat Cand / March Flate - March Conse
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thro	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	and Quality Descriptions and check one):
Good Medium ✓	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 N	Notal	ble Features that influence water quality and hydrology:
			nerbaceouis plant cover (percentage) in the polygon 100-75 √ 75-50 50-25 <25
			woody plant foliar coverage in the polygon √ 100-75 75-50 50-25 <25
			dead woody material on the soil surface ✓ nil scattered frequent
,	iioui		
3a	.2 ۱	Nate	r Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended
	Υ	(N)	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before
	•	U	entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter25 approximate slope (percen15
3a	.3 F	Flood	I and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	(Y)	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)
	v		that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland
	Υ	(N)	to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland poly	gon?1
1b. If only one vegetation zone is evident, which best desc	ribes the site?
Polygon compoosed of amosaic of small veg heterogeneous textures across the polygon.	etation patches, hummocks, or tussocks,
Polygon composed of a single vegettation type the polygon.	be with more or less uniform texture across
2. If more than one vegetation zone is present in the polygon, represents the distribuion of these zone?	which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy?	
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 75%	☐ 75 - 90% ☐ >90%
s there notable layering/stratification in this vegetation zone?	No
Dominant Herbaceous Species (i.e., covering more than 10% abundance. (Mark with an * any species that forms extensive	
a. Carex tribuloides d	
o. Solidago altissima e.	
c f	
Dominant Shrub Species listed in order of relative abundance	
	·
o d	
Dominant Tree Species listed in order of relative abundance.	
a C	
b d	
Tree and shrub canopy: nil separate, seldom touchin	g often touching more or less close
Mature trees (>12" dbh): yes no	

NWI Polygon # S6W025A	Data Refe	rence# S6W025	
3b.2 Dominant Plant Species: Vegetation Zo	ne B		
What % of the polygon does this vegetative zone	occupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vege	tation zone?		
Dominant Herbaceous Species (i.e., covering moabundance. (Mark with an * any species that form			of relative
a	d		
b	e		
C	f.		
Dominant Shrub Species listed in order of relative			
a	C		
b.	d.		
Dominant Tree Species listed in order of relative			
a			
b			
Tree and shrub canopy: nil separate, sel			
·· — — ·	idom todoming _	gorion todoming me	70 01 1000 01000
Mature trees (>12" dbh): yes no		datus ata fuana tha annali	6 . af this
Other remarks (include personal comments about wetland site).	it what adds to or	detracts from the quali	ty of this
3b.2 Dominant Plant Species: Vegetation Zo	ne C		
What % of the polygon does this vegetative zone	occupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vege	tation zone?		
Dominant Herbaceous Species (i.e., covering moabundance. (Mark with an * any species that form			of relative
a	А		
	u		
b.			
b	e		
c	e f		
c Dominant Shrub Species listed in order of relative	e f e abundance.		
c Dominant Shrub Species listed in order of relative a	e f e abundance. c		
c Dominant Shrub Species listed in order of relative a b	e f e abundance. c d		
c	e f e abundance. c d abundance.		
c	e f e abundance. c d abundance. c		
c	e f e abundance. c d abundance. c d		
c Dominant Shrub Species listed in order of relative a b Dominant Tree Species listed in order of relative a	e f e abundance. c d abundance. c d		

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed	olants	Herbs: wide-leafe	d monocots
horsetail, scouri	ing rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6
*ferns: marsh sl	hiled fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4
*cinnamon fern	(Osmunda cinnamomea) 9	*green dragon ((Arisaema dracontium) 6
*royal fern (Osn	nunda regalils) 8	Jack-in-the-pulp	oit (Arisaema triphyllum) 4
sensitive fern (C	Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species	(if known	*skunk cabbage	e (Symplocarpus foetidus) 8
marsh club mos	ss (Selaginella apoda) 4	*water arum (C	alla palustris) 10
Sphagnum mos	ss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floatin	a or submorgant	Harber dicate - lue	s. opposite/whorled
	p. (Utricularia) 10	✓ *bedstraw spp.	• •
	phyllum demersum) 1	✓ beggar's tick sp	· ·
duckweed spp.			erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	eed (Potamogeton crispus) 0		•
	phaea tuberosa) 6	clearweed spp.	,
	•		,
	asenia schreberi) 4		ium perfoliatum) 4
yellow spatterd	lock spp. (Nuphar) 6		ehmeria cylindrica) 3 dicularis lanceolata) 6
Hawka, bya flaatin			,
Herbs: Ivs. floatin		•	Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)		Ambrosia trifida) 0
*sundew spp. ([Diosera) io		pocynum cannabinum) 2
Hankar Busan kia	/		spp. (Eupatorium) 5
	or +/- leafless monocots		. (Lysimachia) 6
	(Rhynchospora) 10		/ (Rhexia virginica) 5
blueflag iris (Iris			edge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
✓ cat-tail spp. (Ty	•	nettle (Urtica pr	•
	op. (Eriophorum) 10		fe (Lythrum salicaria) 0
	amineae) - indicate types and		insonia canadensis) 8
number of species	-onic counting) 10		spp. (Hypericum/Triandeum) 8
	zania aquatica) 10	sunflower sp. (I	
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
foxtail (Alopecru	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
			Ammania Rotala) 2
	rass spp. 0:reed canary reed (Phragmites),	*turtlehead spp	` ,
• •	such as annual foxtail		Clematis virginiana) 3 (Ludwigia palustris) 3
	arnyard grass (Echinochloa)		` ,
,	, , ,	willged loosesti	rife (Lythrum alatum) 5
*additional	pp. (Eleocharis) 1 sp. =2	Harba (vinas), dia	ots - lvs. alternate or basal and
nutsedge spp. (ower (Campanula americana) 4
	species (if know		aster (Aser puniceus) 7
rush spp. (Junc			r (Aster umbellatus) 8
	rex) 1 sp. = 3additional		. (e.g. New England, panicled ast
	enocallis occidentalis) 9		· • • • •
	•		san (Rudbeckia fulgida) 8
sweet flag (Aco	•		(Lobelia cardinalis) 4
	Dulichium arundinaceum) 10	cress spp. (Car	•
	lium mariscoides) 10		mp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0
	camassia scilloides) 5	golden ragwort	(Senecio aureus) 4
yellow-eyed gra	ass (Xyris torta) 9		

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) ✓ *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus nigra) 7 ✓ ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditisa triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 ✓ silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nysas sylvatica) 5 ✓ cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 sycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3 ✓ additional sp. = 7
	_v_auuitioitai sμ. – 7

### Distribances of Hydrology (check all that apply): Ditching	NWI Polygon # S6W025B	Data Reference# S6W025
to be completted on-site for each NWI polygon present in the wetland) .1 Wetland Geomorphic Setting and Surface Water Flow (check one): ✓ Depressional Slope Floodplain Lacustrine Riverine (within the river/stream banks) .2 Presence of Standing Water: is standing water normally present in the polygon? Yes Is standing water is present, is the water greater than 2 meters n depth? No standing water normally present in an adjacent polygon? Yes .3 Apparent Hydroperiod (check one): Permanently Flooded ✓ Artificially Flooded Seasonally Flooded Seasonally Flooded Saturated (surface water seldom present Artificially Drained .4 Soil Type Organic (i.e. peat, etc.) ✓ Mineral Both Mineral and Organic Present .5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): Neep Marsh/Shallow Open Water .6 Disturbances of Hydrology (check all that apply): Ditching ✓ Culvert Tiles Other Human Distrubances to the Road or Railroad Embankment .7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Reed Canary Grass Purple Loosestrife Other (list): .8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None .9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps .10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: ✓ None observed or known to be presen RTES Present (list): .11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	see table on page one)	
Depressional		
Riverine (within the river/stream banks) 2.2 Presence of Standing Water: 5 standing water normally present in the polygon? Yes 1s standing water is present, is the water greater than 2 meters n depth? No 5 standing water normally present in an adjacent polygon? Yes 3.3 Apparent Hydroperiod (check one): Permanently Flooded Seasonally Flooded Seasonally Flooded Saturated (surface water seldom present Artificially Drained 3.4 Soil Type Organic (i.e. peat, etc.) Mineral Both Mineral and Organic Present 3.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): 1.6 Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to the Road or Railroad Embankment 3.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Purple Loosestrife Other (list): 3.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): tone 3.9 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: V None observed or known to be presen RTES Present (list): 3.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	.1 Wetland Geomorphic Setting and Surface W	ater Flow (check one):
Is standing water normally present in the polygon? Yes Is standing water is present, is the water greater than 2 meters n depth? No Is standing water normally present in an adjacent polygon? Yes Is standing water normally present in an adjacent polygon? Yes 3.3 Apparent Hydroperiod (check one): Permanently Flooded Seasonally Flooded Seasonally Flooded Saturated (surface water seldom present Artifically Plooded Seasonally Flooded Saturated (surface water seldom present Artifically Drained 4.4 Soil Type Organic (i.e. peat, etc.) Organic (i.e. peat, etc.) Mineral Both Mineral and Organic Present 5.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): Seep Marsh/Shallow Open Water 6.6 Disturbances of Hydrology (check all that apply): Ditching Tiles Other Human Distrubances to the Road or Railroad Embankment 7.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Phragmities Reed Canary Grass Purple Loosestrife Other (list): 8.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): Income 9.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 1.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 1.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):		· · · · · · · · · · · · · · · · · · ·
Is standing water is present, is the water greater than 2 meters n depth? No standing water normally present in an adjacent polygon? Yes 3 Apparent Hydroperiod (check one): Permanently Flooded Seasonally Flooded Seasonally Flooded Seasonally Flooded Seasonally Flooded Saturated (surface water seldom present Artifically Drained 4 Soil Type Organic (i.e. peat, etc.) / Mineral Both Mineral and Organic Present 5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): 1.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): 1.6 Disturbances of Hydrology (check all that apply): Ditching / Culvert Tiles Other Human Distrubances to the Road or Railroad Embankment 1.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Purple Loosestrife Other (list): 1.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): 1.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 1.0 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 1.1 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	.2 Presence of Standing Water:	
.3 Apparent Hydroperiod (check one): Permanently Flooded Seasonally Flooded Artificially Flooded Artificially Flooded Seasonally Flooded Seasonally Flooded Artificially F	s standing water normally present in the polygor	n? Yes
Permanently Flooded Seasonally Flooded Artificially Flooded Artificially Flooded Seasonally Flooded Artificially Flooded Artificially Flooded Seasonally Flooded Sea	Is standing water is present, is the water gre	eater than 2 meters n depth? No
Permanently Flooded Seasonally Flooded Seasonally Flooded Saturated (surface water seldom present	s standing water normally present in an adjacent	t polygon? Yes
Seasonally Flooded Saturated (surface water seldom present	.3 Apparent Hydroperiod (check one):	
Saturated (surface water seldom present	Permanently Flooded	✓_Artificially Flooded
Organic (i.e. peat, etc.) ✓ Mineral Both Mineral and Organic Present .5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): Deep Marsh/Shallow Open Water .6 Disturbances of Hydrology (check all that apply): Ditching ✓ Culvert Tiles Other Human Distrubances to the Road or Railroad Embankment .7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Purple Loosestrife Other (list): .8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): Ione .9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps .10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: ✓ None observed or known to be presen RTES Present (list): .11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Seasonally Flooded	
Organic (i.e. peat, etc.) ✓ Mineral Both Mineral and Organic Present .5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): Deep Marsh/Shallow Open Water .6 Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to the Boad or Railroad Embankment .7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Purple Loosestrife Other (list): .8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): Jone .9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps .10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: ✓ None observed or known to be presen RTES Present (list): .11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Saturated (surface water seldom pres	sentArtificailly Drained
### 1.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana): ### 1.5 Presence of Hydrology (check all that apply): Ditching	.4 Soil Type	
## Deep Marsh/Shallow Open Water ## Ditching	Organic (i.e. peat, etc.) Mine	eralBoth Mineral and Organic Present
Tiles Other Human Distrubances to bams the Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Purple Loosestrife Other (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: ✓ None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Deep Marsh/Shallow Open Water 2.6 Disturbances of Hydrology (check all that ap	ply):
Tiles Other Human Distrubances to the Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Purple Loosestrife Other (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: ✓ None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Ditching	✓ Culvert
Dams Road or Railroad Embankment 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Phragmities Purple Loosestrife Other (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None 2.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: ✓ None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):		
Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Other (list): 8.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): 9.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 1.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 1.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Dams	the
Garlic Mustard ———————————————————————————————————	Road or Railroad Embankment	
Phragmities Purple Loosestrife 8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): 9 Presence of Special Community Types:	7 Presence of Invasive Exotics (Score as: S = Sc	cattered, F = Frequent, or C = Common):
Purple Loosestrife Other (list): 3.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): 3.9 Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps 3.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: None observed or known to be presen RTES Present (list): 3.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	Garlic Mustard	Glossy Buckthorn
8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat):	Phragmities	Reed Canary Grass
## Presence of Special Community Types: Bog Fen Wet Sand / Muck Flats or Marl Seeps ### Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: ### None observed or known to be presen ### RTES Present (list): ### ### RTES Present (list): ### ### ### ### ### ### ### ### ### #	Purple Loosestrife	Other (list):
## Bog Fen Wet Sand / Muck Flats or Marl Seeps ## Bog Fen Wet Sand / Muck Flats or Marl Seeps ## ## ## 1.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: ## Wone observed or known to be presen RTES Present (list): ## ## ## ## ## ## ## ## ## ## ## ## ##	, , , ,	.e. seeps, wet slopes, floating mat):
BogFenWet Sand / Muck Flats or Marl Seeps 2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: ✓ None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):		
2.10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species: ✓ None observed or known to be presen RTES Present (list): 2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	2.9 Presence of Special Community Types:	
None observed or known to be presen RTES Present (list):	Bog Fen	Wet Sand / Muck Flats or Marl Seeps
RTES Present (list): .11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	.10 Presence of Known Federal or Indiana Rar,	Threatened or Endangered Species:
2.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	✓ None observed or known to be prese	n
	RTES Present (list):	
Cond. Madhuu / Door	2.11 Wetland Polygon Quality Descriptor (see: V	Netland Quality Descriptions and check one):
Good Ivlealum 🗸 Poor	Good Medium	√ Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 1	Notal	ole Features that influence water quality and hydro	logy:			
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon	_100-75	75-50	50-25	√ <25
Es	tima	ated v	voody plant foliar coverage in the polygon	100-75	75-50	50-25	✓ <25
An	noui	nt of o	dead woody material on the soil surfacenil	sc	attered		frequent
3а	.2 ۱	Nate	Quality Protection Questions:				
1.	Υ	N	Does the wetland have a significant amount of vegeta woody plant) density to potentially uptake dissolved n		ically herba	iceous a	nd
2.	Y	N	Managed water (e.g. municipal or road stromwater dr industrial or municipal wastewater) is not discharged				utlet,
3.			If wetland in question is a depressional wetland answ	er 3a, in no	t, answer 3	b.	
	Y	N	3a. Does the wetland have a shape or flow that allow		•	suspend	ded
	Y	N	materials before teh water reaches the center of t 3b. Is the position of the wetland in the landscape sur entering a surface body of water down gradient?			r filtered	before
4.	Υ	N	Does the wetland lack steep slopes, large impervious cropping, or areas with severe overgrazing within				OW
5.	Y) N	Are there recreational lakes, fishable or navigable wadown gradient in the local watershed?	tercourses,	or water su	apply sou	ırces
6.	Y) N	Is a vegetative buffer area or another wetland polygon be filtered) located upland and adjacent to the wetlan area width and slope.				
			width of buffer area (in meter15 approximate	e slope (per	cen 0	_	
3a	.3 I	Flood	and Stormwater Storage / Attenuation Questions:	:			
			If wetland in question is a depressional wetland answ		t answer 1	h	
1.	(Y)) N	1a. Around the wetland is there a buffer strip of natur				d, scrub)
	U	, 14	that will slow overland flow into the wetland?				
	Y	N	1b. Is there a significant amount of microtopography to reduce the veolocity of the water leaving the water	or vegetativ etland?	e density w	rithin the	wetland
2.	Υ	N	Does the wetland lack man-made structure that would wetland (tiles, culverts, ditches)?	d speed the	flow of wat	er from t	he
3.	Υ	N	Is the flood potential high in the local watershed in wh flood damages)?	nich the wetl	and is loca	ted (hist	ory of
4.	Y	N	Is the wetland located in a watershed where the major impermeable, or is bedrock within two feet of the top			re claye	and
5.	Y) N	Is the wetland located in a local watershed which has to existing development?	highly mod	ified runoff	conditio	ns due

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetlar	nd polygon?1
1b. If only one vegetation zone is evident, which be	st describes the site?
Polygon composed of amosaic of sm heterogeneous textures across the polygon.	all vegetation patches, hummocks, or tussocks, ygon.
Polygon composed of a single vegetta the polygon.	tion type with more or less uniform texture across
2. If more than one vegetation zone is present in the percept represents the distribuion of these zone?	olygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75% 75 - 90% >90%
Is there notable layering/stratification in this vegetation	zone? No
Dominant Herbaceous Species (i.e., covering more tha abundance. (Mark with an * any species that forms ex	
a. <i>Typha latifolia</i>	d
b. Leersia sp.	e
C	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	C
b	d
Dominant Tree Species listed in order of relative abund	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom t	
Mature trees (>12" dbh): yes no	5

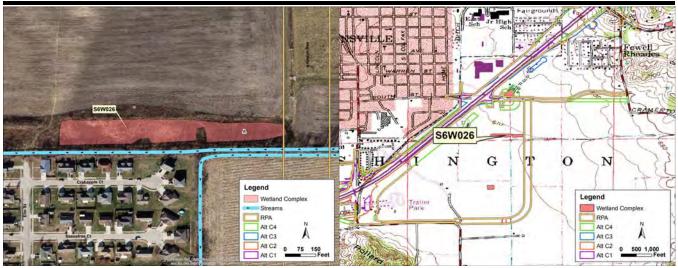
NWI Polygon # S6W025B	Data Refere	ence# S6W025	
3b.2 Dominant Plant Species: Vegetation Zone	e В		
What % of the polygon does this vegetative zone of	ccupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegeta	tion zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that form			f relative
a	d		
b	e		
C	f		
Dominant Shrub Species listed in order of relative			
a	C		
b	d.		
Dominant Tree Species listed in order of relative a			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seld			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about wetland site).	what adds to or o	detracts from the qualit	y of this
3b.2 Dominant Plant Species: Vegetation Zone	e C		
What % of the polygon does this vegetative zone of	ccupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegeta	tion zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that form			of relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative			
a	C		
b			
Dominant Tree Species listed in order of relative a			
a	C		
b			
Tree and shrub canopy: nil separate, seld			
Mature trees (>12" dbh): yes no	5 🗀	5 <u> </u>	
·		letracts from the qualit	. (() ()

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

Herbs: non-seed plants horsetali, scouring rush spp. (Equisetum) 2 "ferns: marsh shiled fern spp. (Dryopteris) 7 "cinnamon fern (Osmunda cinamomea) 9 "royal fern (Osmunda regalilis) 8 sensitive fern (Onoclea sensibilis) 4 "other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent "bladderwort spp. (Utricularia) 10 coontali (Ceratophyllum demersum) 1 duckweed spp. (Lemanceae) 3 "pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton rispus) 0 "water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 Herbs: Inear-Ivs. or +/ leafless monocots "back rush spp (Rhynchospora) 10 blueflag iris (lifs virginica) 5 "bur reed spp. (Sepraganium) 9 _ cat-tail spp. (Typha) 1 "cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtali (Alopecrus), other cut-grass, pp. (Eleocharis) 1 sp. =2 "additional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "additional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "additional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "additional = 8 nutsedge spp. (Cyperus) 2 "additional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "additional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid	(N = northern Indiana) $SW = southwestern Indiana$ nu	umbers = C-coefficents *= species with high conservatism)
**Terms: marsh shiled fern spp. (Dryopteris) 7 **Cinnamon fern (Osmunda cinnamomea) 9 **Troyal fern (Osmunda regallis) 8 **Sensitive fern (Onoclea sensibilis) 4 **Other: species (if known marsh club moss (Selaginella apoda) 4 **Sphagnum moss spp. (Sphagnum) 10 **Herbs: Ivs. floating or submergent **Ibladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Emanceae) 3 **Pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 **water liliy (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 **yellow spatterdock spp. (Nuphar) 6 **Herbs: Inear-Ivs. or +/ leafless monocots **beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 **Dur reed spp. (Sparganium) 9 **cat-tail spp. (Typha) 1 **cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *Wild rice (Zizania aquatica) 10 **D. most natuve perennial grass sp. 4: cut-grass, manna-grass, canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. (Eriophorum) 10 Grasses (Finditonal = 8 nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know **Jreed very 1 sp. 2 **additional = 8 nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know **Jreed very 1 sp. 2 **additional = 8 nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know **Jreed very 1 sp. 2 **additional = 8 nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know **Jreed very 1 sp. 2 **additional = 8 nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know **Jreed very 1 sp. 2 **additional = 8 nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know **Jreed very 1 sp. 2 **additional = 8 nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know **Jreed very 1 sp. 2 **additional = 8 nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know **Jreed very 1 sp. 2 **additional = 8 nutsedge spp. (Cyperus) 2 **orchid spp. 10; species (if know **Jreed very 1 sp. 2 **orchid spp. 10; species (if know **Jreed very 1 sp. 2 **orchid spp. 10; species (if know **Jreed very 1	Herbs: non-seed plants	Herbs: wide-leafed monocots
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Herbs: Ivs. floating or submergent	marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
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wild hyacinth (Camassia scilloides) 5 golden ragwort (Senecio aureus) 4		
	*yellow-eyed grass (Xyris torta) 9	goldon (dghor (donoold darodd) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	√ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W026



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Indian Creek - Sand Creek Quadrangle: Martinsville 14-digit HUC: 05120201170070 County: Morgan T11N Physiographic Region: Martinsville Hills Township: Ecoregion: Interior Plateau R1E Range: **Natural Region:** Highland Rim Section: 3 Size of wetland complex (acres): 1.9653 Quarter: SW

USACE JurisdictionYesLatitude:39.41335IDEM Jurisdiction:YesLongitude:-86.409999

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.00	0.0%
	Shallow Marsh	PEM	1.9653	fair	fair	fair	Alt C2	0.00	0.0%
S6W026A							Alt C3	0.00	0.0%
							Alt C4	0.00	0.0%
							RPA	0.01	0.4%



Polygon S6W026A



Polygon S6W026A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017						
Wetland Site Name	e: N/A						
Data Reference #:	S6W026						
Date of Site Visit:	Friday, May 15, 2015						
Tier 1 Summar	·y:						
a. Total Wetlar	nd Area (acres): 1.9653						
b. Wetland siz	e and connectivity - contribution to anima	l habitat:					
	Valuabl	e More Favora	ble Favorable	Neutral			
c. Surrounding	g land use - numerical rank (max. = 1):	0.40					
d. Value surro	unding area adds to animal habitat:	 Valuab	le Favorable	Low			
Tier 2 SUMMA	RY:	Pol	lygon ID	S6W026A			
a. Indiana We	tland community type: Shallow Marsh						
b. Standing wa	ater - contribution to animal habitat:	Valuab	le Favorable	Neutral			
c. Disturbance	s to site:						
d. Exotic speci	es rating:	Good	Medium	Poor			
e. Special Hyd	rologic Conditions Observed: None						
f. Special Com	munity Type: None						
g. Rare-Threat	ened-Endangered Species: None						
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor			
Tier 3A SUMM	ARY:						
a: Dead wood	y material as indicator of animal habitat:	Valuab	le Favorable	Neutral			
b. Water quali	ty protection - numerical rank (6 max.):	3 Good	Medium	Poor			
c. Flood and s	torm water storage - numerical rank (5 ma	Good	Medium	Poor			
Tier 3B SUMM	ARY:						
a. Zonation an	nd interspersion as indicator of animal hab	tat: Valuab	le Favorable	Neutral			
b. Stratificatio	n as indicator of animal habitat:	Valuab	le	Neutral			
c. Number of	dominant plant taxa observed: 4	Good	Medium	Poor			
	efficient of conservatism: 1.6	Good	Medium	Poor			
e. Tree canop	y as indicator of animal habitat:	Valuab	le	Neutral			
•	s as indicator of animal habitat:	Valuab	le Favorable	Neutral			
g. Total hydro	phytic taxa observed: 26	Good	Medium	Poor			
h. Number of	indicator taxa: 0	Good	Medium	Poor			

NWI Polygon # S6W026A	Data Reference# S6W026
(see table on page one)	
Fier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
✓ Depressional Slope Floo Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	lygon? <u>No</u>
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon hallow Marsh	
.6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. sone	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
	Mar Cond (NA all El al and 10
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thro	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	and Quality Descriptions and check one):
Good ✓ Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	ı.1 N	Notal	ble Features that influence water quality and hydrology:						
Es	Estimated herbaceouis plant cover (percentage) in the polygon <u></u>75-50 50-25<25								
Es	stima	ated	woody plant foliar coverage in the polygon100-7575-5050-25 <25						
Ar	nour	nt of	dead woody material on the soil surface nilscattered frequen						
3a	ı.2 V	Nate	r Quality Protection Questions:						
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?						
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?						
3.	Υ Y	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient? 						
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?						
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?						
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.						
			width of buffer area (in meter0 approximate slope (percen0						
3 <i>a</i>	ı.3 F	Flood	d and Stormwater Storage / Attenuation Questions:						
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b						
1.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?						
	Υ	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?						
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?						
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?						
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?						
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?						

Tier 3b Individual Polygon: Rapid Vegetation Description

1. How may vegetation zones are evident in this	wetland polygon?3
1b. If only one vegetation zone is evident, which	ch best describes the site?
Polygon compoosed of amosaic heterogeneous textures across the	of small vegetation patches, hummocks, or tussocks, he polygon.
Polygon composed of a single venture the polygon.	egettation type with more or less uniform texture across
2. If more than one vegetation zone is present in represents the distribuion of these zone?	the polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zor	ne A
What 0/ of the polygon does this vagatative zone	
What % of the polygon does this vegetative zone	occupy?
10 - 25%	occupy? 50 - 75%
	50 - 75%
10 - 25%	50 - 75%
■ 10 - 25% □ 25 - 50% □ Is there notable layering/stratification in this veget Dominant Herbaceous Species (i.e., covering mo	50 - 75%
Is there notable layering/stratification in this veget Dominant Herbaceous Species (i.e., covering mo abundance. (Mark with an * any species that form	50 - 75%
Is there notable layering/stratification in this veget Dominant Herbaceous Species (i.e., covering mo abundance. (Mark with an * any species that form a. <i>Typha angustifolia</i>	50 - 75%
Is there notable layering/stratification in this veget Dominant Herbaceous Species (i.e., covering mo abundance. (Mark with an * any species that form a. <i>Typha angustifolia</i> b. <i>Eleocharis sp.</i>	50 - 75%
Is there notable layering/stratification in this veget Dominant Herbaceous Species (i.e., covering mo abundance. (Mark with an * any species that form a. <i>Typha angustifolia</i> b. <i>Eleocharis sp.</i> c. <i>Symphyotrichum lanceolatum</i>	50 - 75%
Is there notable layering/stratification in this veger Dominant Herbaceous Species (i.e., covering mo abundance. (Mark with an * any species that form a. <i>Typha angustifolia</i> b. <i>Eleocharis sp.</i> c. <i>Symphyotrichum lanceolatum</i> Dominant Shrub Species listed in order of relative	50 - 75%
Is there notable layering/stratification in this veget Dominant Herbaceous Species (i.e., covering mo abundance. (Mark with an * any species that form a. <i>Typha angustifolia</i> b. <i>Eleocharis sp.</i> c. <i>Symphyotrichum lanceolatum</i> Dominant Shrub Species listed in order of relative a. <i>Salix interior</i>	50 - 75%
Is there notable layering/stratification in this veget Dominant Herbaceous Species (i.e., covering mo abundance. (Mark with an * any species that form a. <i>Typha angustifolia</i> b. <i>Eleocharis sp.</i> c. <i>Symphyotrichum lanceolatum</i> Dominant Shrub Species listed in order of relative a. <i>Salix interior</i> b.	50 - 75%
Is there notable layering/stratification in this veget Dominant Herbaceous Species (i.e., covering mo abundance. (Mark with an * any species that form a. <i>Typha angustifolia</i> b. <i>Eleocharis sp.</i> c. <i>Symphyotrichum lanceolatum</i> Dominant Shrub Species listed in order of relative a. <i>Salix interior</i> b	50 - 75%

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W026A	Data Reference	ce# S6W026	
3b.2 Dominant Plant Species: Vegetation Zone B			
What % of the polygon does this vegetative zone occur	л ру?		
□ 10 - 25% □ 25 - 50%	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	n zone? No		
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms expecies that forms expecies that forms expecies that species that forms expecies that forms expecies that forms expecies that species that species is a species of the spec			·elative
a. <u>Typha angustifolia</u>	d. <i>Fraxinus p</i>	pennsylvanica	
b. Symphyotrichum lanceolatum	e		
c. Eleocharis sp.	f		
Dominant Shrub Species listed in order of relative abu	ındance.		
a. Salix interior	C		
b	d		
Dominant Tree Species listed in order of relative abur	ndance.		
a	C		
b	d		
Tree and shrub canopy: nil separate, seldom	touching oft	en touching more	or less close
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about wh wetland site).	at adds to or detr	racts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone C			
What % of the polygon does this vegetative zone occur	upy?		
□ 10 - 25% ■ 25 - 50% □ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	n zone? typangF	PEM	
Dominant Herbaceous Species (i.e., covering more thabundance. (Mark with an * any species that forms expecies that forms expec			·elative
a. <i>Typha angustifolia</i>	d		
b. Equisetum hyemale			
C			
Dominant Shrub Species listed in order of relative abu			
a. Salix interior	C		
b	d		
Dominant Tree Species listed in order of relative abur			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seldom			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about wh	at adds to or detr	racts from the quality	of this

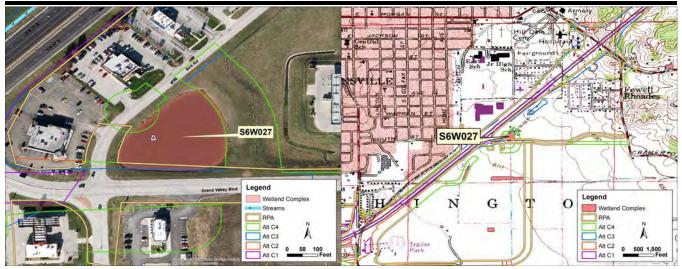
wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana) $SW = southwestern Indiana$	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plantshorsetail, scouring rush spp. (Equisetum) 2*ferns: marsh shiled fern spp. (Dryopteris) 7 _*cinnamon fern (Osmunda cinnamomea) 9 _*royal fern (Osmunda regalils) 8 _sensitive fern (Onoclea sensibilis) 4 _*other: species (if known _marsh club moss (Selaginella apoda) 4 _Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent _*bladderwort spp. (Utricularia) 10 _coontail (Ceratophyllum demersum) 1 _duckweed spp. (Lemnaceae) 3 _*pondweed spp. (Potamogeton) 8 _curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6arrow-head spp. (Sagittaria) 4*green dragon (Arisaema dracontium) 6Jack-in-the-pulpit (Arisaema triphyllum) 4pickerel weed (Pontederia cordata) 5*skunk cabbage (Symplocarpus foetidus) 8*water arum (Calla palustris) 10water plantain (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorledw*bedstraw spp. (Gallium) 6wbeggar's tick spp. (Bidens) 3blue vervain (Berbena hastata) 3wboneset (Eupatorium perfoliatum) 4bugleweed spp. (Lycopus) 5clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4*yellow spatterdock spp. (Nuphar) 6	cup plant (Silphium perfoliatum) 4false nettle (Boehmeria cylindrica) 3*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10blueflag iris (Iris virginica) 5bulrush spp. (Scirpus / Schoenoplectus) 5*bur reed spp. (Sparganium) 9cat-tail spp. (Typha) 1*cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of speciesa. *wild rice (Zizania aquatica) 10b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); otherc. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)needle sedge spp. (Eleocharis) 1 sp. =2	*loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5
additional = 8 nutsedge spp. (Cyperus) 2 *orchid spp. 10; species (if know rush spp. (Juncus) 4 sedge spp. (Carex) 1 sp. = 3 *spiderlily (Hymenocallis occidentalis) 9 sweet flag (Acorus calamus) 0 *3-way sedge (Dulichium arundinaceum) 10 *twig rush (Cladium mariscoides) 10 *umbrella sedge (Fuirena squarrosa) 10 wild hyacinth (Camassia scilloides) 5 *yellow-eyed grass (Xyris torta) 9	Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4*asters: bristly aster (Aser puniceus) 7flat-topped aster (Aster umbellatus) 8 = 7

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	√ ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	✓ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	,
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	✓ cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
water parempe (claim daave) e	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	✓ additional sp. = 7
frangula) 0	w additional sp. /
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
olderberry (Garribuous) 2	

Wetland S6W027



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Indian Creek - Sand Creek Quadrangle: Martinsville 14-digit HUC: 05120201170070 County: Morgan T11N Physiographic Region: Martinsville Hills Township: Ecoregion: Interior Plateau R1E Range: **Natural Region:** Highland Rim Section: 3 Size of wetland complex (acres): 1.2057 Quarter: SW

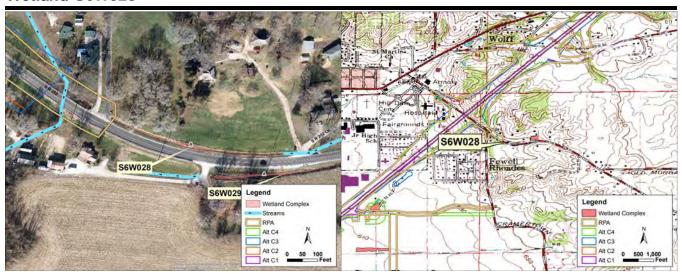
USACE JurisdictionYesLatitude:39.417087IDEM Jurisdiction:YesLongitude:-86.409698

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted		
							Alt C1	0.00	0.0%		
			1.2057				Alt C2	0.15	12.6%		
S6W027A	Pond	PUB		1.2057	1.2057	no rating	no rating	ng no rating	Alt C3	0.09	7.1%
							Alt C4	0.15	12.6%		
							RPA	0.09	7.5%		



Polygon S6W027A

Wetland S6W028



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Indian Creek - Sand Creek Quadrangle: Martinsville Basin: 14-digit HUC: 05120201170070 County: Morgan T11N Physiographic Region: Martinsville Hills Township: Ecoregion: Interior Plateau R1E Range: **Natural Region:** Highland Rim Section: 2 Size of wetland complex (acres): 0.0411 Quarter: NW

USACE JurisdictionYesLatitude:39.422999IDEM Jurisdiction:YesLongitude:-86.397487

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted													
							Alt C1	0.00	0.0%													
									Alt C2	0.00	0.0%											
S6W028A	Seasonally	PEM	0.0411	poor	poor	poor	Alt C3	0.00	0.0%													
	Flooded													1					·	Alt C4	0.00	0.0%
	Basin						RPA	0.00	0.2%													



Polygon S6W028A



Polygon S6W028A

In-WRAP Summary Sheet

Date Report Generated: Friday, September	15, 2017			
Wetland Site Name: N/A				
Data Reference #: S6W028				
Date of Site Visit: Wednesday, October 28	, 2015			
Tier 1 Summary:				
a. Total Wetland Area (acres): 0.0411				
b. Wetland size and connectivity - contr	ibution to animal ha	abitat:		
	Valuable	More Favorable	Favorable	Neutral
c. Surrounding land use - numerical ran	k (max. = 1): 0.20)		
d. Value surrounding area adds to anim	al habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:		Polyg	on ID	6W028A
a. Indiana Wetland community type: S	easonally Flooded B	Basin		
b. Standing water - contribution to anin	nal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: ditches culvert				
d. Exotic species rating:		Good	Medium	Poor
e. Special Hydrologic Conditions Observ	ved: None			
f. Special Community Type: None				
g. Rare-Threatened-Endangered Specie	s: None			
h. Polygon Quality Descriptor:		Good	Medium	Poor
Tier 3A SUMMARY:				
a: Dead woody material as indicator of	animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical	rank (6 max.):0	Good	Medium	Poor
c. Flood and storm water storage - num	erical rank (5 ma	2 Good	Medium	Poor
Tier 3B SUMMARY:				
a. Zonation and interspersion as indicat	or of animal habitat	:: Valuable	Favorable	Neutral
b. Stratification as indicator of animal h	abitat:	Valuable		Neutral
c. Number of dominant plant taxa obse	rved: 2	Good	Medium	Poor
d. Average coefficient of conservatism:	1	Good	Medium	Poor
e. Tree canopy as indicator of animal ha	abitat:	Valuable		Neutral
f. Mature trees as indicator of animal h	abitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:	11	Good	Medium	Poor
h. Number of indicator taxa: 0		Good	Medium	Poor

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type):

- Native Vegetation woodland ____50 __ Road / highway / railroad bed / parking lot
 Native Vegetation old field / scrub ___0 __ Industrial
- 0 Agricultural tilled 50 Residential single family
- ____0 __ Agricultural pasture _____0 __ Commercial or multifamily residential
- ____0 ___ Recreation green space, mowed

NWI Polygon # S6W028A	Data Reference# S6W028
ee table on page one)	
ier 2: Individual Polygon: Prelimina o be completted on-site for each NWI polygon	
.1 Wetland Geomorphic Setting and Surface W	Vater Flow (check one):
DepressionalSlope✓ Riverine (within the river/stream bar	-
2.2 Presence of Standing Water:	
s standing water normally present in the polygo	on? Yes
Is standing water is present, is the water g	reater than 2 meters n depth? No
s standing water normally present in an adjacer	nt polygon? Yes
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom pre	esentArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Min	eralBoth Mineral and Organic Present
Seasonally Flooded Basin 2.6 Disturbances of Hydrology (check all that a	pply):
✓ Ditching	✓Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = S	cattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	S Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat):
None	
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar	, Threatened or Endangered Species:
✓ None observed or known to be prese	en
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see:	Wetland Quality Descriptions and check one):
Good Medium	✓ Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a.	.1 N	Notak	ole Features that influence water quality and hydrology:					
Es	Estimated herbaceouis plant cover (percentage) in the polygon100-7550-25<25							
Es	Estimated woody plant foliar coverage in the polygon100-7575-5050-25<25							
Am	nour	nt of o	dead woody material on the soil surface nilscatteredfrequent					
3a.	.2 V	Nate	Quality Protection Questions:					
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?					
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?					
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.					
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended					
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?					
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?					
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?					
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.					
			width of buffer area (in meter0 approximate slope (percen0					
3a.	.3 F	Flood	and Stormwater Storage / Attenuation Questions:					
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b					
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?					
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?					
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?					
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?					
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?					
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?					

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Persicaria hydropiper b. Nasturtium officinale f. Dominant Shrub Species listed in order of relative abundance. Dominant Tree Species listed in order of relative abundance. C. _____ d. ____ Tree and shrub canopy: nil separate, seldom touching often touching more or less close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

Mature trees (>12" dbh): yes

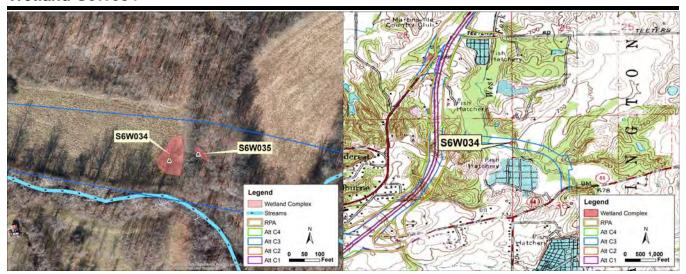
NWI Polygon # S6W028A	Data Reference# S6W028
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p	olants	Herbs: wide-leafe	d monocots
horsetail, scouri	ing rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6
*ferns: marsh sh	hiled fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4
*cinnamon fern	(Osmunda cinnamomea) 9	*green dragon ((Arisaema dracontium) 6
*royal fern (Osm	nunda regalils) 8	Jack-in-the-pul	oit (Arisaema triphyllum) 4
sensitive fern (C	Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species	· ·	:	e (Symplocarpus foetidus) 8
	ss (Selaginella apoda) 4		alla palustris) 10
	s spp. (Sphagnum) 10		Alisma plantago-aquatica) 2
	_		
Herbs: Ivs. floating			s. opposite/whorled
	p. (Utricularia) 10	*bedstraw spp.	•
	phyllum demersum) 1	beggar's tick sp	,
duckweed spp.	,		erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	eed (Potamogeton crispus) 0		
	phaea tuberosa) 6	clearweed spp.	· ·
	asenia schreberi) 4		iium perfoliatum) 4
*yellow spatterd	ock spp. (Nuphar) 6		ehmeria cylindrica) 3
			dicularis lanceolata) 6
Herbs: Ivs. floating			Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)	✓ giant ragweed (
*sundew spp. (D	Orosera) 10	Indian hamp (A	pocynum cannabinum) 2
		Joe-pye weed s	spp. (Eupatorium) 5
Herbs: linear-lvs.	or +/- leafless monocots	*loosestrife spp	. (Lysimachia) 6
	(Rhynchospora) 10	meadow beauty	/ (Rhexia virginica) 5
blueflag iris (Iris	virginica) 5	mint spp. e.g. h	edge nettle, mtn. mint, skullcap 5
bulrush spp. (So	cirpus / Schoenoplectus) 5	moneywort (Lys	simachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower	spp. (Mimulus) 4
✓ cat-tail spp. (Type)	pha) 1	nettle (Urtica pr	ocera) 1
*cotton grass sp	pp. (Eriophorum) 10	purple loosestri	fe (Lythrum salicaria) 0
	amineae) - indicate types and	*richweed (Coll	insonia canadensis) 8
number of species		St. John's wort	spp. (Hypericum/Triandeum) 8
a. *wild rice (Ziz	zania aquatica) 10	sunflower sp. (I	Helianthus) 4
b. most natuve	perennial grass spp. 4:	*swamp looses	trife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,	swamp milkwee	ed (Asclepias incarnata) 4
foxtail (Alopecru		toothcup spp. (/	Ammania Rotala) 2
	rass spp. 0:reed canary	*turtlehead spp	. (Chelone) 8
	reed (Phragmites),	virgin's bower (Clematis virginiana) 3
	such as annual foxtail	water purslane	(Ludwigia palustris) 3
(Setaria) and ba	arnyard grass (Echinochloa)	winged loosesti	rife (Lythrum alatum) 5
needle sedge sp	op. (Eleocharis) 1 sp. =2		
*additional =	= 8	Herbs (vines): dice	ots - lvs. alternate or basal and
✓ nutsedge spp. (Cyperus) 2	American bellflo	ower (Campanula americana) 4
*orchid spp. 10;	species (if know	*asters: bristly a	aster (Aser puniceus) 7
rush spp. (Junc	us) 4	flat-topped aste	er (Aster umbellatus) 8
sedge spp. (Car	rex) 1 sp. = 3additional	= 7other aster spp	. (e.g. New England, panicled ast
*spiderlily (Hym	enocallis occidentalis) 9	*black-eyed Su	san (Rudbeckia fulgida) 8
sweet flag (Acor	rus calamus) 0	cardinal flower	(Lobelia cardinalis) 4
*3-way sedge (I	Dulichium arundinaceum) 10	cress spp. (Car	•
	lium mariscoides) 10		mp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0
	amassia scilloides) 5		(Senecio aureus) 4
	ass (Xyris torta) 9 [´]		·

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
migotom (/ totallomento alternational) o	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	polooii sainao (rinas vernix) 10
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	silver maple (Acci saccinamium) i
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, eastern (Populus deitoides) 1 cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
	ironwood (Carpinus caroliniana) 5
swamp agrimony (Agrimonia parviflora) 4	
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
Olomba da sua a sur a sita an unhanta d	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W034



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Martinsville 14-digit HUC: 05120201140140 County: Morgan T12N Physiographic Region: Martinsville Hills Township: Interior Plateau Ecoregion: R1E Range: **Natural Region:** Highland Rim Section: 35 Size of wetland complex (acres): 0.1539 Quarter: NE

USACE JurisdictionYesLatitude:39.439826IDEM Jurisdiction:YesLongitude:-86.380902

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Wet Prairie	PEM	0.1539	poor	poor	good	Alt C1	0.00	0.0%
							Alt C2	0.00	0.0%
S6W034A							Alt C3	0.15	100.0%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%



Polygon S6W034A



Polygon S6W034A

In-WRAP Summary Sheet

Date Report Gener	ated: Friday, September 15, 2017						
Wetland Site Name	e: N/A						
Data Reference #:	S6W034						
Date of Site Visit:	Monday, October 19, 2015						
Tier 1 Summar	y:						
a. Total Wetlar	nd Area (acres): 0.1539						
b. Wetland siz	e and connectivity - contribution to animal habita	at:					
	Valuable Mo	re Favorable	Favorable	Neutral			
c. Surrounding	gland use - numerical rank (max. = 1): 0.58						
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low			
Tier 2 SUMMA	RY:	Polyg	on ID	S6W034A			
a. Indiana We	tland community type: Wet Prairie						
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral			
c. Disturbance	s to site:						
d. Exotic speci	es rating:	Good	Medium	Poor			
e. Special Hydrologic Conditions Observed: None							
f. Special Com	munity Type: None						
g. Rare-Threat	ened-Endangered Species: None						
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor			
Tier 3A SUMM	ARY:						
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral			
b. Water quali	ty protection - numerical rank (6 max.):4	Good	Medium	Poor			
c. Flood and st	corm water storage - numerical rank (5 ma4	Good	Medium	Poor			
Tier 3B SUMM	ARY:						
a. Zonation an	d interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral			
b. Stratificatio	n as indicator of animal habitat:	Valuable		Neutral			
c. Number of o	dominant plant taxa observed: 5	Good	Medium	Poor			
	efficient of conservatism: 1.2	Good	Medium	Poor			
_	as indicator of animal habitat:	Valuable		Neutral			
f. Mature tree	s as indicator of animal habitat:	Valuable	Favorable	Neutral			
g. Total hydro	phytic taxa observed: 10	Good	Medium	Poor			
h. Number of	indicator taxa: 0	Good	Medium	Poor			

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type):

- 40 Native Vegetation woodland
- 0 Road / highway / railroad bed / parking lot
- 0 Native Vegetation old field / scrub 0 Industrial
 - 0 Residential single family
- 30 Agricultural tilled 30 Agricultural - pasture
- 0 Commercial or multifamily residential
- 0 Recreation green space, mowed

NWI Polygon # S6W034A	Data Reference# S6W034
(see table on page one)	
Fier 2: Individual Polygon: Preliminary Atto be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Wate	r Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
s standing water normally present in an adjacent po	olygon? <u>No</u>
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom presen	tArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon Vet Prairie	
.6 Disturbances of Hydrology (check all that apply	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
7 Presence of Invasive Exotics (Score as: S = Scatt	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. sone	seeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
	Mot Cond / Muck Flats on Mark Cooks
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thr	reatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wet	land Quality Descriptions and check one):
✓ Good Medium	Poor
	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 N	Notak	ole Features that influence water quality and hydrology:							
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon 100-75 75-50 50-25 <25							
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25 <25							
An	noui	nt of o	dead woody material on the soil surface nilscatteredfrequent							
3а	.2 \	Nate	Quality Protection Questions:							
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?							
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?							
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.							
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended							
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?							
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?							
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?							
6.	Y (N) Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.									
		width of buffer area (in meter0 approximate slope (percen0								
3a	.3 F	Flood	and Stormwater Storage / Attenuation Questions:							
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b							
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?							
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?							
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?							
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?							
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?							
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?							

Tier 3b Individual Polygon: Rapid Vegetation Description

Oh 4. Zamatian and International	-
3b.1 Zonation and Interspersion:	
How may vegetation zones are evident in this wetlan	nd polygon?1
1b. If only one vegetation zone is evident, which bes	st describes the site?
Polygon compoosed of amosaic of sm heterogeneous textures across the pol	all vegetation patches, hummocks, or tussocks, ygon.
Polygon composed of a single vegettage the polygon.	tion type with more or less uniform texture across
2. If more than one vegetation zone is present in the porepresents the distribuion of these zone?	olygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occup	oy?
10 - 25% 25 - 50% 50 -	75% 75 - 90% >90%
Is there notable layering/stratification in this vegetation	zone? No
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms exists)	
a. Leersia oryzoides	d. Cyperus esculentus
b. Marrubium vulgare	e. Juncus effusus
c. Equisetum arvense	f.
Dominant Shrub Species listed in order of relative abur	ndance
a	C
b	d
Dominant Tree Species listed in order of relative abund	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	ouching often touching more or less close
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

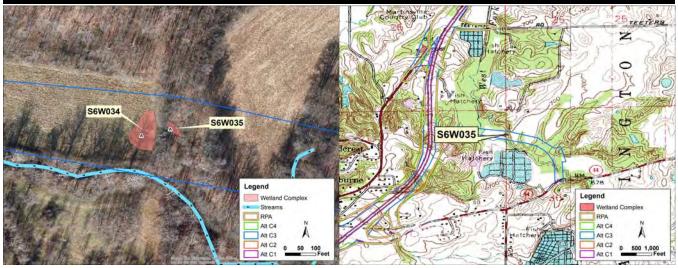
NWI Polygon # S6W034A	Data Reference# S6W034
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more the abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p	colants ing rush spp. (Equisetum) 2 chiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 chunda regalils) 8 Dnoclea sensibilis) 4 (if known ss (Selaginella apoda) 4 ss spp. (Sphagnum) 10 g or submergent	Herbs: wide-leafe *arrow arum (Parrow-head spp*green dragon (Jack-in-the-pulppickerel weed (*skunk cabbage*water arum (Cwater plantain (d monocots eltandra virginica) 6 o. (Sagittaria) 4 (Arisaema dracontium) 6 oit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 s. opposite/whorled
	p. (Utricularia) 10	*bedstraw spp.	•
	phyllum demersum) 1	beggar's tick sp	• •
duckweed spp.	,		erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	eed (Potamogeton crispus) 0		
	phaea tuberosa) 6	clearweed spp.	•
	asenia schreberi) 4		iium perfoliatum) 4
*yellow spatterd	ock spp. (Nuphar) 6		ehmeria cylindrica) 3
			dicularis lanceolata) 6
Herbs: Ivs. floating			Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)		(Ambrosia trifida) 0
*sundew spp. (D	Orosera) 10		pocynum cannabinum) 2
			spp. (Eupatorium) 5
	or +/- leafless monocots		. (Lysimachia) 6
	(Rhynchospora) 10		y (Rhexia virginica) 5
blueflag iris (Iris			edge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
cat-tail spp. (Typ	•	nettle (Urtica pr	· · · · · · · · · · · · · · · · · · ·
	pp. (Eriophorum) 10		fe (Lythrum salicaria) 0
number of species	amineae) - indicate types and		insonia canadensis) 8 spp. (Hypericum/Triandeum) 8
· · · · · · · · · · · · · · · · · · ·	zania aquatica) 10	sunflower sp. (I	
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
	rass spp. 0:reed canary	turtlehead spp. (/	
	reed (Phragmites),		Clematis virginiana) 3
	such as annual foxtail	•	(Ludwigia palustris) 3
•	arnyard grass (Echinochloa)		rife (Lythrum alatum) 5
	op. (Eleocharis) 1 sp. =2		no (Eyimani diatam) o
*additional =		Herbs (vines): dice	ots - lvs. alternate or basal and
✓ nutsedge spp. (ower (Campanula americana) 4
	species (if know		aster (Aser puniceus) 7
✓ rush spp. (Junci			er (Aster umbellatus) 8
	,		. (e.g. New England, panicled ast
• • • • • • •	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
sweet flag (Acor	•		(Lobelia cardinalis) 4
	Oulichium arundinaceum) 10	cress spp. (Car	
	lium mariscoides) 10		mp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0
	amassia scilloides) 5		(Senecio aureus) 4
	ass (Xyris torta) 9 [´]		,

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	✓ ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	,
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W035



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Martinsville

14-digit HUC: 05120201140140 County: Morgan

Physiographic Region: Martinsville HillsTownship:T12NEcoregion:Interior PlateauRange:R1ENatural Region:Highland RimSection:36Size of wetland complex (acres):0.0216Quarter:NW

USACE JurisdictionYesLatitude:39.439855IDEM Jurisdiction:YesLongitude:-86.380637

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Scrub-Carr	ub-Carr PSS	0.0216	fair	poor	fair	Alt C1	0.00	0.0%
							Alt C2	0.00	0.0%
S6W035A							Alt C3	0.02	100.0%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%



Polygon S6W035A



Polygon S6W035A

In-WRAP Summary Sheet

Date Report Gener	ated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W035			
Date of Site Visit:	Monday, October 19, 2015			
Tier 1 Summar	y:			
a. Total Wetlar	nd Area (acres): 0.0216			
b. Wetland siz	e and connectivity - contribution to animal habit	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding	land use - numerical rank (max. = 1):0.58_			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	on ID	66W035A
a. Indiana We	tland community type: Shrub-Carr			
b. Standing wa	eter - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	s to site:			
d. Exotic speci	es rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	ened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	ARY:			
a: Dead woody	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quali	ty protection - numerical rank (6 max.):3	Good	Medium	Poor
c. Flood and st	corm water storage - numerical rank (5 ma4	Good	Medium	Poor
Tier 3B SUMM	ARY:			
a. Zonation an	d interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratificatio	n as indicator of animal habitat:	Valuable		Neutral
c. Number of o	dominant plant taxa observed: 1	Good	Medium	Poor
d. Average coe	efficient of conservatism: 5	Good	Medium	Poor
e. Tree canopy	as indicator of animal habitat:	Valuable		Neutral
f. Mature tree	s as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	ohytic taxa observed:2	Good	Medium	Poor
h. Number of i	ndicator taxa: 0	Good	Medium	Poor

the wetland site (indicate the % abundance of each type):

40	Native Vegetation - woodland	0	Road / highway / railroad bed / parking lo
0	Native Vegetation - old field / scrub_	0	Industrial
30	_ Agricultural - tilled	0	Residential - single family

30 Agricultural - pasture 0 Commercial or multifamily residential

Recreation - green space, mowed

NWI Polygon # S6W035A	Data Reference# S6W035
see table on page one)	
Tier 2: Individual Polygon: Prelimina to be completted on-site for each NWI polygon	
.1 Wetland Geomorphic Setting and Surface V	Vater Flow (check one):
✓ Depressional Slope Riverine (within the river/stream bar	_FloodplainLacustrine nks)
.2 Presence of Standing Water:	
standing water normally present in the polygo	on? No
Is standing water is present, is the water g	reater than 2 meters n depth? No
s standing water normally present in an adjacer	nt polygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	<u> </u>
Saturated (surface water seldom pre	esentArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Min	eralBoth Mineral and Organic Present
2.5 Wetland Community Type for this NWI poly	ygon (see Key to Wetland Communities of Indiana):
2.6 Disturbances of Hydrology (check all that a	pply):
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = S	cattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat):
None	
2.9 Presence of Special Community Types:	
BogFen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar	, Threatened or Endangered Species:
✓ None observed or known to be prese	en
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see:	Wetland Quality Descriptions and check one):
√ Good Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a.1 Nota	able Features that influence water quality and hydrology:
Estimated	herbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25
Estimated	woody plant foliar coverage in the polygon100-7575-5050-25 <25
Amount of	dead woody material on the soil surfacenilscatteredfrequen
3a.2 Wate	er Quality Protection Questions:
1. Y (N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2. Y N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3. Y N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4. Y N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5. Y N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6. Y N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
	width of buffer area (in meter0 approximate slope (percen0
3a.3 Floo	d and Stormwater Storage / Attenuation Questions:
1.	If wetland in question is a depressional wetland answer 1a, in not, answer 1b
Y N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
Y (N	La di con la 20 a 20 a 20 a con la distributa de la constante
2. Y N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3. Y N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4. Y (N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5. Y N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wet	land polygon?1
1b. If only one vegetation zone is evident, which l	pest describes the site?
Polygon composed of amosaic of sheterogeneous textures across the	small vegetation patches, hummocks, or tussocks, polygon.
Polygon composed of a single vege the polygon.	ttation type with more or less uniform texture across
2. If more than one vegetation zone is present in the represents the distribuion of these zone?	polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone	A
What % of the polygon does this vegetative zone oc	cupy?
☐ 10 - 25% ☐ 25 - 50% ☐ 56	O - 75%
Is there notable layering/stratification in this vegetation	on zone? Yes
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms	than 10% of the area) listed in order of relative extensive monocultural patches).
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative at	oundance.
a	C
b	d
Dominant Tree Species listed in order of relative abu	undance.
a. <u>Acer rubrum</u>	c
b	d
Tree and shrub canopy: nil separate, seldor	m touching often touching more or less close
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W035A	Data Referen	ce# S6W035	
3b.2 Dominant Plant Species: Vegetation Zone B			
What % of the polygon does this vegetative zone occ	upy?		
☐ 10 - 25%☐ 25 - 50%☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	n zone?		
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms expecies the forms expecies that forms exp			relative
a	d		
b	e		
c	f.		
Dominant Shrub Species listed in order of relative about			
a	C		
b	d.		
Dominant Tree Species listed in order of relative abuse			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seldom			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about wh wetland site).	at adds to or det	tracts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone C			
What % of the polygon does this vegetative zone occ	upy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	n zone?		
Dominant Herbaceous Species (i.e., covering more thabundance. (Mark with an * any species that forms e	nan 10% of the a	rea) listed in order of ultural patches).	relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative abo			
a			
b			
Dominant Tree Species listed in order of relative abu			
a			
b Tree and shrub canopy: nil separate, seldom		ten touching \square more	
·· — — —		ton todoming more	, or 1633 01036
Mature trees (>12" dbh): yes no Other remarks (include personal comments about wh	at adds to or det	tracts from the quality	of this

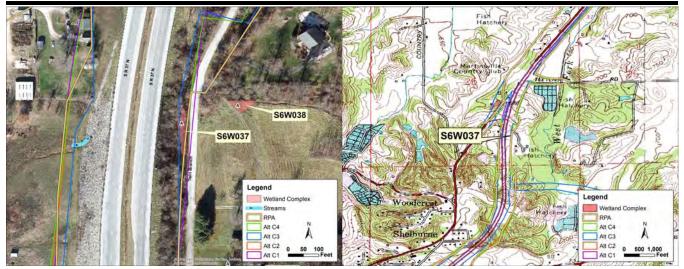
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osm sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floating *bladderwort sp coontail (Cerato	ng rush spp. (Equisetum) 2 niled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 nunda regalils) 8 Dnoclea sensibilis) 4 (if known as (Selaginella apoda) 4 as spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 phyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (F*skunk cabbage*water arum (Cawater plantain (A) Herbs: dicots - lvs*bedstraw sppbeggar's tick sp	d monocots eltandra virginica) 6 c. (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 c. opposite/whorled (Gallium) 6 p. (Bidens) 3
duckweed spp.	(Lemnaceae) 3 . (Potamogeton) 8		erbena hastata) 3 orium perfoliatum) 4
curlyleaf pondw *water lily (Nym water shield (Br	eed (Potamogeton) 6 eed (Potamogeton crispus) 0 phaea tuberosa) 6 asenia schreberi) 4 ock spp. (Nuphar) 6	bugleweed spp. clearweed spp. cup plant (Silphi false nettle (Boe	(Lycopus) 5 (Pilea) 3 ium perfoliatum) 4 ehmeria cylindrica) 3
*sundew spp. (E	arracenia purpurea (10) Orosera) 10	*gentian spp. (G giant ragweed (A Indian hamp (Ap Joe-pye weed s	dicularis lanceolata) 6 Gentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9	mint spp. e.g. he moneywort (Lys monkey flower s	r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 simachia nummularia) 0 spp. (Mimulus) 4
Grasses (family Granumber of species a. *wild rice (Zizb. most natuve cut-grass, mann foxtail (Alopecruc. introduced grass (Phalaris, annual grasses (Setaria) and ba	zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint,	*richweed (Collii St. John's wort s sunflower sp. (F *swamp loosest swamp milkwee toothcup spp. (F *turtlehead spp. virgin's bower (C water purslane (nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8 Helianthus) 4 trife (Decodon verticillatus) 8 ed (Asclepias incarnata) 4 Ammania Rotala) 2
*additional =nutsedge spp. (*orchid spp. 10;rush spp. (Junctsedge spp. (Cai _*spiderlily (Hymoles)*sweet flag (Acoi _**a-way sedge (E*twig rush (Clad _*umbrella sedgewild hyacinth (C	= 8 Cyperus) 2 species (if know us) 4 rex) 1 sp. = 3additional enocallis occidentalis) 9	American bellflom *asters: bristly a flat-topped aster other aster spp. *black-eyed Sustardinal flower (cress spp. (Cardinal flower) dock spp.: swan garlic mustard (ots - Ivs. alternate or basal and ower (Campanula americana) 4 aster (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4 damine) 4 mp, water, pale (Rumex) 4 Alliaria petiolata) 0 (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	√ red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W037



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Martinsville 14-digit HUC: 05120201140140 County: Morgan Physiographic Region: Martinsville Hills T12N Township: Interior Plateau Ecoregion: R1E Range: **Natural Region:** Highland Rim Section: 26 Size of wetland complex (acres): 0.0603 Quarter: SE

USACE JurisdictionYesLatitude:39.444538IDEM Jurisdiction:YesLongitude:-86.386915

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
			0.0603	poor	oor poor	fair	Alt C1	0.06	100.0%
							Alt C2	0.05	89.6%
S6W037A	Wet						Alt C3	0.01	9.5%
	Meadow						Alt C4	0.05	89.2%
							RPA	0.05	89.6%



Polygon S6W037A



Polygon S6W037A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017				
Wetland Site Name: N/A				
Data Reference #: S6W037				
Date of Site Visit: Thursday, October 01, 2015				
Tier 1 Summary:				
a. Total Wetland Area (acres): 0.0603				
b. Wetland size and connectivity - contribution to	animal h	nabitat:		
V	aluable	More Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1	.): 0.2	3		
d. Value surrounding area adds to animal habitat:		Valuable	Favorable	Low
Tier 2 SUMMARY:		Polyg	on ID	S6W037A
a. Indiana Wetland community type: Wet Meado)W			
b. Standing water - contribution to animal habitat	:	Valuable	Favorable	Neutral
c. Disturbances to site: ditches road/railroad				
d. Exotic species rating:		Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None	غ د			
f. Special Community Type: None				
g. Rare-Threatened-Endangered Species: None				
h. Polygon Quality Descriptor:		Good	Medium	Poor
Tier 3A SUMMARY:				
a: Dead woody material as indicator of animal hab	oitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 ma	ax.): 2	Good	Medium	Poor
c. Flood and storm water storage - numerical rank	(5 ma	2 Good	Medium	Poor
Tier 3B SUMMARY:				
a. Zonation and interspersion as indicator of anima	al habita	t: Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:		Valuable		Neutral
c. Number of dominant plant taxa observed:	4	Good	Medium	Poor
d. Average coefficient of conservatism: 1		Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:		Valuable		Neutral
f. Mature trees as indicator of animal habitat:		Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed: 5		Good	Medium	Poor
h. Number of indicator taxa: 0		Good	Medium	Poor

0 Industrial

0 Residential - single family

Commercial or multifamily residential

15 Native Vegetation - old field / scrub

Recreation - green space, mowed

0 Agricultural - tilled

15

0 Agricultural - pasture

	olygon # S6W037 able on page one)	A	Data R	Reference# S6W037
		olygon: Prelimi		
(to be	completted on-site	for each NWI polyg	on present in ti	ie wettand)
2.1 W	etland Geomorphic	Setting and Surface	e Water Flow (c	heck one):
✓	Depressional Riverine (within	Slope the river/stream b	Floodplain panks)	Lacustrine
2.2 Pr	esence of Standing	Water:		
stan	ding water normall	y present in the poly	/gon? No	
l:	s standing water is	present, is the water	r greater than 2	meters n depth? No
s stan	ding water normall	y present in an adjad	cent polygon?	No
.3 Ap	parent Hydroperio	d (check one):		
	Permanently Flo	ooded	<u></u>	Artificially Flooded
	Seasonally Floor	ded		
\checkmark	Saturated (surfa	ice water seldom p	resent	Artificailly Drained
2.4 So	il Type			
	_Organic (i.e. pea	ıt, etc.) <u>√</u> M	lineral	Both Mineral and Organic Present
Vet N	1eadow			y to Wetland Communities of Indiana):
וט ס.י	•	ology (check all that	. арріу):	
√	Ditching			Culvert
	Tiles			Other Human Distrubances to
	Dams			the
√	Road or Railroad	1 Embankment		
.7 Pr	esence of Invasive	Exotics (Score as: S =	= Scattered, F =	Frequent, or C = Common):
	_Garlic Mustard			Glossy Buckthorn
	Phragmities			Reed Canary Grass
	Purple Loosestri	fe		Other (list):
2.8 Pr	esence of Special H	ydrologic Condition	s (i.e. seeps, w	et slopes, floating mat):
None				
2.9 Pr	esence of Special C	ommunity Types:		
	_Bog	Fen	Wet Sa	and / Muck Flats or Marl Seeps
2.10 P	resence of Known	Federal or Indiana R	ar, Threatened	or Endangered Species:
\checkmark	None observed	or known to be pre	esen	
		st):		
2.11 V	Vetland Polygon O	uality Descriptor (se	e: Wetland Ou	ality Descriptions and check one):
 •	Good	Medium	✓ Poor	, 2000, p. 1000 and 0.000 one;
	_ ====		. 001	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 I	Notak	ole Features that influence water quality and hydrology:
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25 <25
An	nou	nt of o	dead woody material on the soil surface nilscattered frequent
3а	.2 \	Wate	Quality Protection Questions:
1.	Y) N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	Ŷ Y	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0
3a	.3 I	Flood	and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Y) N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y) N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description 3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 25 - 50% 10 - 25% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Persicaria sp. b. Typha latifolia c. Equisetum hyemale f.

Dominant Shrub Species listed in order of relative abundance.

a. _____

C. _____

Dominant Tree Species listed in order of relative abundance.

a. Salix interior

C. _____

D. ______

d.____

Mature trees (>12" dbh): yes no

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

Tree and shrub canopy: nil separate, seldom touching often touching more or less close

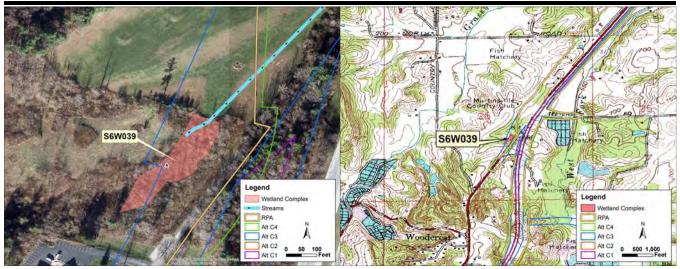
NWI Polygon # S6W037A	Data Reference# S6W037
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana) $SW = southwestern Indiana$ n	umbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
✓ horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - Ivs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0	bugleweed spp. (Lycopus) 5
*water lily (Nymphaea tuberosa) 6	clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
yellow spatterdock spp. (Naprial) o	*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
Sundew Spp. (Dioscia) To	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Friophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	swamp mikweed (Asciepias incamata) 4toothcup spp. (Ammania Rotala) 2
c. introduced grass spp. 0:reed canary	turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	winged loosestille (Eytillalii alataiii) 5
*additional = 8	Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3 additional =	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	goldon ragwort (Oerieolo aureus) 4
, 5 5, 5 5, 6 (7.) 10 10 10 10 10	

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) ✓ *goldenrod spp. (Solidago ohioensis, S. patula,	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10*dwarf birch (Betula pumila) 10*highbush blueberry (Vaccinium corymbosum) 9*leatherleaf (Chamaedaphne calyculata) 10meadowsweet and Hardhack spp. (Spiraea) 4*ninebark (Physocarpus opulifoius) 7*shrubby cinquefoil (Potentilla fruticosa) 9spice bush (Lindera benzoin) 5*swamp dewberry (Rubus hispidus) 6*swamp holly and winterberry spp. (Ilex) 7swamp rose (Rosa palustris) 5
tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2	Trees - leaves needle shaped*tamarack (Larix laricina) 10 Trees - leaves compound*ash, black (Fraxinus nigra) 7ash, green (Fraxinus pensylvanica) 3 _*ash, pumpkin (Fraxinus tomentosa) 8boxelder (Acer negundo) 1hickory, bitternut (Carya cordiformis) 5hickory, shellbark (Carya laciniosa) 8honey locust (Gleditsia triacanthos) 1*poison sumac (Rhus vernix) 10
*buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwood, red-osier (Cornus stolonifera) 4 *dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2 elderberry (Sambucus) 2	Trees - leaves simple and opposite red maple (Acer rubrum) 5silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9river birch (Betula nigra) 2black, gum (Nyssa sylvatica) 5cottonwood, eastern (Populus deltoides) 1cottonwood, swamp (Populus heterophylla) 8elm, American (Ulmus americana) 3hackberry (Celtis occidentalis) 3ironwood (Carpinus caroliniana) 5oak, pin or white (Quercus) 4*oak, Shumard's, swamp chestnut, swamp white*pawpaw (Asimina triloba) 6*sugarberry (Celtis laevigata) 7sweet gum (Liquidambar styraciflua) 4sycamore, American (Platanus occidentalis) 3✓ willow spp. (Salix) 1 sp. = 3additional sp. = 7

Wetland S6W039



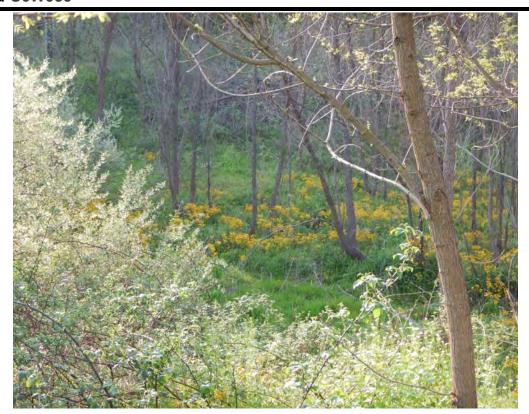
Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Martinsville 14-digit HUC: 05120201140140 County: Morgan Physiographic Region: Martinsville Hills T12N Township: Interior Plateau Ecoregion: R1E Range: **Natural Region:** Highland Rim Section: 26 Size of wetland complex (acres): 0.6110 Quarter: SE

USACE JurisdictionYesLatitude:39.44745IDEM Jurisdiction:YesLongitude:-86.388379

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted																												
				fair			Alt C1	0.45	73.6%																												
					fair			Alt C2	0.00	0.0%																											
S6W039A	Shallow	PEM	0.6110			fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair poor	poor	poor fair	Alt C3
	Marsh						Alt C4	0.00	0.0%																												
							RPA	0.00	0.0%																												



Polygon S6W039A



Polygon S6W039A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W039			
Date of Site Visit: Thursday, October 01, 2015			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.6110			
b. Wetland size and connectivity - contribution to animal	habitat:		
Valuable	More Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1):0.	48		
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID S	6W039A
a. Indiana Wetland community type: Shallow Marsh			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: road/railroad			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):	2 Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habit	at: Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 4	Good	Medium	Poor
d. Average coefficient of conservatism: 2.7	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable	İ	Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:12	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

0 Residential - single family

Commercial or multifamily residential

Tier 1: Assessment Overview 1.1 Site Identification: Wetland Site Name: N/A Ownership (if known): N/A USGS Topographic Quadrangle: Martinsville USGS Watershed map 14-Digit HUC: Clear Creek - East/West/Grassy Forks Identify each NWI Polygon within the Wetland Site (Polygon specific data) NWI Polygon ID Number **Cowardin Classification** Polygon Size (acres) S6W039A PFM1 0.6110 1.2 Site Visit Team Members: R. Hook, R. Connolly (Orginally JFNew) Agency: HNTB Date assessed: 10/1/2015 Time assessed: Weather conditions: Note any unusual weahter events that may have influenced the current conditions within this wetland system (e.g. recent heav rains, an unusually dry season, an especially early spring etc.) 1.3 Wetland Size Size of site under assessment: 0.611 Size of wetland complex: 0.611 1.4 Site Setting Degree of isolation from other wetlands or wetland complexes: ✓ The site is connected upstream and downstream with other wetlands The site is only connected upstrrem with other wetlands The site is only connected downstream with other wetlands Other wetlands are nearby (within 0.25 mile) but not connected The wetland site is isolated General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type): 20 Road / highway / railroad bed / parking lot 0 Native Vegetation - woodland 0 Industrial O Native Vegetation - old field / scrub

20

60 Recreation - green space, mowed

0 Agricultural - tilled

0 Agricultural - pasture

NWI Polygon # S6W039A	Data Reference# S6W039
see table on page one)	
Tier 2: Individual Polygon: Preliminary and to be completted on-site for each NWI polygon pre	
2.1 Wetland Geomorphic Setting and Surface Wate	er Flow (check one):
Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
2.2 Presence of Standing Water:	
Is standing water normally present in the polygon?	Yes
Is standing water is present, is the water great	er than 2 meters n depth? No
Is standing water normally present in an adjacent po	olygon? Yes
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	<u> </u>
Saturated (surface water seldom presen	tArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
2.5 Wetland Community Type for this NWI polygon Shallow Marsh	
2.6 Disturbances of Hydrology (check all that apply	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Scatt	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e. s	seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
Bog Fen	_Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, Th	reatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
2 11 Wetland Dalvaan Ovelite Descriptor I Wet	bland Quality Descriptions and shark and
2.11 Wetland Polygon Quality Descriptor (see: Wet	
Good Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 1	Notal	ble Features that influence water quality and hydrolo	ogy:			
Es	stima	ated h	nerbaceouis plant cover (percentage) in the polygon	100-757	5-50	50-25	<25
Es	stima	ated v	woody plant foliar coverage in the polygon	100-757	5-50 🗸	50-25	<25
Ar	nour	nt of	dead woody material on the soil surfacenil	scatte	red _	✓	frequen
3а	.2 \	Nate	r Quality Protection Questions:				
1.	Y	N	Does the wetland have a significant amount of vegetation woody plant) density to potentially uptake dissolved nu		y herbace	eous ar	nd
2.	Y	N	Managed water (e.g. municipal or road stromwater dra industrial or municipal wastewater) is not discharged in				ıtlet,
3.	Y	(N) (N)	If wetland in question is a depressional wetland answe 3a. Does the wetland have a shape or flow that allows materials before teh water reaches the center of th 3b. Is the position of the wetland in the landscape such entering a surface body of water down gradient?	for the settling e wetland?	g out of s	uspend	
4.	Y	N	Does the wetland lack steep slopes, large impervious a cropping, or areas with severe overgrazing within 10)W
5.	Y	N	Are there recreational lakes, fishable or navigable water down gradient in the local watershed?	ercourses, or v	vater sup	ply sou	rces
6.	Y	N	Is a vegetative buffer area or another wetland polygon be filtered) located upland and adjacent to the wetland area width and slope.				
			width of buffer area (in meter0 approximate	slope (percen	0		
3a	.3 F	Flood	d and Stormwater Storage / Attenuation Questions:				
1.			If wetland in question is a depressional wetland answe	r 1a, in not, ar	nswer 1b		
1.	Y	N	1a. Around the wetland is there a buffer strip of natural that will slow overland flow into the wetland?			old field	, scrub)
	Y	N	Is there a significant amount of microtopography of to reduce the veolocity of the water leaving the well.	r vegetative de tland?	ensity with	nin the	wetland
2.	Y	N	Does the wetland lack man-made structure that would wetland (tiles, culverts, ditches)?	speed the flov	v of water	from t	he
3.	Y	N	Is the flood potential high in the local watershed in which flood damages)?	ch the wetland	l is locate	d (histo	ory of
4.	Y	N	Is the wetland located in a watershed where the majori impermeable, or is bedrock within two feet of the top of			claye	and
5.	Y	N	Is the wetland located in a local watershed which has he to existing development?	nighly modified	d runoff co	ondition	ns due

Tier 3b Individual Polygon: Rapid Vegetation Description

,,,	•
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetlan	d polygon?1
1b. If only one vegetation zone is evident, which bes	t describes the site?
heterogeneous textures across the poly	
the polygon.	ion type with more or less uniform texture across
2. If more than one vegetation zone is present in the porepresents the distribuion of these zone?	lygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occup	y?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 1	75%
Is there notable layering/stratification in this vegetation	zone? No
Dominant Herbaceous Species (i.e., covering more tha abundance. (Mark with an * any species that forms ext	
a. Impatiens capensis	d
b. Leersia oryzoides	e
c. Solidago sp.	f
Dominant Shrub Species listed in order of relative abun	dance.
a	c
b	d
Dominant Tree Species listed in order of relative abund	ance.
a. Salix nigra	c
b	d
Tree and shrub canopy: nil separate, seldom to	ouching often touching more or less close
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W039A	Data Reference# S6W039
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more the abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 arrow-head spp. (Sagittaria) 4 *green dragon (Arisaema dracontium) 6 Jack-in-the-pulpit (Arisaema triphyllum) 4 pickerel weed (Pontederia cordata) 5 *skunk cabbage (Symplocarpus foetidus) 8
*water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorled *bedstraw spp. (Gallium) 6 beggar's tick spp. (Bidens) 3 blue vervain (Berbena hastata) 3
✓ boneset (Eupatorium perfoliatum) 4
bugleweed spp. (Lycopus) 5 ✓ clearweed spp. (Pilea) 3
cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6
*gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5
 *loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0
*richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8
swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2
*turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5
Herbs (vines): dicots - Ivs. alternate or basal andAmerican bellflower (Campanula americana) 4*asters: bristly aster (Aser puniceus) 7flat-topped aster (Aster umbellatus) 8 = 7other aster spp. (e.g. New England, panicled ast*black-eyed Susan (Rudbeckia fulgida) 8cardinal flower (Lobelia cardinalis) 4cress spp. (Cardamine) 4dock spp.: swamp, water, pale (Rumex) 4garlic mustard (Alliaria petiolata) 0golden ragwort (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
✓ ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstern (/telinemens ditermiolia) o	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poison sumae (renas vernix) 10
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	✓ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	Silver maple (Acer Sacchamium) i
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
	*alder, speckled (Alnus rugosa) 9
hog peanut / ground nut (Amphicarpaea and Apios) 5	
• •	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W040



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Clear Creek - East/West/Grassy Quadrangle: Martinsville Basin: 14-digit HUC: 05120201140140 County: Morgan T12N Physiographic Region: Martinsville Hills Township: Ecoregion: Interior Plateau R1E Range: **Natural Region:** Highland Rim Section: 26 Size of wetland complex (acres): 0.0396 Quarter: SE

USACE JurisdictionYesLatitude:39.448906IDEM Jurisdiction:YesLongitude:-86.386854

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted	
							Alt C1	0.04	100.0%	
		Wet PEM 0.0396 poor poor f						Alt C2	0.04	100.0%
S6W040A	Wet		fair	Alt C3	0.04	100.0%				
	Meadow			Alt C4	0.04	100.0%				
							RPA	0.04	100.0%	



Polygon S6W040A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017					
Wetland Site Name: N/A					
Data Reference #: S6W040					
Date of Site Visit: Thursday, October 01, 2015					
Tier 1 Summary:					
a. Total Wetland Area (acres): 0.0396					
b. Wetland size and connectivity - contribution to a	nimal h	habitat:			
Val	uable	More F	avorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1):	0.5	57			
d. Value surrounding area adds to animal habitat:		\	/aluable	Favorable	Low
Tier 2 SUMMARY:			Polyg	on ID	66W040A
a. Indiana Wetland community type: Wet Meadow	<u>'</u>				
b. Standing water - contribution to animal habitat:		١	/aluable	Favorable	Neutral
c. Disturbances to site: road/railroad other					
d. Exotic species rating:			Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None					
f. Special Community Type: None					
g. Rare-Threatened-Endangered Species: None					
h. Polygon Quality Descriptor:			Good	Medium	Poor
Tier 3A SUMMARY:					
a: Dead woody material as indicator of animal habit	at:	١	/aluable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max	.):3	3	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma _	3	Good	Medium	Poor
Tier 3B SUMMARY:					
a. Zonation and interspersion as indicator of animal	habita	at: \	/aluable	Favorable	Neutral
b. Stratification as indicator of animal habitat:		\	/aluable		Neutral
c. Number of dominant plant taxa observed: 5			Good	Medium	Poor
d. Average coefficient of conservatism: 3			Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:		١	/aluable		Neutral
f. Mature trees as indicator of animal habitat:		١	/aluable	Favorable	Neutral
g. Total hydrophytic taxa observed:11			Good	Medium	Poor
h. Number of indicator taxa: 0			Good	Medium	Poor

 0
 Native Vegetation - woodland
 20
 Road / highway / railroad bed / parking lot

 10
 Native Vegetation - old field / scrub
 0
 Industrial

 0
 Agricultural - tilled
 0
 Residential - single family

0 Agricultural - pasture 0 Commercial or multifamily residential

_____70___ Recreation - green space, mowed

NWI Polygon # S6W040A	Data Reference# S6W040
see table on page one)	
Tier 2: Individual Polygon: Preliminary Associates to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	lygon? <u>No</u>
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	tArtificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon /et Meadow	
.6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
44 Watland Bahara 20 all 20 al	land Quality Parasitation and I had a
.11 Wetland Polygon Quality Descriptor (see: Wetl	
Good✓ _Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	ı.1 N	Notal	ole Features that influence water quality and hydrology:
Es	stima	ated I	nerbaceouis plant cover (percentage) in the polygon 🗹 100-7575-5050-25<25
Es	stima	ated v	woody plant foliar coverage in the polygon100-7575-5050-25 <u>√</u> <25
Ar	nour	nt of	dead woody material on the soil surface nilscattered frequen
3a	.2 V	Vate	r Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	Y Y	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0
3a	.3 F	Flood	d and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Υ	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

2h 1 Zonation and Intercorreion	
3b.1 Zonation and Interspersion:	disaburano d
How may vegetation zones are evident in this wetlan	
1b. If only one vegetation zone is evident, which bes	t describes the site?
Polygon compoosed of amosaic of sma heterogeneous textures across the poly	all vegetation patches, hummocks, or tussocks, ygon.
Polygon composed of a single vegettat the polygon.	ion type with more or less uniform texture across
2. If more than one vegetation zone is present in the porepresents the distribuion of these zone?	lygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occup	yy?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - ·	75%
Is there notable layering/stratification in this vegetation	zone? No
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms extended to the control of the contro	
a. Impatiens sp.	d. <i>Solidago sp.</i>
b. Leersia oryzoides	e
c. Eupatorium perfoliatum	f
Dominant Shrub Species listed in order of relative abun	dance.
a	C
b	d
Dominant Tree Species listed in order of relative abund	
	c
b	d
Tree and shrub canopy: nil separate, seldom to	ouching often touching more or less close
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

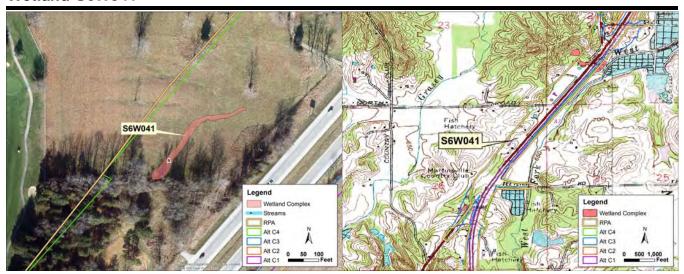
NWI Polygon # S6W040A	Data Reference# S6W040
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
c	f
Dominant Shrub Species listed in order of relative abur	
a	C
b	d
Dominant Tree Species listed in order of relative abund	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana) $SW = southwestern Indiana$	numbers = C-coefficents *= species with high conservatism)					
Herbs: non-seed plants horsetail, scouring rush spp. (Equisetum) 2	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6					
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4					
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6					
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4					
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5					
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8					
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10					
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2					
Spriagram moss spp. (Spriagram) 10	water plantain (Alisma plantago-aquatica) 2					
Herbs: Ivs. floating or submergent	Herbs: dicots - Ivs. opposite/whorled					
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6					
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3					
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3					
*pondweed spp. (Potamogeton) 8	✓ boneset (Eupatorium perfoliatum) 4					
curlyleaf pondweed (Potamogeton crispus) 0	bugleweed spp. (Lycopus) 5					
*water lily (Nymphaea tuberosa) 6	clearweed spp. (Pilea) 3					
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4					
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3					
	*fen betony (Pedicularis lanceolata) 6					
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8					
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0					
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2					
, ,	Joe-pye weed spp. (Eupatorium) 5					
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6					
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5					
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5					
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0					
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4					
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1					
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0					
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8					
number of species	St. John's wort spp. (Hypericum/Triandeum) 8					
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4					
√ b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8					
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4					
foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2					
✓ c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8					
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3					
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3					
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5					
needle sedge spp. (Eleocharis) 1 sp. =2						
*additional = 8	Herbs (vines): dicots - Ivs. alternate or basal and					
✓ nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4					
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7					
✓ rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8					
sedge spp. (Carex) 1 sp. = 3additional =	= 7 <u>√</u> other aster spp. (e.g. New England, panicled ast					
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8					
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4					
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4					
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4					
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0					
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4					
*yellow-eyed grass (Xyris torta) 9						

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	✓ ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	,
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
water paretripe (claim edays) e	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	additional Sp. /
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
olderberry (dambdedd) 2	

Wetland S6W041



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Martinsville 14-digit HUC: 05120201140140 County: Morgan T12N Physiographic Region: Martinsville Hills Township: Ecoregion: Interior Plateau R1E Range: **Natural Region:** Highland Rim Section: 26 Size of wetland complex (acres): 0.1449 Quarter: NE

USACE JurisdictionYesLatitude:39.453634IDEM Jurisdiction:YesLongitude:-86.38392

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
S6W041A	Sedge Meadow	PEM	0.1449	poor	poor	fair	Alt C1	0.14	100.0%
							Alt C2	0.14	100.0%
							Alt C3	0.14	100.0%
							Alt C4	0.14	100.0%
							RPA	0.14	100.0%



Polygon S6W041A



Polygon S6W041A

In-WRAP Summary Sheet

Date Report Generate	d: Friday, September 15, 2017			
Wetland Site Name:	N/A			
Data Reference #: S6	W041			
Date of Site Visit: The	ursday, October 01, 2015			
Tier 1 Summary:				
a. Total Wetland A	rea (acres): 0.1449			
b. Wetland size ar	nd connectivity - contribution to animal habita	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding lar	nd use - numerical rank (max. = 1):0.45			
d. Value surround	ing area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY	:	Polyg	gon ID	66W041A
a. Indiana Wetlar	nd community type: Sedge Meadow			
b. Standing water	- contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to	site:			
d. Exotic species r	ating:	Good	Medium	Poor
e. Special Hydrolo	gic Conditions Observed: None			
f. Special Commu	nity Type: None			
g. Rare-Threatene	ed-Endangered Species: None			
h. Polygon Quality	/ Descriptor:	Good	Medium	Poor
Tier 3A SUMMAR	Y:			
a: Dead woody m	aterial as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality p	protection - numerical rank (6 max.):2	Good	Medium	Poor
c. Flood and storn	n water storage - numerical rank (5 ma2	Good	Medium	Poor
Tier 3B SUMMAR	Y:			
a. Zonation and in	iterspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as	s indicator of animal habitat:	Valuable		Neutral
c. Number of dom	ninant plant taxa observed: 3	Good	Medium	Poor
d. Average coeffic	cient of conservatism: 1.3	Good	Medium	Poor
e. Tree canopy as	indicator of animal habitat:	Valuable		Neutral
f. Mature trees as	indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophy	tic taxa observed:4	Good	Medium	Poor
h. Number of indi	cator taxa: 0	Good	Medium	Poor

the wetland site (indicate the % abundance of each type):

- 10 Road / highway / railroad bed / parking lot 10 Native Vegetation - woodland 0 Native Vegetation - old field / scrub 0 Industrial 0 Residential - single family
- 0 Agricultural tilled
- 70 Agricultural pasture Commercial or multifamily residential
- 10 Recreation green space, mowed

NWI Polygon # S6W041A	Data Reference# S6W041
see table on page one)	
Fier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
Depressional Slope Floo Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	olygon? No
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	tArtificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon edge Meadow	(see Key to Wetland Communities of Indiana):
.6 Disturbances of Hydrology (check all that apply)):
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. sone	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
	Mat Canal / March Flate as No. 10
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	land Quality Descriptions and check one):
✓ Good Medium	Poor
	_

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	lotak	ole Features that influence water quality and hydrology:				
Es	Estimated herbaceouis plant cover (percentage) in the polygon <u></u>						
Es	Estimated woody plant foliar coverage in the polygon100-7575-5050-25<25						
An	nour	nt of o	dead woody material on the soil surface nilscatteredfrequent				
3а	.2 V	Vate	Quality Protection Questions:				
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?				
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?				
3.	If wetland in question is a depressional wetland answer 3a, in not, answer 3b. Y N 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? Y N 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?						
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?				
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?				
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.				
			width of buffer area (in meter0 approximate slope (percen0				
3а	.3 F	Flood	and Stormwater Storage / Attenuation Questions:				
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b				
	Y	(N)	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)				
	Y	N	that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?				
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?				
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?				
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?				
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?				

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wet	land polygon?1
1b. If only one vegetation zone is evident, which be	pest describes the site?
Polygon compoosed of amosaic of sheterogeneous textures across the	small vegetation patches, hummocks, or tussocks, polygon.
Polygon composed of a single vegether the polygon.	ttation type with more or less uniform texture across
2. If more than one vegetation zone is present in the represents the distribuion of these zone?	polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone	A
What % of the polygon does this vegetative zone occ	cupy?
☐ 10 - 25% ☐ 25 - 50% ☐ 50) - 75%
Is there notable layering/stratification in this vegetation	on zone? No
Dominant Herbaceous Species (i.e., covering more tabundance. (Mark with an * any species that forms	
a. <u>Cyperus esculentus</u>	d
b. <u>Р</u> оа sp.	e
c. <u>Vernonia missurica</u>	f
Dominant Shrub Species listed in order of relative ab	oundance.
a	c
b	d
Dominant Tree Species listed in order of relative abu	indance.
a	c
b	d
Tree and shrub canopy: nil separate, seldor	n touching often touching more or less close
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W041A	Data Referen	ce# S6W041	
3b.2 Dominant Plant Species: Vegetation Zone B			
What % of the polygon does this vegetative zone occ	upy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetatio	n zone?		
Dominant Herbaceous Species (i.e., covering more thabundance. (Mark with an * any species that forms e			relative
a	d		
b	e		
c	f.		
Dominant Shrub Species listed in order of relative abo			
a	C		
b	d.		
Dominant Tree Species listed in order of relative abur			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seldom			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about wh wetland site).	at adds to or det	racts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone C			
What % of the polygon does this vegetative zone occ	upy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetatio	n zone?		
Dominant Herbaceous Species (i.e., covering more thabundance. (Mark with an * any species that forms e	nan 10% of the a	rea) listed in order of ultural patches).	relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative abo			
a			
b			
Dominant Tree Species listed in order of relative abur			
a			
b Tree and shrub canopy: nil separate, seldom		ten touching \square more	
		ton todoming more	, or 1633 01036
Mature trees (>12" dbh): yes no Other remarks (include personal comments about wh	at adds to or det	racts from the quality	of this

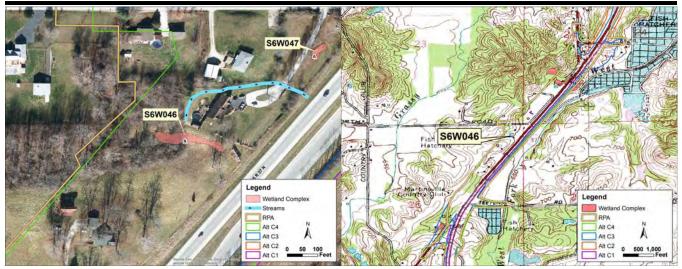
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p	olants	Herbs: wide-leafe	d monocots
horsetail, scouri	ing rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6
*ferns: marsh sh	hiled fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4
*cinnamon fern	(Osmunda cinnamomea) 9	*green dragon	(Arisaema dracontium) 6
	nunda regalils) 8		oit (Arisaema triphyllum) 4
	Onoclea sensibilis) 4		Pontederia cordata) 5
*other: species			e (Symplocarpus foetidus) 8
	ss (Selaginella apoda) 4		alla palustris) 10
	s spp. (Sphagnum) 10		Alisma plantago-aquatica) 2
Herbs: Ivs. floating	a or submergent	Herbs: dicots - lvs	s. opposite/whorled
	p. (Utricularia) 10	*bedstraw spp.	<u> </u>
	phyllum demersum) 1	beggar's tick sp	•
duckweed spp.			erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	eed (Potamogeton crispus) 0	bugleweed spp	
	phaea tuberosa) 6	clearweed spp.	· • · ·
	asenia schreberi) 4		nium perfoliatum) 4
	lock spp. (Nuphar) 6		ehmeria cylindrica) 3
your opaciora	con opp. (Hapman) c		edicularis lanceolata) 6
Herbs: Ivs. floating	a or submergent		Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)		(Ambrosia trifida) 0
*sundew spp. (E	,		pocynum cannabinum) 2
oundon opp. (2	7.000.a) 10		spp. (Eupatorium) 5
Herbs: linear-lys.	or +/- leafless monocots		o. (Lysimachia) 6
	(Rhynchospora) 10		y (Rhexia virginica) 5
blueflag iris (Iris			edge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (\$			spp. (Mimulus) 4
cat-tail spp. (Typ		nettle (Urtica pr	
	pp. (Eriophorum) 10		fe (Lythrum salicaria) 0
	amineae) - indicate types and		insonia canadensis) 8
number of species	3,		spp. (Hypericum/Triandeum) 8
-	zania aquatica) 10	sunflower sp. (I	
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
` .	rass spp. 0:reed canary	*turtlehead spp	
	reed (Phragmites),		Clematis virginiana) 3
	such as annual foxtail	•	(Ludwigia palustris) 3
(Setaria) and ba	arnyard grass (Echinochloa)		rife (Lythrum alatum) 5
needle sedge sr	op. (Eleocharis) 1 sp. =2		,
*additional =		Herbs (vines): dice	ots - Ivs. alternate or basal and
√ nutsedge spp. (€)	Cyperus) 2	` ,	ower (Campanula americana) 4
• • • • • •	species (if know		aster (Aser puniceus) 7
rush spp. (Junci			er (Aster umbellatus) 8
✓ sedge spp. (Car	•		. (e.g. New England, panicled ast
	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
sweet flag (Acor	,		(Lobelia cardinalis) 4
	Oulichium arundinaceum) 10	cress spp. (Car	•
	lium mariscoides) 10		mp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0
	amassia scilloides) 5		(Senecio aureus) 4
	ass (Xyris torta) 9 [′]		,

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
✓ ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
goto (: tollineoo anooa)	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poloon damad (rando vornix) 10
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	onvol maple (vicel eacemannen) i
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
water parsimps (claim stave) o	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	additional sp. – 7
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
Gluciberry (Sambucus) Z	

Wetland S6W046



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Clear Creek - East/West/Grassy Quadrangle: Martinsville Basin: 14-digit HUC: 05120201140140 County: Morgan T12N Physiographic Region: Martinsville Hills Township: Interior Plateau R1E **Ecoregion:** Range: **Natural Region:** Highland Rim Section: 26 Size of wetland complex (acres): 0.1031 Quarter: NE

USACE JurisdictionYesLatitude:39.455551IDEM Jurisdiction:YesLongitude:-86.382046

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted			
							Alt C1	0.10	100.0%			
	Wet Prairie PEM 0.1031 fair poor			Alt C2	0.10	100.0%						
S6W046A		PEM	PEM 0.1031	fair	fair	fair	fair	poor	fair	Alt C3	0.10	100.0%
					Alt C4	0.10	100.0%					
							RPA	0.10	100.0%			



Polygon S6W046A



Polygon S6W046A

In-WRAP Summary Sheet

Date Report Genera	ted: Friday, September 15, 2017			
Wetland Site Name:	N/A			
Data Reference #: S	66W046			
Date of Site Visit: 1	Thursday, October 01, 2015			
Tier 1 Summary	:			
a. Total Wetland	d Area (acres): 0.1031			
b. Wetland size	and connectivity - contribution to animal habita	at:		
	Valuable Mor	re Favorable	Favorable	Neutral
c. Surrounding I	and use - numerical rank (max. = 1):0.59			
d. Value surroui	nding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMAR	RY:	Polyg	gon ID S	6W046A
a. Indiana Wetl	and community type: Wet Prairie			
b. Standing wat	er - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances	to site:			
d. Exotic species	s rating:	Good	Medium	Poor
e. Special Hydro	ologic Conditions Observed: None			
f. Special Comm	nunity Type: None			
g. Rare-Threate	ned-Endangered Species: None			
h. Polygon Qual	lity Descriptor:	Good	Medium	Poor
Tier 3A SUMMA	IRY:			
a: Dead woody	material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality	y protection - numerical rank (6 max.):5	Good	Medium	Poor
c. Flood and sto	orm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMA	IRY:			
a. Zonation and	interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
	as indicator of animal habitat:	Valuable		Neutral
c. Number of do	ominant plant taxa observed: 2	Good	Medium	Poor
d. Average coef	ficient of conservatism: 1.5	Good	Medium	Poor
e. Tree canopy a	as indicator of animal habitat:	Valuable		Neutral
f. Mature trees	as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydropl	hytic taxa observed:5	Good	Medium	Poor
h. Number of in	idicator taxa: 0	Good	Medium	Poor

0 Agricultural - pasture

10 Recreation - green space, mowed

Commercial or multifamily residential

Tier 1: Assessment Overview 1.1 Site Identification: Wetland Site Name: N/A Ownership (if known): N/A USGS Topographic Quadrangle: Martinsville USGS Watershed map 14-Digit HUC: Clear Creek - East/West/Grassy Forks Identify each NWI Polygon within the Wetland Site (Polygon specific data) NWI Polygon ID Number **Cowardin Classification** Polygon Size (acres) S6W046A PFM1 0.1031 1.2 Site Visit Team Members: R. Hook/R. Connolly Agency: HNTB Date assessed: 10/1/2015 Time assessed: Weather conditions: Note any unusual weahter events that may have influenced the current conditions within this wetland system (e.g. recent heav rains, an unusually dry season, an especially early spring etc.) 1.3 Wetland Size Size of site under assessment: 0.1031 Size of wetland complex: 0.1031 1.4 Site Setting Degree of isolation from other wetlands or wetland complexes: ✓ The site is connected upstream and downstream with other wetlands The site is only connected upstrrem with other wetlands The site is only connected downstream with other wetlands Other wetlands are nearby (within 0.25 mile) but not connected The wetland site is isolated General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type): 10 Road / highway / railroad bed / parking lot 40 Native Vegetation - woodland 0 Industrial 0 Native Vegetation - old field / scrub 0 Agricultural - tilled 30 Residential - single family

NWI Polygon # S6W046A	Data Reference# S6W046
see table on page one)	
Tier 2: Individual Polygon: Preliminar to be completted on-site for each NWI polygon p	
.1 Wetland Geomorphic Setting and Surface Wa	ater Flow (check one):
Depressional ✓ SlopeF Riverine (within the river/stream bank	•
.2 Presence of Standing Water:	
standing water normally present in the polygor	n? Yes
Is standing water is present, is the water gre	eater than 2 meters n depth? No
standing water normally present in an adjacent	polygon? Yes
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom pres	entArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mine	ralBoth Mineral and Organic Present
Vet Prairie	gon (see Key to Wetland Communities of Indiana):
2.6 Disturbances of Hydrology (check all that app	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
7 Presence of Invasive Exotics (Score as: S = Sc	attered, F = Frequent, or C = Common):
F Garlic Mustard	Glossy Buckthorn
Phragmities	C Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.	e. seeps, wet slopes, floating mat):
None	
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar,	Threatened or Endangered Species:
✓ None observed or known to be preser	n
RTES Present (list):	
<u> </u>	
2.11 Wetland Polygon Quality Descriptor (see: W	
Good✓Medium	Poor Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	lotak	ole Features that influence water quality and hydrology:					
Es	Estimated herbaceouis plant cover (percentage) in the polygon <u></u>							
Es	Estimated woody plant foliar coverage in the polygon100-7575-5050-25 <25							
An	nour	nt of o	dead woody material on the soil surface nilscattered frequent					
_								
3a	.2 V	Vate	r Quality Protection Questions:					
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?					
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?					
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.					
	Υ	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended					
	(Y)	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before					
	U	••	entering a surface body of water down gradient?					
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?					
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?					
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.					
			width of buffer area (in meter20 approximate slope (percen1					
3a	.3 F	lood	and Stormwater Storage / Attenuation Questions:					
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b					
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?					
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?					
2.	Ŷ	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?					
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?					
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?					
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?					

Tier 3b Individual Polygon: Rapid Vege	etation Description
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this we	etland polygon?1
1b. If only one vegetation zone is evident, which	best describes the site?
heterogeneous textures across the	
Polygon composed of a single vegether polygon.	ettation type with more or less uniform texture across
2. If more than one vegetation zone is present in th represents the distribuion of these zone?	e polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone	Α
What % of the polygon does this vegetative zone of	ccupy?
☐ 10 - 25% ☐ 25 - 50% ☐ 5	50 - 75%
Is there notable layering/stratification in this vegetat	ion zone? No
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms	
a. <u>Solidago sp.</u>	d
b. Phalaris arundinacea	e
C	f
Dominant Shrub Species listed in order of relative a	abundance.
a	C
b	d
Dominant Tree Species listed in order of relative ab	oundance.
a	C
b	d

Mature trees (>12" dbh): yes no

Tree and shrub canopy: nil separate, seldom touching often touching more or less close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

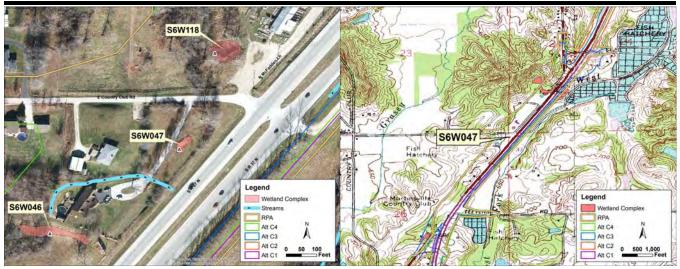
NWI Polygon # S6W046A	Data Reference# S6W046
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
c	f
Dominant Shrub Species listed in order of relative abur	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed	plants	Herbs: wide-leafe	d monocots
horsetail, scour	ing rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6
*ferns: marsh s	hiled fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4
*cinnamon fern	(Osmunda cinnamomea) 9	*green dragon ((Arisaema dracontium) 6
*royal fern (Osn	nunda regalils) 8	Jack-in-the-pul	oit (Arisaema triphyllum) 4
sensitive fern (C	Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species	(if known	*skunk cabbage	e (Symplocarpus foetidus) 8
marsh club mos	ss (Selaginella apoda) 4	*water arum (C	alla palustris) 10
Sphagnum mos	ss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floatin	a or submeraent	Herbs: dicots - lv	s. opposite/whorled
	pp. (Utricularia) 10	*bedstraw spp.	
	ophyllum demersum) 1	beggar's tick sp	•
duckweed spp.			erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	veed (Potamogeton crispus) 0	bugleweed spp	
	phaea tuberosa) 6	clearweed spp.	` ' '
	rasenia schreberi) 4		nium perfoliatum) 4
	dock spp. (Nuphar) 6		ehmeria cylindrica) 3
yollow spattere	iock spp. (Naphai) o		edicularis lanceolata) 6
Herbs: Ivs. floatin	a or submergent		Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)		(Ambrosia trifida) 0
*sundew spp. ([pocynum cannabinum) 2
Suridew Spp. (L	5103Cla) 10		spp. (Eupatorium) 5
Harbe: linear-lye	or +/- leafless monocots		o. (Lysimachia) 6
	(Rhynchospora) 10		y (Rhexia virginica) 5
blueflag iris (Iris			nedge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
cat-tail spp. (Ty		nettle (Urtica pr	
	op. (Eriophorum) 10		fe (Lythrum salicaria) 0
	amineae) - indicate types and		insonia canadensis) 8
number of species	annineae) - indicate types and		spp. (Hypericum/Triandeum) 8
•	zania aquatica) 10	sunflower sp. (I	
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
	rass spp. 0:reed canary	turtlehead spp. (/	
	, reed (Phragmites),		Clematis virginiana) 3
	such as annual foxtail		(Ludwigia palustris) 3
	arnyard grass (Echinochloa)		rife (Lythrum alatum) 5
,	pp. (Eleocharis) 1 sp. =2	wiilged ioosesii	ine (Eytindin alatum) 3
*additional		Harbe (vines): dice	ots - lvs. alternate or basal and
nutsedge spp. (ower (Campanula americana) 4
	; species (if know	· · · · · · · · · · · · · · · · · · ·	aster (Aser puniceus) 7
rush spp. (Junc	• • •		er (Aster umbellatus) 8
	•		,
sedge spp. (Ca			. (e.g. New England, panicled ast
	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
sweet flag (Aco	•	· · · · · · · · · · · · · · · · · · ·	(Lobelia cardinalis) 4
	Dulichium arundinaceum) 10	✓ cress spp. (Car	· · · · · · · · · · · · · · · · · · ·
	dium mariscoides) 10		mp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0
	Camassia scilloides) 5	✓ golden ragwort	(Senecio aureus) 4
yellow-eyed gra	ass (Xyris torta) 9		

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) ✓ *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, eastern (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4
swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3	ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled	*sugarberry (Celtis laevigata) 7sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5buckthorn spp. (Rhamnus cathartica, R. frangula) 0buttonbush (Cephalanthus occidentalis) 5dogwwod, red-osier (Cornus stolonifera) 4*dogwood, blue-fruited or silky (Cornus obliqua)dogwood, gray (Cornus racemosa) 2elderberry (Sambucus) 2	sycamore, American (Platanus occidentalis) 3willow spp. (Salix) 1 sp. = 3additional sp. = 7

Wetland S6W047



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Clear Creek - East/West/Grassy Quadrangle: Martinsville Basin: 14-digit HUC: 05120201140140 County: Morgan T12N Physiographic Region: Martinsville Hills Township: Ecoregion: Interior Plateau R1E Range: **Natural Region:** Highland Rim Section: 25 Size of wetland complex (acres): 0.0277 Quarter: NE

USACE JurisdictionYesLatitude:39.456371IDEM Jurisdiction:YesLongitude:-86.380799

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted			
				0.0277 poor						Alt C1	0.03	100.0%
			0.0277		poor	fair	Alt C2	0.03	100.0%			
S6W047A	Wet Meadow						Alt C3	0.03	100.0%			
							Alt C4	0.03	100.0%			
							RPA	0.03	100.0%			



Polygon S6W047A



Polygon S6W047A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W047			
Date of Site Visit:	Sunday, November 01, 2015			
Tier 1 Summar	y:			
a. Total Wetlar	nd Area (acres): 0.0277			
b. Wetland siz	e and connectivity - contribution to animal habita	at:		
	Valuable Mor	e Favorable	Favorable	Neutral
c. Surrounding	gland use - numerical rank (max. = 1): 0.50			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	on ID S	66W047A
a. Indiana We	tland community type: Wet Meadow			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	s to site: road/railroad			
d. Exotic speci	es rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	ened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	ARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quali	ty protection - numerical rank (6 max.):3	Good	Medium	Poor
c. Flood and st	corm water storage - numerical rank (5 ma 2	Good	Medium	Poor
Tier 3B SUMM	ARY:			
a. Zonation an	d interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
	n as indicator of animal habitat:	Valuable		Neutral
c. Number of o	dominant plant taxa observed: 2	Good	Medium	Poor
d. Average coe	efficient of conservatism: 1.5	Good	Medium	Poor
e. Tree canopy	as indicator of animal habitat:	Valuable		Neutral
f. Mature tree	s as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed: 5	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type):

- Native Vegetation woodland
 Road / highway / railroad bed / parking lot
 Native Vegetation old field / scrub
 Industrial
 Agricultural tilled
 Residential single family
- 0 Agricultural pasture 0 Commercial or multifamily residential
- 60 Recreation green space, mowed

NWI Polygon # S6W047A	Data Reference# S6W047
see table on page one)	
Tier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	· Flow (check one):
✓ Depressional Slope Floo Riverine (within the river/stream banks)	dplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	r than 2 meters n depth? No
standing water normally present in an adjacent pol	lygon? <u>No</u>
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	<u> </u>
Saturated (surface water seldom present	Artificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon /et Meadow .6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams ✓ Road or Railroad Embankment	the
.7 Presence of Invasive Exotics (Score as: S = Scatte	ared E - Fraguent or C - Common)
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. so	eeps, wet slopes, floating mat):
One	
.9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Thro	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	
Good✓ _Medium	_Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	lotak	ole Features that influence water quality and hydrology:		
Es	tima	ited h	nerbaceouis plant cover (percentage) in the polygon 100-75 75-50 50-25 <25		
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25 <25		
An	nour	nt of o	dead woody material on the soil surfacenilscatteredfrequent		
3а	.2 V	Vate	Quality Protection Questions:		
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?		
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?		
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.		
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended		
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?		
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?		
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?		
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.		
			width of buffer area (in meter0 approximate slope (percen0		
3а	.3 F	lood	and Stormwater Storage / Attenuation Questions:		
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b		
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?		
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?		
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?		
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?		
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?		
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?		

Tier 3b Individual Polygon: Rapid Vegetation Description 3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion Type One Interspersion** 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No

Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).

a. Leersia oryzoides	d		
b. <i>Typha latifolia</i>	e		

Dominant Shrub Species listed in order of relative abundance.

a.	C.	
_		

b. _____ d. ___

Dominant Tree Species listed in order of relative abundance.

a.	C.

Tree and shrub canopy: Inil separate, seldom touching often touching more or less close

Mature trees (>12" dbh): yes no

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

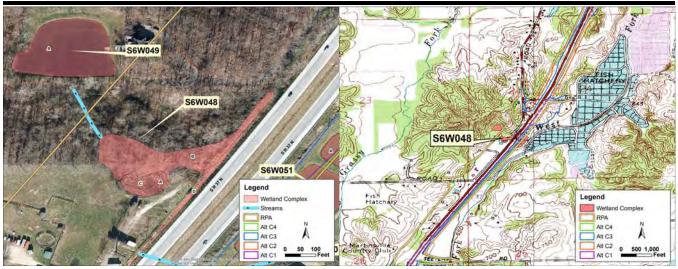
NWI Polygon # S6W047A	Data Reference# S6W047
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more the abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	it adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana) $SW = southwestern Indiana$	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plantshorsetail, scouring rush spp. (Equisetum) 2 _*ferns: marsh shiled fern spp. (Dryopteris) 7 _*cinnamon fern (Osmunda cinnamomea) 9 _*royal fern (Osmunda regalils) 8sensitive fern (Onoclea sensibilis) 4 _*other: species (if knownmarsh club moss (Selaginella apoda) 4 _Sphagnum moss spp. (Sphagnum) 10	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 _arrow-head spp. (Sagittaria) 4 _*green dragon (Arisaema dracontium) 6 _Jack-in-the-pulpit (Arisaema triphyllum) 4 _pickerel weed (Pontederia cordata) 5 *skunk cabbage (Symplocarpus foetidus) 8 *water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10coontail (Ceratophyllum demersum) 1duckweed spp. (Lemnaceae) 3*pondweed spp. (Potamogeton) 8curlyleaf pondweed (Potamogeton crispus) 0*water lily (Nymphaea tuberosa) 6water shield (Brasenia schreberi) 4*yellow spatterdock spp. (Nuphar) 6	Herbs: dicots - Ivs. opposite/whorled *bedstraw spp. (Gallium) 6 beggar's tick spp. (Bidens) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 bugleweed spp. (Lycopus) 5 clearweed spp. (Pilea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10	*gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots _*beak rush spp (Rhynchospora) 10 _blueflag iris (Iris virginica) 5 _bulrush spp. (Scirpus / Schoenoplectus) 5 _*bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 _*cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species _a. *wild rice (Zizania aquatica) 10 ✓ b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other _c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Eleocharis) 1 sp. =2 _*additional = 8 _nutsedge spp. (Cyperus) 2 *orchid spp. 10; species (if know rush spp. (Juncus) 4 _sedge spp. (Carex) 1 sp. = 3additional = *spiderlily (Hymenocallis occidentalis) 9 _*sweet flag (Acorus calamus) 0 *3-way sedge (Dulichium arundinaceum) 10	*black-eyed Susan (Rudbeckia fulgida) 8 cardinal flower (Lobelia cardinalis) 4 cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10 *umbrella sedge (Fuirena squarrosa) 10 wild hyacinth (Camassia scilloides) 5 *yellow-eyed grass (Xyris torta) 9	dock spp.: swamp, water, pale (Rumex) 4garlic mustard (Alliaria petiolata) 0golden ragwort (Senecio aureus) 4

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) ✓ *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, eastern (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4
senna spp. (Cassia) 4swamp agrimony (Agrimonia parviflora) 4swamp thistle (Cirsium muticum) 8tall coneflower (Rudbeckia laciniata) 3	hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white
water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R.	*sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 sycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3 additional sp. = 7
frangula) 0buttonbush (Cephalanthus occidentalis) 5dogwwod, red-osier (Cornus stolonifera) 4*dogwood, blue-fruited or silky (Cornus obliqua)dogwood, gray (Cornus racemosa) 2elderberry (Sambucus) 2	

Wetland S6W048



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Clear Creek - East/West/Grassy Quadrangle: Martinsville Basin: 14-digit HUC: 05120201140140 County: Morgan T12N Physiographic Region: Martinsville Hills Township: Interior Plateau R1E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 24 Size of wetland complex (acres): 1.0454 Quarter: SW

USACE JurisdictionYesLatitude:39.460496IDEM Jurisdiction:YesLongitude:-86.377517

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.11	100.0%
		PEM	0.1075	poor	poor	fair	Alt C2	0.11	100.0%
S6W048A	Seasonally						Alt C3	0.11	100.0%
	Flooded						Alt C4	0.11	100.0%
	Basin						RPA	0.11	99.9%
							Alt C1	0.75	100.0%
	Swamp Forest	PFO	0.7474 fair	fair	poor	fair	Alt C2	0.75	100.0%
S6W048B							Alt C3	0.75	100.0%
							Alt C4	0.75	100.0%
	Shallow PU Open Water						Alt C1	0.06	100.0%
			PUB 0.0557	poor	or poor	fair	Alt C2	0.06	100.0%
S6W048C							Alt C3	0.06	100.0%
							Alt C4	0.06	100.0%
							RPA	0.06	100.0%
				0.1348 poor poor poor		Alt C1	0.13	100.0%	
	SD Seasonally P Flooded Basin	ed ,	0.1348		poor	poor	Alt C2	0.13	100.0%
S6W048D							Alt C3	0.13	100.0%
							Alt C4	0.13	100.0%
							RPA	0.13	100.0%



Polygon S6W048A



Polygon S6W048A



Polygon S6W048D

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W048			
Date of Site Visit:	Tuesday, October 06, 2015			
Tier 1 Summar	·y:			
a. Total Wetlar	nd Area (acres): 1.0454			
b. Wetland siz	e and connectivity - contribution to animal habita	at:		
	Valuable Mor	e Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1): 0.60			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	gon ID S	6W048A
a. Indiana We	tland community type: Seasonally Flooded Basin	1		
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	s to site:			
d. Exotic speci	es rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	ened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	ARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quali	ty protection - numerical rank (6 max.):5	Good	Medium	Poor
c. Flood and st	torm water storage - numerical rank (5 ma 2	Good	Medium	Poor
Tier 3B SUMM	ARY:			
a. Zonation an	d interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
	n as indicator of animal habitat:	Valuable		Neutral
c. Number of o	dominant plant taxa observed: 1	Good	Medium	Poor
d. Average coe	efficient of conservatism: 2.6	Good	Medium	Poor
e. Tree canopy	y as indicator of animal habitat:	Valuable		Neutral
f. Mature tree	s as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed:11	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

Tier 2 SUMMARY:	Polyg	on ID	S6W048B
a. Indiana Wetland community type: Swamp Forest			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: dams road/railroad			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: Seeps			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):3	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma2	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed:5	Good	Medium	Poor
d. Average coefficient of conservatism: 2.6	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:11	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

er 2 SUMMARY: Polygon ID		S6W048C	
a. Indiana Wetland community type: Deep Marsh/Shallow Ope	en Water		
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: dams			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):3	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma2	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed:1	Good	Medium	Poor
d. Average coefficient of conservatism:3	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:1	Good	Medium	Poor
h. Number of indicator taxa:0	Good	Medium	Poor

Tier 2 SUMMARY:	Polygon ID S6W04		56W048D
a. Indiana Wetland community type: Seasonally Flooded Basin			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: ditches culvert other			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):1_	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma1	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed:2	Good	Medium	Poor
d. Average coefficient of conservatism: 2.5	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:15	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

25 Residential - single family

Tier 1: Assessment O	verview		
Wetland Site Name: N/A			
Ownership (if known): N/A			
USGS Topographic Quadrang	gle: Martinsville		
USGS Watershed map 14-Di	git HUC: Clear Creek - East/\	West/Grassy Forks	
Identify each NWI Polygon v	vithin the Wetland Site (Poly	gon specific data)	
NWI Polygon ID Number	Cowardin Classification	Polygon Size (acres)	
S6W048A	PEM1	0.1075	
S6W048B	PFO1	0.7474	
S6W048C	PUBHx	0.0557	
S6W048D	PEM1	0.1348	
1.2 Site Visit			
Team Members: R. Hook, F	R. Connolly (orignally JFNew)		
Agency: HNTB			
Date assessed: <u>10/6/2015</u>	Time ass	sessed:	
Weather conditions: Sunn	У		
•	•	ced the current conditions withing an especially early spring etc.)	າ this wetland
Dry season			
1.3 Wetland Size			
Size of site under assessmer	nt: 1.0454		
Size of wetland complex:	1.0454		
The site is connect ✓ The site is only cor The site is only cor Other wetlands are The wetland site is		eam with other wetlands er wetlands other wetlands	e perimeter of
•	e % abundance of each type		ا د ا د منادات م
50 Native Vegetation0 Native Vegetation	1 - woodland25 1 - old field / scrub0	Road / highway / railroad bed Industrial	ı / parking iot

0 Agricultural - pasture _____ 0 ___ Commercial or multifamily residential

0 Recreation - green space, mowed

O Agricultural - tilled ____

NWI Polygon # S6W048A	Data Reference# S6W048
see table on page one)	
Fier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
2.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
2.2 Presence of Standing Water:	
s standing water normally present in the polygon?	Yes
Is standing water is present, is the water greate	er than 2 meters n depth? No
s standing water normally present in an adjacent po	lygon? <u>Yes</u>
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	<u> </u>
Saturated (surface water seldom present	tArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
easonally Flooded Basin .6 Disturbances of Hydrology (check all that apply)):
Ditching	Culvert
Tiles	Other Human Distrubances to
 Dams	the
Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	S Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
11 Wetland Polygon Quality Descriptor (see: Wetl	land Quality Descriptions and check one)
Good ✓ Medium	Poor
	_, , , , , , , , , , , , , , , , , , ,

3a	.1 N	lotak	ole Features that influence water quality and hydrology:
Es	tima	ited h	nerbaceouis plant cover (percentage) in the polygon 75-50 50-25<25
Es	tima	ited v	voody plant foliar coverage in the polygon100-7575-5050-25 _ ✓ <25
An	nour	nt of o	dead woody material on the soil surface nilscatteredfrequent
3а	.2 V	Vate	Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	(Υ) Υ	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter100 approximate slope (percen2
3a.3 Flood and Stormwater Storage / Attenuation Questions:			
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	(Y)	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)
	Υ	N	that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetlan	nd polygon?1
1b. If only one vegetation zone is evident, which bes	st describes the site?
Polygon compoosed of amosaic of sm heterogeneous textures across the pol	all vegetation patches, hummocks, or tussocks, ygon.
Polygon composed of a single vegettate the polygon.	tion type with more or less uniform texture across
2. If more than one vegetation zone is present in the porepresents the distribuion of these zone?	olygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occup	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75% 75 - 90% >90%
Is there notable layering/stratification in this vegetation	zone? No
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ext	
a. <i>Typha latifolia</i>	d
b	e
с	f
Dominant Shrub Species listed in order of relative abur	ndance
a	C
b	d
Dominant Tree Species listed in order of relative abund	
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	
Mature trees (>12" dbh): yes no	<u> </u>
, , , , , , , , , , , , , , , , , , , ,	

NWI Polygon # S6W048A	Data Refer	ence# S6W048	
3b.2 Dominant Plant Species: Vegetation Zor	ie B		
What % of the polygon does this vegetative zone	occupy?		
10 - 25% 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this veget	ation zone?		
Dominant Herbaceous Species (i.e., covering mo abundance. (Mark with an * any species that form			f relative
a	d		
b			
C	f.		
Dominant Shrub Species listed in order of relative			
a	c		
b			
Dominant Tree Species listed in order of relative			
a			
b	d.		
Tree and shrub canopy: nil separate, sele			
Mature trees (>12" dbh): yes no	<u> </u>	3 :	
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).			
3b.2 Dominant Plant Species: Vegetation Zor	ne C		
What % of the polygon does this vegetative zone	occupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this veget	ation zone?		
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).			
a	d		
b			
C			
Dominant Shrub Species listed in order of relative			
a			
b			
Dominant Tree Species listed in order of relative a			
a.			
b		often touching	
Tree and shrub canopy: nil separate, sel	dom touching [orten touching [_] mo	TE OF IESS CIOSE
Mature trees (>12" dbh): yes no	tudot odde te ee	dotrooto from the consti	n, of this
Other remarks (include personal comments about	i what adds to or	deliacts from the dualit	v oi this

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants horsetail, scouring rush spp. (Equisetum) 2 *ferns: marsh shiled fern spp. (Dryopteris) 7 *cinnamon fern (Osmunda cinnamomea) 9 *royal fern (Osmunda regalils) 8 sensitive fern (Onoclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 arrow-head spp. (Sagittaria) 4 *green dragon (Arisaema dracontium) 6 Jack-in-the-pulpit (Arisaema triphyllum) 4 pickerel weed (Pontederia cordata) 5 *skunk cabbage (Symplocarpus foetidus) 8 _*water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorled *bedstraw spp. (Gallium) 6 beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6	 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 bugleweed spp. (Lycopus) 5 clearweed spp. (Pilea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-lvs. or +/- leafless monocots	*gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5 *loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10	 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other	*richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2
c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Eleocharis) 1 sp. =2 *additional = 8	*turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5
additional = 6nutsedge spp. (Cyperus) 2*orchid spp. 10; species (if know	Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4 *asters: bristly aster (Aser puniceus) 7 flat-topped aster (Aster umbellatus) 8 other aster spp. (e.g. New England, panicled ast *black-eyed Susan (Rudbeckia fulgida) 8 cardinal flower (Lobelia cardinalis) 4 cress spp. (Cardamine) 4 dock spp.: swamp, water, pale (Rumex) 4 garlic mustard (Alliaria petiolata) 0 golden ragwort (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
✓ sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstorn (Atomicine atomicina) o	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poison sumae (rinus vernix) 10
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
· ·	silver maple (Acer saccharinum) 1
chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7	Silver maple (Acer Sacchannum) 1
*great angelica (Angelica atropurpurea) 6	Troca leaves simple and alternate
	Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9
hog peanut / ground nut (Amphicarpaea and Apios) 5	river birch (Betula nigra) 2
	black, gum (Nyssa sylvatica) 5
honewort (Cryptotaenia canadensis) 3	cottonwood, eastern (Populus deltoides) 1
meadow rue spp. (Thalictrum) 5	
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

NWI Polygon # S6W048B	Data Reference# S6W048
see table on page one)	
Tier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
Depressional Slope Floo Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	Yes
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	lygon? <u>Yes</u>
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
5 Wetland Community Type for this NWI polygon	(see Key to Wetland Communities of Indiana):
wamp Forest	
.6 Disturbances of Hydrology (check all that apply)	:
Ditching	Culvert
Tiles	Other Human Distrubances to
✓ Dams	the
Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	T Other (list):
8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
eeps	
.9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	land Quality Descriptions and check one):
Good Medium √	Poor

38	a.1 N	Notal	ole Features that influence water quality and hydrology:
Es	stima	ated I	nerbaceouis plant cover (percentage) in the polygon — 75-5050-25<25
Es	stima	ated v	woody plant foliar coverage in the polygon100-75 <u>√</u> 75-5050-25 <25
Ar	mour	nt of	dead woody material on the soil surfacenilscatteredfrequen
38	a.2 V	Nate	r Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	Y Y	N N	If wetland in question is a depressional wetland answer 3a, in not, answer 3b.3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland?3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Υ	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Υ	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0
38	1.3 F	Flood	d and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
٠.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Υ	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

b. Platanus occidentalis

Tier 3b Individual Polygon: Rapid Vegetation Description	
3b.1 Zonation and Interspersion:	
How may vegetation zones are evident in this wetland polygon?	
1b. If only one vegetation zone is evident, which best describes the site?	
Polygon composed of amosaic of small vegetation patches, hummocks, or tussock heterogeneous textures across the polygon.	(S,
Polygon composed of a single vegettation type with more or less uniform texture act the polygon.	oss
2. If more than one vegetation zone is present in the polygon, which intersperision diagram most close represents the distribuion of these zone?	sely
Type One Interspersion Type Two Interspersion	
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy?	
☐ 10 - 25%☐ 25 - 50%☐ 50 - 75%☐ 75 - 90%☐ >9	90%
Is there notable layering/stratification in this vegetation zone? Yes	
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).	
a. <u>Leersia oryzoides</u> d	
b. Impatiens capensis e	
c f	
Dominant Shrub Species listed in order of relative abundance.	
a. Lindera benzoin c	
b d	
Dominant Tree Species listed in order of relative abundance.	
a. Fraxinus pennsylvanica c	

Tree and shrub canopy:

nil separate, seldom touching often touching more or less close

Mature trees (>12" dbh): yes no

d. ____

NWI Polygon # S6W048B	Data Reference# S6W048		
3b.2 Dominant Plant Species: Vegetation Zone B			
What % of the polygon does this vegetative zone occur	py?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%		
Is there notable layering/stratification in this vegetation	zone?		
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex			
a	d		
b	e		
C	f		
Dominant Shrub Species listed in order of relative abu			
a	c		
b	d		
Dominant Tree Species listed in order of relative abundance	dance.		
a	c		
b	d		
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close		
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this		
3b.2 Dominant Plant Species: Vegetation Zone C			
What % of the polygon does this vegetative zone occur	py?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%		
Is there notable layering/stratification in this vegetation	zone?		
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).			
a	d		
b	e		
C	f		
Dominant Shrub Species listed in order of relative abu			
a	C		
b	d		
Dominant Tree Species listed in order of relative abundance	dance.		
a	c		
b	d		
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close		
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this		

(N = northern Indiana SW = southwestern Indiana)	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants horsetail, scouring rush spp. (Equisetum) 2 *ferns: marsh shiled fern spp. (Dryopteris) 7 *cinnamon fern (Osmunda cinnamomea) 9 *royal fern (Osmunda regalils) 8 sensitive fern (Onoclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 arrow-head spp. (Sagittaria) 4 *green dragon (Arisaema dracontium) 6 Jack-in-the-pulpit (Arisaema triphyllum) 4 pickerel weed (Pontederia cordata) 5 _*skunk cabbage (Symplocarpus foetidus) 8 _*water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10coontail (Ceratophyllum demersum) 1duckweed spp. (Lemnaceae) 3*pondweed spp. (Potamogeton) 8curlyleaf pondweed (Potamogeton crispus) 0*water lily (Nymphaea tuberosa) 6water shield (Brasenia schreberi) 4*yellow spatterdock spp. (Nuphar) 6	Herbs: dicots - Ivs. opposite/whorled *bedstraw spp. (Gallium) 6beggar's tick spp. (Bidens) 3blue vervain (Berbena hastata) 3boneset (Eupatorium perfoliatum) 4bugleweed spp. (Lycopus) 5clearweed spp. (Pilea) 3cup plant (Silphium perfoliatum) 4false nettle (Boehmeria cylindrica) 3*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10	*gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10blueflag iris (Iris virginica) 5bulrush spp. (Scirpus / Schoenoplectus) 5*bur reed spp. (Sparganium) 9 _✓ cat-tail spp. (Typha) 1*cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of speciesa. *wild rice (Zizania aquatica) 10 _✓ b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); otherc. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)needle sedge spp. (Eleocharis) 1 sp. =2*additional = 8nutsedge spp. (Cyperus) 2 _*orchid spp. 10; species (if knowrush spp. (Juncus) 4sedge spp. (Carex) 1 sp. = 3additional = *spiderlily (Hymenocallis occidentalis) 9sweet flag (Acorus calamus) 0 _*3-way sedge (Dulichium arundinaceum) 10 _*twig rush (Cladium mariscoides) 10	*black-eyed Susan (Rudbeckia fulgida) 8 cardinal flower (Lobelia cardinalis) 4 cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10 *umbrella sedge (Fuirena squarrosa) 10 wild hyacinth (Camassia scilloides) 5 *yellow-eyed grass (Xyris torta) 9	dock spp.: swamp, water, pale (Rumex) 4garlic mustard (Alliaria petiolata) 0golden ragwort (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	✓ spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	✓ ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	,
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
✓ poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

NWI Polygon # S6W048C	Data Reference# S6W048
(see table on page one)	
Fier 2: Individual Polygon: Preliminary Atobe completted on-site for each NWI polygon pre	
2.1 Wetland Geomorphic Setting and Surface Wate	er Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
2.2 Presence of Standing Water:	
s standing water normally present in the polygon?	Yes
Is standing water is present, is the water great	er than 2 meters n depth? No
s standing water normally present in an adjacent po	olygon? <u>Yes</u>
3 Apparent Hydroperiod (check one):	
✓ Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom presen	tArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
Deep Marsh/Shallow Open Water 2.6 Disturbances of Hydrology (check all that apply	·):
Ditching	Culvert
Tiles	Other Human Distrubances to
√ Dams	the
Road or Railroad Embankment	
	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
 Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. s	seeps, wet slopes, floating mat):
Q Brosonco of Special Community Types	
.9 Presence of Special Community Types:	Mat Canal / Maral Flate - Mar I Conne
Bog Fen	_Wet Sand / Muck Flats or Marl Seeps
<u> </u>	reatened or Endangered Species:
10 Presence of Known Federal or Indiana Rar, Thi ✓ None observed or known to be presen	reatened or Endangered Species:
2.10 Presence of Known Federal or Indiana Rar, Thi	reatened or Endangered Species:
2.10 Presence of Known Federal or Indiana Rar, Thi ✓ None observed or known to be presen	

3a	.1 N	Notal	ole Features that influence water quality and hydro	logy:			
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon	100-75	75-50	50-25	√ <25
Es	tima	ated v	voody plant foliar coverage in the polygon	100-75	75-50	50-25	✓ <25
An	nour	nt of o	dead woody material on the soil surfacenil	sc	attered		frequent
3а	.2 V	Nate	r Quality Protection Questions:				
1.	Y	N	Does the wetland have a significant amount of vegeta woody plant) density to potentially uptake dissolved n		ically herba	aceous a	nd
2.	Y	N	Managed water (e.g. municipal or road stromwater dr industrial or municipal wastewater) is not discharged				utlet,
3.			If wetland in question is a depressional wetland answ	er 3a, in no	t, answer 3	b.	
	Υ	N	3a. Does the wetland have a shape or flow that allow		•	suspend	ded
	materials before teh water reaches the center of the wetland? Y N 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?			before			
4.	Y	N	Does the wetland lack steep slopes, large impervious cropping, or areas with severe overgrazing within				OW
5.	Y	N	Are there recreational lakes, fishable or navigable wadown gradient in the local watershed?	itercourses,	or water su	upply sou	ırces
6.	Y	N	Is a vegetative buffer area or another wetland polygon be filtered) located upland and adjacent to the wetlan area width and slope.				
			width of buffer area (in meter100 approximate	e slope (per	cen2	<u> </u>	
22	2 6	Eloos	I and Stormwater Storage / Attenuation Questions:	_			
Ja	.э г	1000	-				
1.			If wetland in question is a depressional wetland answ				ا ممسیام)
	Y	N	1a. Around the wetland is there a buffer strip of natur that will slow overland flow into the wetland?	ai vegetatio	n (lorestea	, old lield	i, Scrub)
	Y	N	1b. Is there a significant amount of microtopography to reduce the veolocity of the water leaving the w	or vegetativ etland?	e density w	ithin the	wetland
2.	Y	N	Does the wetland lack man-made structure that would wetland (tiles, culverts, ditches)?	d speed the	flow of war	ter from t	he
3.	Y	N	Is the flood potential high in the local watershed in wh flood damages)?	nich the wet	land is loca	ted (hist	ory of
4.	Y	N	Is the wetland located in a watershed where the major impermeable, or is bedrock within two feet of the top			ire claye	and
5.	Y	N	Is the wetland located in a local watershed which has to existing development?	s highly mod	ified runoff	condition	ns due

Tier 3b Individual Polygon: Rapid Vegetation Description

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland	d polygon?1
1b. If only one vegetation zone is evident, which best	t describes the site?
Polygon composed of amosaic of sma heterogeneous textures across the poly	Ill vegetation patches, hummocks, or tussocks, gon.
Polygon composed of a single vegettati the polygon.	on type with more or less uniform texture across
2. If more than one vegetation zone is present in the pol represents the distribuion of these zone?	lygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy	y?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 7	75%
Is there notable layering/stratification in this vegetation z	rone? No
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms extended)	
a. <u>Lemna minor</u>	d
b	e
C	f
Dominant Shrub Species listed in order of relative abund	dance.
a	c
b	d
Dominant Tree Species listed in order of relative abunda	ance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom to	
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W048C	Data Reference# S6W048
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
c	f
Dominant Shrub Species listed in order of relative abur	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - Ivs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0	
*water lily (Nymphaea tuberosa) 6	clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
yellow spatterdock spp. (Nupriar) o	*fen betony (Pedicularis lanceolata) 6
Harbar has fleeting or automorgant	*gentian spp. (Gentiana Gentianopsis) 8
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10)	•
	giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2
*sundew spp. (Drosera) 10	
Harbar Basan bia an il lasticas manasata	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2
c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)	water purslane (Ludwigia palustris) 3
	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	
*additional = 8	Herbs (vines): dicots - Ivs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3additional	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstorii (/totinoriiona alterniiona) o	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poison sumac (ithus vernix) to
*buttercup spp.: cursed b., hooked b., swamp	Trace leaves simple and appeals
b.(Ranunculus) 6	Trees - leaves simple and opposite
·	red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1
chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7	Silver maple (Acer Sacchamillum) i
	Trace leaves simple and alternate
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

NWI Polygon # S6W048D	Data Reference# S6W048
(see table on page one)	
Tier 2: Individual Polygon: Preliminary and to be completted on-site for each NWI polygon pres	
2.1 Wetland Geomorphic Setting and Surface Wate	r Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
2.2 Presence of Standing Water:	
s standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
s standing water normally present in an adjacent po	olygon? <u>No</u>
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	t Artificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
Seasonally Flooded Basin 2.6 Disturbances of Hydrology (check all that apply)):
✓ Ditching	✓ Culvert
Tiles	✓ Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	F Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e. s	seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
	Mot Cond / Much Flate on Maril Carrie
BogFen	_Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, Thr	reatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: Wet	land Quality Descriptions and check one):
Good Medium ✓	Poor

3а	.1 N	Notab	ole Features that influence water quality and hydrology:
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon 100-75 75-50 50-25 <25
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25<25
An	nour	nt of o	dead woody material on the soil surface nilscatteredfrequent
3а	.2 V	Vate	Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.
	Υ	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.		
			width of buffer area (in meter0 approximate slope (percen0
3а	.3 F	Flood	and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
1.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

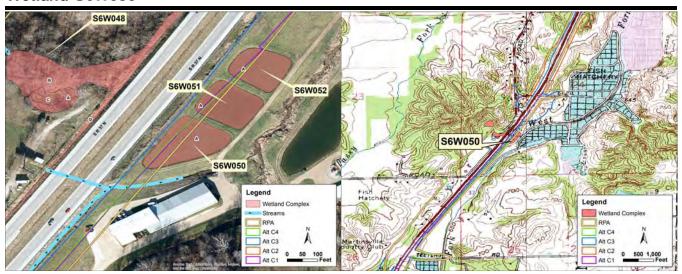
Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland	polygon?1
1b. If only one vegetation zone is evident, which best of	describes the site?
Polygon compoosed of amosaic of small heterogeneous textures across the polyg	vegetation patches, hummocks, or tussocks, on.
Polygon composed of a single vegettation the polygon.	n type with more or less uniform texture across
2. If more than one vegetation zone is present in the poly represents the distribuion of these zone?	gon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy	?
10 - 25% 25 - 50% 50 - 75	5%
Is there notable layering/stratification in this vegetation zo	ne? No
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms exter	
a. Leersia oryzoides	d
b. <i>Typha latifolia</i>	e
c	f
Dominant Shrub Species listed in order of relative abunda	ance.
a	с
b	d
Dominant Tree Species listed in order of relative abundar	nce.
a	с
b	d
Tree and shrub canopy: nil separate, seldom tou	ching often touching more or less close
Mature trees (>12" dbh): yes no	

NWI Polygon # S6W048D	Data Reference# S6W048		
3b.2 Dominant Plant Species: Vegetation Zone B			
What % of the polygon does this vegetative zone occur	py?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%		
Is there notable layering/stratification in this vegetation	zone?		
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex			
a	d		
b	e		
C	f		
Dominant Shrub Species listed in order of relative abu			
a	C		
b	d		
Dominant Tree Species listed in order of relative abundance	dance.		
a	c		
b	d		
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close		
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this		
3b.2 Dominant Plant Species: Vegetation Zone C			
What % of the polygon does this vegetative zone occur	py?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%		
Is there notable layering/stratification in this vegetation	zone?		
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex			
a	d		
b	e		
C	f		
Dominant Shrub Species listed in order of relative abu			
a	C		
b	d		
Dominant Tree Species listed in order of relative abundance	dance.		
a	c		
b	d		
Tree and shrub canopy: nil separate, seldom			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this		

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants ✓ horsetail, scouring rush spp. (Equisetum) 2 — *ferns: marsh shiled fern spp. (Dryopteris) 7 — *cinnamon fern (Osmunda cinnamomea) 9 — *royal fern (Osmunda regalils) 8 — sensitive fern (Onoclea sensibilis) 4 — *other: species (if known — marsh club moss (Selaginella apoda) 4 — Sphagnum moss spp. (Sphagnum) 10	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 arrow-head spp. (Sagittaria) 4 *green dragon (Arisaema dracontium) 6 Jack-in-the-pulpit (Arisaema triphyllum) 4 _pickerel weed (Pontederia cordata) 5 _*skunk cabbage (Symplocarpus foetidus) 8 _*water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6	Herbs: dicots - Ivs. opposite/whorled *bedstraw spp. (Gallium) 6beggar's tick spp. (Bidens) 3blue vervain (Berbena hastata) 3boneset (Eupatorium perfoliatum) 4bugleweed spp. (Lycopus) 5clearweed spp. (Pilea) 3cup plant (Silphium perfoliatum) 4false nettle (Boehmeria cylindrica) 3*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10	*gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5*bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1*cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)	*loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2 *additional = 8 ✓ nutsedge spp. (Cyperus) 2 _*orchid spp. 10; species (if knowrush spp. (Juncus) 4 ✓ sedge spp. (Carex) 1 sp. = 3additional _*spiderlily (Hymenocallis occidentalis) 9 sweet flag (Acorus calamus) 0 _*3-way sedge (Dulichium arundinaceum) 10 _*twig rush (Cladium mariscoides) 10 _*umbrella sedge (Fuirena squarrosa) 10 _wild hyacinth (Camassia scilloides) 5 *yellow-eyed grass (Xyris torta) 9	Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4 *asters: bristly aster (Aser puniceus) 7 flat-topped aster (Aster umbellatus) 8

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 ✓ jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 ✓ smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 _*dwarf birch (Betula pumila) 10 _*highbush blueberry (Vaccinium corymbosum) 9 _*leatherleaf (Chamaedaphne calyculata) 10 _meadowsweet and Hardhack spp. (Spiraea) 4 _*ninebark (Physocarpus opulifoius) 7 _*shrubby cinquefoil (Potentilla fruticosa) 9 _spice bush (Lindera benzoin) 5 _*swamp dewberry (Rubus hispidus) 6 _*swamp holly and winterberry spp. (Ilex) 7 _✓ swamp rose (Rosa palustris) 5 Trees - leaves needle shaped _*tamarack (Larix laricina) 10



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Martinsville

Physiographic Region: New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R1ENatural Region:Tipton Till PlainSection:24

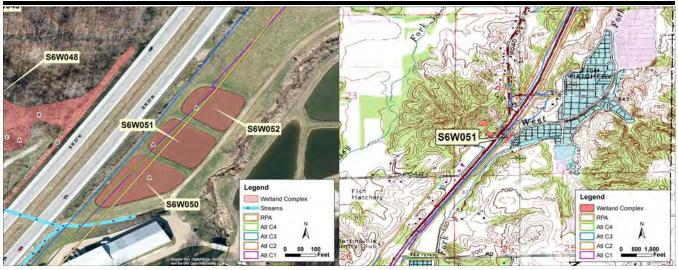
Size of wetland complex (acres): Quarter: SW

USACE JurisdictionYesLatitude:39.459872IDEM Jurisdiction:YesLongitude:-86.376398

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.11	22.4%
							Alt C2	0.10	19.9%
S6W050A	S6W050A Pond PUB 0.4843 no rating	no rating	no rating	no rating	Alt C3	0.00	0.0%		
				Alt C4	0.10	19.9%			
						RPA	0.21	44.2%	



Polygon S6W050A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Martinsville

Physiographic Region: New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R1ENatural Region:Tipton Till PlainSection:24

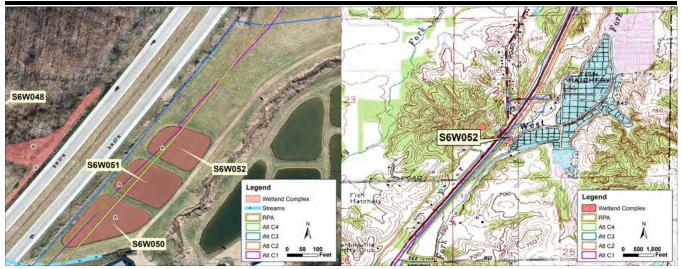
Size of wetland complex (acres): Quarter: SW

USACE JurisdictionYesLatitude:39.460216IDEM Jurisdiction:YesLongitude:-86.37602

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.06	16.5%
							Alt C2	0.08	19.6%
S6W051A	S6W051A Pond PUB 0.3931 no rating	no rating	no rating	no rating	Alt C3	0.00	0.0%		
				Alt C4	0.08	19.6%			
							RPA	0.12	29.7%



Polygon S6W051A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Martinsville

Physiographic Region:New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R1ENatural Region:Tipton Till PlainSection:24

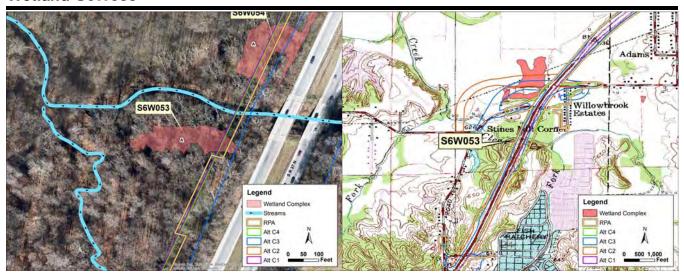
Size of wetland complex (acres): Quarter: SW

USACE JurisdictionYesLatitude:39.460544IDEM Jurisdiction:YesLongitude:-86.375736

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted	
							Alt C1	0.08	22.3%	
									Alt C2	0.09
S6W052A	S6W052A Pond PUB 0.3509 no rating	no rating	no rating	Alt C3	0.00	0.0%				
							Alt C4	0.09	26.0%	
							RPA	0.10	28.5%	



Polygon S6W052A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Cope 14-digit HUC: 05120201140140 County: Morgan T12N Physiographic Region: Martinsville Hills Township: Eastern Corn Belt Plains R1E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 13 Size of wetland complex (acres): 0.3963 Quarter: SE

USACE JurisdictionYesLatitude:39.474246IDEM Jurisdiction:YesLongitude:-86.36986

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted				
							Alt C1	0.04	10.7%				
				good	good						Alt C2	0.04	9.7%
S6W053A	Floodplain	PFO	0.3963			poor	fair	Alt C3	0.00	0.6%			
	Forest						Alt C4	0.04	9.7%				
							RPA	0.02	4.5%				



Polygon S6W053A



Polygon S6W053A



Polygon S6W053A

In-WRAP Summary Sheet

Date Report Genera	ated: Friday, September 15, 2017			
Wetland Site Name	: <u>N/A</u>			
Data Reference #:	S6W053			
Date of Site Visit:	Tuesday, October 06, 2015			
Tier 1 Summary	y:			
a. Total Wetlan	d Area (acres): 0.3963			
b. Wetland size	e and connectivity - contribution to animal habita	it:		
	Valuable Mor	e Favorable	Favorable	Neutral
c. Surrounding	land use - numerical rank (max. = 1): 0.85			
d. Value surrou	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMAI	RY:	Polyg	on ID S	6W053A
a. Indiana Wet	land community type: Floodplain Forest			
b. Standing wa	ter - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances	s to site: road/railroad other			
d. Exotic specie	es rating:	Good	Medium	Poor
e. Special Hydr	ologic Conditions Observed: None			
f. Special Comr	munity Type: None			
g. Rare-Threate	ened-Endangered Species: None			
h. Polygon Qua	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	ARY:			
a: Dead woody	material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water qualit	ry protection - numerical rank (6 max.): 4	Good	Medium	Poor
c. Flood and st	orm water storage - numerical rank (5 ma 2	Good	Medium	Poor
Tier 3B SUMMA	ARY:			
a. Zonation and	d interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
	n as indicator of animal habitat:	Valuable	İ	Neutral
c. Number of d	ominant plant taxa observed: 5	Good	Medium	Poor
	fficient of conservatism: 2	Good	Medium	Poor
J	as indicator of animal habitat:	Valuable		Neutral
• •	s as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrop	ohytic taxa observed: 12	Good	Medium	Poor
h. Number of i	ndicator taxa: 0	Good	Medium	Poor

the wetland site (indicate the % abundance of each type):

- 15 Road / highway / railroad bed / parking lot 85 Native Vegetation - woodland 0 Industrial O Native Vegetation - old field / scrub
- 0 Agricultural tilled 0 Residential - single family
- 0 Agricultural pasture Commercial or multifamily residential
- Recreation green space, mowed

NWI Polygon # S6W053A	Data Reference# S6W053
see table on page one)	·
Fier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
DepressionalSlope✓ Floo Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	Yes
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	lygon? <u>Yes</u>
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	· ·
Saturated (surface water seldom present	Artificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon loodplain Forest .6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	✓ Other Human Distrubances to
Dams	the
✓ Road or Railroad Embankment	the
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	W 10 1/24 1 The 25 15
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
RTES Present (list): .11 Wetland Polygon Quality Descriptor (see: Wetl	land Quality Descriptions and check one):

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 l	Nota	ble Features that influence water quality and hydrology:			
Es	Estimated herbaceouis plant cover (percentage) in the polygon 					
Es	tima	ated	woody plant foliar coverage in the polygon100-7575-5050-25 <25			
Ar	noui	nt of	dead woody material on the soil surfacenilscatteredfrequent			
3а	.2 \	Wate	r Quality Protection Questions:			
1.	Y) N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?			
2.	Y) N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?			
3.	Y	(N) N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient? 			
4.	Υ	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?			
5.	Υ	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?			
6.	Y) N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.			
			width of buffer area (in meter20 approximate slope (percen45			
3а	.3 I	Floo	d and Stormwater Storage / Attenuation Questions:			
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b			
٠.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?			
	Y) N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?			
2.	Υ	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?			
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?			
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?			
5.	Y) N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?			

Tier 3b Individual Polygon: Rapid Vegetation Description

Tier ob marviduari orygon. Rapid veget	ation Bescription
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetla	and polygon?1
1b. If only one vegetation zone is evident, which b	est describes the site?
heterogeneous textures across the p	
the polygon.	tation type with more or less uniform texture across
2. If more than one vegetation zone is present in the represents the distribuion of these zone?	polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	L
What % of the polygon does this vegetative zone occ	upy?
□ 10 - 25% □ 25 - 50% □ 50	- 75% T5 - 90% >90%
Is there notable layering/stratification in this vegetatio	n zone? Yes
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms e	
a. <u>Polygonum striatulum</u>	d
b. Impatiens capensis	e
c. Solidago gigantea	f
Dominant Shrub Species listed in order of relative about	undance.
a	C
b	d
Dominant Tree Species listed in order of relative abu	
a. Fraxinus pennsylvanica	C
b. Acer negundo	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	5 <u> </u>

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W053A	Data Referen	ce# S6W053	
3b.2 Dominant Plant Species: Vegetation Zone	3		
What % of the polygon does this vegetative zone oc	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 56) - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	on zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms			relative
a	d		
b	e		
c	f.		
Dominant Shrub Species listed in order of relative at			
a	C		
b	d.		
Dominant Tree Species listed in order of relative about			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seldor			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).			
3b.2 Dominant Plant Species: Vegetation Zone	3		
What % of the polygon does this vegetative zone oc	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 56) - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	on zone?		
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).			
a	d		
b			
C			
Dominant Shrub Species listed in order of relative at			
a	C		
b			
Dominant Tree Species listed in order of relative abu			
a	C		
b			
Tree and shrub canopy: nil separate, seldor			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about w	hat adds to or det	tracts from the quality	of this

wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

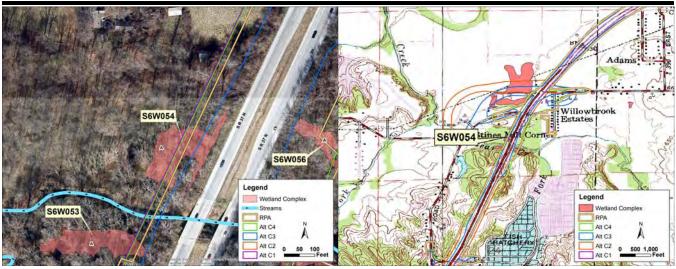
(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osn sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floatin *bladderwort sp coontail (Cerato duckweed spp. *pondweed spp curlyleaf pondw	ng rush spp. (Equisetum) 2 niled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 nunda regalils) 8 Dnoclea sensibilis) 4 (if known is (Selaginella apoda) 4 is spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 iphyllum demersum) 1 (Lemnaceae) 3 i. (Potamogeton) 8 eed (Potamogeton crispus) 0	Herbs: wide-leafed *arrow arum (Pearrow-head spp. *green dragon (Aack-in-the-pulped pickerel weed (Faack-in-the-pulped Pearrow (Caack-in-the-pulped Pearrow (Caa	d monocots eltandra virginica) 6 . (Sagittaria) 4 Arisaema dracontium) 6 oit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 a. opposite/whorled (Gallium) 6 p. (Bidens) 3 erbena hastata) 3 orium perfoliatum) 4 (Lycopus) 5
*water lily (Nym	phaea tuberosa) 6	✓ clearweed spp.	(Pilea) 3
	asenia schreberi) 4 ock spp. (Nuphar) 6	√ false nettle (Boe	ium perfoliatum) 4 ehmeria cylindrica) 3 dicularis lanceolata) 6
*sundew spp. ([Sarracenia purpurea (10) Orosera) 10	giant ragweed (A Indian hamp (Ap Joe-pye weed s	Sentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9 pha) 1	mint spp. e.g. he moneywort (Lys monkey flower s	r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 imachia nummularia) 0 spp. (Mimulus) 4 ocera) 1
Grasses (family Granumber of species a. *wild rice (Zi:b. most natuve cut-grass, mann foxtail (Alopecruc. introduced g grass (Phalaris, annual grasses	pp. (Eriophorum) 10 mineae) - indicate types and zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint, us); other rass spp. 0:reed canary reed (Phragmites), such as annual foxtail arnyard grass (Echinochloa)	*richweed (Collii St. John's wort s sunflower sp. (F *swamp loosest swamp milkwee toothcup spp. (A *turtlehead spp. virgin's bower (C water purslane (rife (Decodon verticillatus) 8 ed (Asclepias incarnata) 4 Ammania Rotala) 2
*additional =nutsedge spp. (*orchid spp. 10;rush spp. (Junc sedge spp. (Cal *spiderlily (Hym sweet flag (Aco *3-way sedge (I *twig rush (Clad *umbrella sedge wild hyacinth (C	Cyperus) 2 species (if know us) 4 rex) 1 sp. = 3additional enocallis occidentalis) 9	Herbs (vines): dicc American bellflo*asters: bristly aflat-topped aster = 7	ots - Ivs. alternate or basal and ower (Campanula americana) 4 laster (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4

dogwwod, red-osier (Cornus stolonifera) 4
**dogwood, blue-fruited or silky (Cornus obliqua)

dogwood, gray (Cornus racemosa) 2 elderberry (Sambucus) 2

NWI Polygon # S6W053A	Data Reference# S6W053
Herbs (vines): dicots - Ivs. alternate or basal and simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	✓ ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	✓ boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
lanker disease has been an alternate and	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - Ivs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	Trace leaves simple and appeals
*buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6	Trees - leaves simple and opposite
	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	✓ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	Trace leaves simple and alternate
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9
hog peanut / ground nut (Amphicarpaea and	river birch (Betula nigra) 2
Apios) 5	black, gum (Nyssa sylvatica) 5
honewort (Cryptotaenia canadensis) 3	
meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1	cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	
	<pre>*pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7</pre>
water parsnips (Sium suave) 5	
Shruba lagyag appasita ar wharlad	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	✓ sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R. frangula) 0	additional sp. = 7
buttonbush (Cephalanthus occidentalis) 5	

Wetland S6W054



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Cope 14-digit HUC: 05120201140140 County: Morgan T12N Physiographic Region: Martinsville Hills Township: Eastern Corn Belt Plains R1E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 13 Size of wetland complex (acres): 0.4852 Quarter: SE

USACE JurisdictionYesLatitude:39.474993IDEM Jurisdiction:YesLongitude:-86.369266

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.28	56.8%
	Floodplain	PFO	0.4852	good	poor	fair	Alt C2	0.26	54.3%
S6W054A							Alt C3	0.12	24.3%
	Forest						Alt C4	0.26	54.3%
							RPA	0.19	39.0%



Polygon S6W054A



Polygon S6W054A



Polygon S6W054A

In-WRAP Summary Sheet

Date Report Generate	d: Friday, September 15, 2017			
Wetland Site Name:	N/A			
Data Reference #: S6	W054			
Date of Site Visit: Tue	esday, October 06, 2015			
Tier 1 Summary:				
a. Total Wetland A	rea (acres): 0.4852			
b. Wetland size ar	nd connectivity - contribution to animal habit	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding lar	nd use - numerical rank (max. = 1): 0.85			
d. Value surround	ing area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY	:	Polyg	on ID S	6W054A
a. Indiana Wetlar	nd community type: Floodplain Forest			
b. Standing water	- contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to	site: road/railroad			
d. Exotic species r	ating:	Good	Medium	Poor
e. Special Hydrolo	gic Conditions Observed: None			
f. Special Commu	nity Type: None			
g. Rare-Threatene	ed-Endangered Species: None			
h. Polygon Quality	/ Descriptor:	Good	Medium	Poor
Tier 3A SUMMAR	Y:			
a: Dead woody m	aterial as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality p	protection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and storn	n water storage - numerical rank (5 ma3_	Good	Medium	Poor
Tier 3B SUMMAR	Y:			
a. Zonation and in	iterspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as	s indicator of animal habitat:	Valuable		Neutral
c. Number of dom	ninant plant taxa observed: 4	Good	Medium	Poor
	ient of conservatism: 2	Good	Medium	Poor
e. Tree canopy as	indicator of animal habitat:	Valuable		Neutral
• •	indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophy	tic taxa observed: 11	Good	Medium	Poor
h. Number of indi	cator taxa: 0	Good	Medium	Poor

Native Vegetation - woodland

Native Vegetation - old field / scrub

Native Vegetation - old field / scrub

Residential - single family

Agricultural - pasture

Commercial or multifamily residential

____0 ___ Recreation - green space, mowed

Tier 2: Individual Polygon: Preliminary Assessment (to be completted on-site for each NWI polygon present in the wetland) 2.1 Wetland Geomorphic Setting and Surface Water Flow (check one): Depressional Slope ✓ Floodplain Lacustrine Riverine (within the river/stream banks) 2.2 Presence of Standing Water: Is standing water normally present in the polygon? Yes Is standing water is present, is the water greater than 2 meters n depth? No Is standing water normally present in an adjacent polygon? Yes 2.3 Apparent Hydroperiod (check one): Permanently Flooded Artificially Flooded ✓ Seasonally Flooded ✓ Seasonally Flooded ✓ Seasonally Flooded Saturated (surface water seldom present Artificially Drained) 2.4 Soil Type Organic (i.e. peat, etc.) ✓ Mineral Both Mineral and Organic Present 2.5 Wetland Community Type for this NWI polygon (see Key to Wetland Communities of Indiana) Floodplain Forest 2.6 Disturbances of Hydrology (check all that apply): Ditching Culvert Tiles Other Human Distrubances to the And Organic Present 2.7 Presence of Invasive Exotics (Score as: S = Scattered, F = Frequent, or C = Common): Garlic Mustard Glossy Buckthorn Phragmities Reed Canary Grass Purple Loosestrife S Other (list): 2.8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat): None	NWI Polygon # S6W054A	Data Reference# S6W054
## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Drained ## Actificially Flooded ## Actificially Floo	see table on page one)	
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Purple Loosestrife S Other (list): 8 Presence of Special Hydrologic Conditions (i.e. seeps, wet slopes, floating mat):		<u> </u>
		· ·
UIIC	8 Presence of Special Hydrologic Conditions (i.e.	. seeps, wet slopes, floating mat):
O Duncan on of Canadial Community Toward	O Dunanta of Charles Community To the	
.9 Presence of Special Community Types:		
BogFenWet Sand / Muck Flats or Marl Seeps	BogFen	Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Threatened or Endangered Species:	10 Presence of Known Federal or Indiana Rar, Th	nreatened or Endangered Species:
✓ None observed or known to be presen	✓ None observed or known to be presen	
RTES Present (list):	RTES Present (list):	_
.11 Wetland Polygon Quality Descriptor (see: Wetland Quality Descriptions and check one):	.11 Wetland Polygon Quality Descriptor (see: We	etland Quality Descriptions and check one):
✓ Good Medium Poor	✓ Good Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	ı.1 N	Notak	ole Features that influence water quality and hydrology:
Es	stima	ated h	nerbaceouis plant cover (percentage) in the polygon 100-75
Es	stima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25 <25
			dead woody material on the soil surface nilscattered frequent
3a	۱.2 ۱	Nate	Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.
	Υ	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended
	(Y)	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before
	O	,	entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter20 approximate slope (percen45
3a	.3 F	Flood	and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Mature trees (>12" dbh): yes

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland	l polygon?1
1b. If only one vegetation zone is evident, which best	describes the site?
heterogeneous textures across the poly	
Polygon composed of a single vegettation the polygon.	on type with more or less uniform texture across
2. If more than one vegetation zone is present in the pol represents the distribuion of these zone?	ygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy	/?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 7	75% 75 - 90% >90%
Is there notable layering/stratification in this vegetation z	one? Yes
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms exte	
a. Sagittaria latifolia	d
b. Carex sp.	e
c. Impatiens capensis	f
Dominant Shrub Species listed in order of relative abund	dance.
a	с
b	d
Dominant Tree Species listed in order of relative abunda	ance.
a. Fraxinus pennsylvanica	c
b	d
Tree and shrub canopy: nil separate, seldom to	uching often touching more or less close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

no

NWI Polygon # S6W054A	Data Reference# S6W054
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom to	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
c	f
Dominant Shrub Species listed in order of relative abur	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

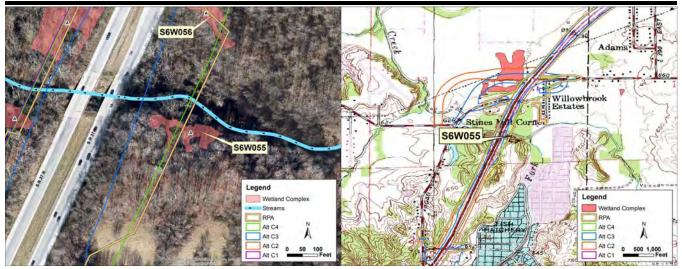
3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plantshorsetail, scouring rush spp. (Equisetum) 2*ferns: marsh shiled fern spp. (Dryopteris) 7 _*cinnamon fern (Osmunda cinnamomea) 9 _*royal fern (Osmunda regalils) 8 _sensitive fern (Onoclea sensibilis) 4 _*other: species (if known _marsh club moss (Selaginella apoda) 4 _Sphagnum moss spp. (Sphagnum) 10	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 arrow-head spp. (Sagittaria) 4 *green dragon (Arisaema dracontium) 6 Jack-in-the-pulpit (Arisaema triphyllum) 4 pickerel weed (Pontederia cordata) 5 _*skunk cabbage (Symplocarpus foetidus) 8 _*water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10coontail (Ceratophyllum demersum) 1duckweed spp. (Lemnaceae) 3*pondweed spp. (Potamogeton) 8curlyleaf pondweed (Potamogeton crispus) 0*water lily (Nymphaea tuberosa) 6water shield (Brasenia schreberi) 4*yellow spatterdock spp. (Nuphar) 6	Herbs: dicots - Ivs. opposite/whorled *bedstraw spp. (Gallium) 6beggar's tick spp. (Bidens) 3blue vervain (Berbena hastata) 3boneset (Eupatorium perfoliatum) 4bugleweed spp. (Lycopus) 5clearweed spp. (Pilea) 3cup plant (Silphium perfoliatum) 4false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10	*gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1	*loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of speciesa. *wild rice (Zizania aquatica) 10b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); otherc. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)	purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2*additional = 8nutsedge spp. (Cyperus) 2 _*orchid spp. 10; species (if knowrush spp. (Juncus) 4 _✓ sedge spp. (Carex) 1 sp. = 3additional _*spiderlily (Hymenocallis occidentalis) 9 _sweet flag (Acorus calamus) 0 _*3-way sedge (Dulichium arundinaceum) 10 _*twig rush (Cladium mariscoides) 10 _*tumbrella sedge (Fuirena squarrosa) 10 _wild hyacinth (Camassia scilloides) 5 _*yellow-eyed grass (Xyris torta) 9	Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4 *asters: bristly aster (Aser puniceus) 7 flat-topped aster (Aster umbellatus) 8 7 other aster spp. (e.g. New England, panicled ast *black-eyed Susan (Rudbeckia fulgida) 8 cardinal flower (Lobelia cardinalis) 4 cress spp. (Cardamine) 4 dock spp.: swamp, water, pale (Rumex) 4 garlic mustard (Alliaria petiolata) 0 golden ragwort (Senecio aureus) 4

Shrubs - leaves alternate
*cranberry spp. (Vaccinium) 10
*dwarf birch (Betula pumila) 10
*highbush blueberry (Vaccinium corymbosum) 9
*leatherleaf (Chamaedaphne calyculata) 10
meadowsweet and Hardhack spp. (Spiraea) 4
*ninebark (Physocarpus opulifoius) 7
*shrubby cinquefoil (Potentilla fruticosa) 9
spice bush (Lindera benzoin) 5
*swamp dewberry (Rubus hispidus) 6
*swamp holly and winterberry spp. (Ilex) 7
swamp rose (Rosa palustris) 5
Trees - leaves needle shaped
*tamarack (Larix laricina) 10
Trees - leaves compound
*ash, black (Fraxinus nigra) 7
*ash, pumpkin (Fraxinus tomentosa) 8
boxelder (Acer negundo) 1
hickory, bitternut (Carya cordiformis) 5
hickory, shellbark (Carya laciniosa) 8
✓ honey locust (Gleditsia triacanthos) 1
*poison sumac (Rhus vernix) 10
poison sumac (Khus vernix) To
Trees leaves simple and appeals
Trees - leaves simple and opposite
✓ red maple (Acer rubrum) 5
√ silver maple (Acer saccharinum) 1
Turner de como el combo en del francesto
Trees - leaves simple and alternate

river birch (Betula nigra) 2
black, gum (Nyssa sylvatica) 5
cottonwood, eastern (Populus deltoides) 1
cottonwood, swamp (Populus heterophylla) 8
elm, American (Ulmus americana) 3
hackberry (Celtis occidentalis) 3
ironwood (Carpinus caroliniana) 5
oak, pin or white (Quercus) 4
*oak, Shumard's, swamp chestnut, swamp white
*pawpaw (Asimina triloba) 6
*sugarberry (Celtis laevigata) 7
eweet gum (Liguidambar etyraciflua) /
sweet gum (Liquidambar styraciflua) 4
✓ sycamore, American (Platanus occidentalis) 3
✓ sycamore, American (Platanus occidentalis) 3✓ willow spp. (Salix) 1 sp. = 3
✓ sycamore, American (Platanus occidentalis) 3
✓ sycamore, American (Platanus occidentalis) 3✓ willow spp. (Salix) 1 sp. = 3
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Wetland S6W055



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Cope

Physiographic Region:New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R1E

Natural Region:Tipton Till PlainSection:13Size of wetland complex (acres):0.2061Quarter:SE

USACE JurisdictionYesLatitude:39.474128IDEM Jurisdiction:YesLongitude:-86.368145

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted			
					air fair good		Alt C1	0.07	34.6%			
							Alt C2	0.07	34.6%			
S6W055A	Floodplain	PFO	0.2061	fair		Alt C3	0.00	0.0%				
	Forest									Alt C4	0.07	34.6%
							RPA	0.08	39.2%			



Polygon S6W055A



Polygon S6W055A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W055			
Date of Site Visit: Tuesday, October 06, 2015			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.2061			
b. Wetland size and connectivity - contribution to animal habita	nt:		
Valuable Mor	e Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1): 0.74			
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID	6W055A
a. Indiana Wetland community type: Floodplain Forest			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site:			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: Marl Seeps			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):5	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 6	Good	Medium	Poor
d. Average coefficient of conservatism: 4.5	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed: 8	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

1.3 Wetland Size

Size of site under assessment: 0.2061

Size of wetland complex: 0.2061

1.4 Site Setting

Degree of isolation from other wetlands or wetland complexes:

\checkmark	_The site is connected upstream and downstream with other wetlands
	The site is only connected upstrrem with other wetlands
	The site is only connected downstream with other wetlands
	Other wetlands are nearby (within 0.25 mile) but not connected
	The wetland site is isolated

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type):

50	Native Vegetation - woodland	20	Road / highway / railroad bed / parking lot
30	Native Vegetation - old field / scrub	0	_ Industrial
0	Agricultural - tilled	0	Residential - single family
0	Agricultural - pasture	0	Commercial or multifamily residential

0 Recreation - green space, mowed

NWI Polygon # S6W055A	Data Reference# S6W055
see table on page one)	
Tier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
DepressionalSlope✓ Floo Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	lygon? <u>No</u>
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon loodplain Forest .6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to
Tries Dams	the
Road or Railroad Embankment	tile
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered. F = Frequent. or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
, , , ,	Wat Sand / Muck Flats or Mari Saans
Bog FenFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	land Quality Descriptions and check one):
✓ Good Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

38	a.1 N	Notal	ole Features that influence water quality and hydrology:
E	stima	ated I	nerbaceouis plant cover (percentage) in the polygon100-75 🗹 75-5050-25<25
E	stima	ated v	woody plant foliar coverage in the polygon
Aı	mour	nt of	dead woody material on the soil surface nilscattered frequen
38	a.2 V	Vate	r Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	Y Y	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Υ	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0
38	a.3 F	Flood	d and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
Τ.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Υ	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

wetland site).

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? □ 50 - 75% 10 - 25% 25 - 50% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? Yes Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Polystichum acrostichoides b. Impatiens capensis f. Dominant Shrub Species listed in order of relative abundance. a. Asimina triloba b. Lindera benzoin Dominant Tree Species listed in order of relative abundance. a. Acer saccharum d. _____ b. Fagus grandifolia Tree and shrub canopy: nil separate, seldom touching often touching more or less close Mature trees (>12" dbh): yes ☐ no

Other remarks (include personal comments about what adds to or detracts from the quality of this

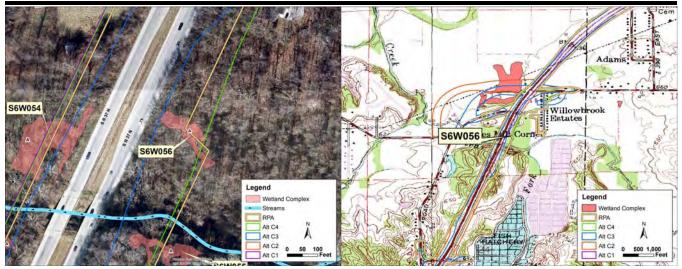
NWI Polygon # S6W055A	Data Reference# S6W055
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
c	f
Dominant Shrub Species listed in order of relative abur	
a	c
b	d
Dominant Tree Species listed in order of relative abund	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osm sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floating	blants ing rush spp. (Equisetum) 2 hiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 hunda regalils) 8 Dnoclea sensibilis) 4 (if known ss (Selaginella apoda) 4 ss spp. (Sphagnum) 10	Herbs: wide-leafed *arrow arum (Pearrow-head spp) *green dragon (Jack-in-the-pulp pickerel weed (I *skunk cabbage *water arum (Ca water plantain (A	d monocots eltandra virginica) 6 . (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 s. opposite/whorled
	phyllum demersum) 1	beggar's tick sp	•
duckweed spp.			erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	eed (Potamogeton crispus) 0		• •
	phaea tuberosa) 6	clearweed spp.	
			` '
	asenia schreberi) 4		ium perfoliatum) 4
yellow spatteru	ock spp. (Nuphar) 6		ehmeria cylindrica) 3
Harla bar Garda			dicularis lanceolata) 6
Herbs: Ivs. floating		• • • • • • •	Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)		Ambrosia trifida) 0
*sundew spp. (D	Prosera) 10		pocynum cannabinum) 2
Hanka Parameter	/		pp. (Eupatorium) 5
	or +/- leafless monocots	*loosestrife spp.	· •
	(Rhynchospora) 10		(Rhexia virginica) 5
blueflag iris (Iris			edge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		imachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
cat-tail spp. (Typ	•	nettle (Urtica pro	•
	op. (Eriophorum) 10		fe (Lythrum salicaria) 0
	amineae) - indicate types and		nsonia canadensis) 8
number of species			spp. (Hypericum/Triandeum) 8
	zania aquatica) 10	sunflower sp. (F	•
	perennial grass spp. 4:		rife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
	rass spp. 0:reed canary	*turtlehead spp.	· ·
	reed (Phragmites), such as annual foxtail		Clematis virginiana) 3
	arnyard grass (Echinochloa)		(Ludwigia palustris) 3 ife (Lythrum alatum) 5
needle sedge sr	op. (Eleocharis) 1 sp. =2		,
*additional =		Herbs (vines): dicc	ots - lvs. alternate or basal and
nutsedge spp. (` ,	ower (Campanula americana) 4
	species (if know		ster (Aser puniceus) 7
rush spp. (Junc			r (Aster umbellatus) 8
✓ sedge spp. (Car			(e.g. New England, panicled ast
• • • • • •	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
sweet flag (Aco	•		Lobelia cardinalis) 4
	Oulichium arundinaceum) 10	cress spp. (Care	,
	lium mariscoides) 10		np, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		Alliaria petiolata) 0
	amassia scilloides) 5	`	(Senecio aureus) 4
	ass (Xyris torta) 9		

Herbs (vines): dicots - lvs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	√ spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
✓ stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	✓ ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
g(hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	onvoi mapio (vioci caccinamiam) i
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
water parampa (elam saave) e	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	additional 3p. – 7
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
olderberry (dambdedd) 2	

Wetland S6W056



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin:Clear Creek - East/West/GrassyQuadrangle:Cope14-digit HUC:05120201140140County:Morgan

Physiographic Region: New Castle Till Plains

Township: T12N

Ecoregion: Eastern Corn Belt Plains Range: R1E

Natural Region: Tipton Till Plain Section: 13
Size of wetland complex (acres): 0.1636 Quarter: SE

USACE JurisdictionYesLatitude:39.475195IDEM Jurisdiction:YesLongitude:-86.367923

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.13	82.0%
				Alt C2	0.13	82.0%			
S6W056A	Swamp	PFO	0.1636	fair poor good	good	Alt C3	0.00	0.0%	
	Forest	Forest	Alt C4	0.13	82.0%				
					RPA	0.11	67.1%		



Polygon S6W056A



Polygon S6W056A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W056			
Date of Site Visit:	Tuesday, October 06, 2015			
Tier 1 Summar	ry:			
a. Total Wetlar	nd Area (acres): 0.1636			
b. Wetland siz	e and connectivity - contribution to animal hab	oitat:		
	Valuable M	lore Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1):0.90_	_		
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	on ID	6W056A
a. Indiana We	tland community type: Swamp Forest			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	es to site: road/railroad			
d. Exotic speci	ies rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	tened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	IARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quali	ity protection - numerical rank (6 max.):5	Good	Medium	Poor
c. Flood and s	torm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMM	ARY:			
a. Zonation an	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratificatio	on as indicator of animal habitat:	Valuable		Neutral
c. Number of	dominant plant taxa observed: 5	Good	Medium	Poor
d. Average co	efficient of conservatism: 2.8	Good	Medium	Poor
e. Tree canopy	y as indicator of animal habitat:	Valuable	·	Neutral
f. Mature tree	es as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed:5	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

1.2 Site '	Visit			
Team Members: R. Hook/R. Connolly (oringally JFNew)				
Agency:	HNTB			
Date ass	essed: <u>10/6/2015</u>	Time as	sessed:	
Weather	conditions:			
-	unusual weahter events that may have e.g. recent heay rains, an unusually dry s		ced the current conditions withih this wetland an especially early spring etc.)	
1.3 Wetl	and Size te under assessment: 0.1636			
Size of w	retland complex: 0.1636			
1.4 Site 5	Setting			
Degree o	of isolation from other wetlands or wetla	and com	nplexes:	
	The site is connected upstream and o	downst	ream with other wetlands	
	The site is only connected upstrrem with other wetlands			
	The site is only connected downstream with other wetlands			
	Other wetlands are nearby (within 0.25 mile) but not connected			
	The wetland site is isolated			
	assessment of adjacent land use / land o and site (indicate the % abundance of ea		the area within 50 meters of the perimeter of e):	
90	Native Vegetation - woodland	10	Road / highway / railroad bed / parking lot	
0	Native Vegetation - old field / scrub	0	Industrial	
0	Agricultural - tilled	0	Residential - single family	
0	Agricultural - pasture	0	Commercial or multifamily residential	

O Recreation - green space, mowed

NWI Polygon # S6W056A	Data Reference# S6W056
see table on page one)	_
Fier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	Flow (check one):
✓ Depressional Slope Floo Riverine (within the river/stream banks)	dplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	Yes
Is standing water is present, is the water greate	r than 2 meters n depth? No
standing water normally present in an adjacent pol	lygon? Yes
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
5 Wetland Community Type for this NWI polygon	(see Key to Wetland Communities of Indiana):
wamp Forest	
.6 Disturbances of Hydrology (check all that apply)	:
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
one	
9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thro	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	and Quality Descriptions and check one):
GoodMedium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 N	Notal	ole Features that influence water quality and hydrology:	
Estimated herbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25				
Es	stima	ated v	voody plant foliar coverage in the polygon	
Ar	nour	nt of o	dead woody material on the soil surface nilscattered frequent	
3а	.2 V	Vate	Quality Protection Questions:	
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?	
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?	
3.	Y Y	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient? 	
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?	
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?	
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.	
			width of buffer area (in meter30 approximate slope (percen5_	
3a	.3 F	Flood	and Stormwater Storage / Attenuation Questions:	
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b	
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?	
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?	
2.	Ŷ	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?	
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?	
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?	
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?	

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland	d polygon?1
1b. If only one vegetation zone is evident, which best	describes the site?
heterogeneous textures across the poly	all vegetation patches, hummocks, or tussocks, egon. on type with more or less uniform texture across
the polygon.	on type man more of loos armorm toxune across
2. If more than one vegetation zone is present in the pol represents the distribuion of these zone?	ygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy	у?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 7	75%
Is there notable layering/stratification in this vegetation z	one? No
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms extended to the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the contro	
a. <u>Carex sp.</u>	d
b. Boehmeria cylindrica	e
C	f
Dominant Shrub Species listed in order of relative abund	dance.
a. Lindera benzoin	C
b	d
Dominant Tree Species listed in order of relative abunda	ance.
a. Platanus occidentalis	C
b. Acer negundo	d
Tree and shrub canopy: nil separate, seldom to	ouching often touching more or less close
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W056A	Data Refe	rence# S6W056	
3b.2 Dominant Plant Species: Vegetation	n Zone B		
What % of the polygon does this vegetative a	zone occupy?		
☐ 10 - 25% ☐ 25 - 50%	<u> </u>	75 - 90%	Section >90%
Is there notable layering/stratification in this v	vegetation zone?		
Dominant Herbaceous Species (i.e., covering abundance. (Mark with an * any species that			f relative
a	d		
b	e		
C	f.		
Dominant Shrub Species listed in order of re			
a	c		
b	d.		
Dominant Tree Species listed in order of rela			
a	C		
a			
	d.		
b		often touching mc	
b Tree and shrub canopy: nil separate			
b Tree and shrub canopy: nil separate Mature trees (>12" dbh): yes no	e, seldom touching	often touching mo	re or less close
b Tree and shrub canopy: nil separate Mature trees (>12" dbh): yes no Other remarks (include personal comments a	e, seldom touching	often touching mo	re or less close
b	e, seldom touching	often touching mo	re or less close
b	e, seldom touching about what adds to or	often touching mo	re or less close
b	e, seldom touching about what adds to or	often touching mo	re or less close
b	e, seldom touching about what adds to or a Zone C zone occupy?	often touching mo	ore or less close by of this
b	about what adds to or about what adds to or a Zone C zone occupy? 50 - 75% vegetation zone? g more than 10% of the	often touching moderate detracts from the quality of the detracts from the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detrac	y of this
b	about what adds to or about what adds to or a Zone C zone occupy? 50 - 75% vegetation zone? g more than 10% of the torms extensive more	often touching moderate detracts from the quality of the detracts from the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detract of the detrac	y of this >90%
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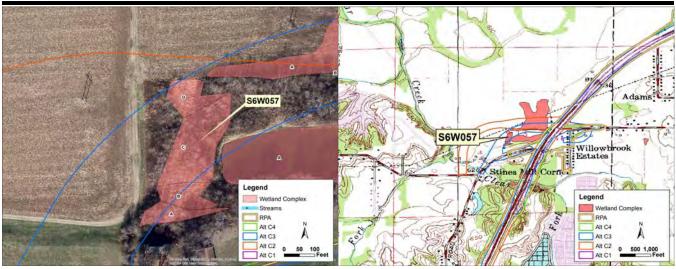
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southw	estern Indiana n	umbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed plantshorsetail, scouring rush spp*ferns: marsh shiled fern spp _*cinnamon fern (Osmunda ci _*royal fern (Osmunda regalils _sensitive fern (Onoclea sens _*other: species (if known _marsh club moss (Selaginells _Sphagnum moss spp. (Spha Herbs: Ivs. floating or submer _*bladderwort spp. (Utricularia _coontail (Ceratophyllum dem	(Equisetum) 2 . (Dryopteris) 7 nnamomea) 9 s) 8 ibilis) 4 a apoda) 4 gnum) 10 gent l) 10 ersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (F*skunk cabbage _*water arum (Ca _water plantain (Herbs: dicots - lvs _*bedstraw sppbeggar's tick sp	d monocots eltandra virginica) 6 . (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 s. opposite/whorled (Gallium) 6 p. (Bidens) 3
duckweed spp. (Lemnaceae) *pondweed spp. (Potamoget curlyleaf pondweed (Potamo *water lily (Nymphaea tubero water shield (Brasenia schre *yellow spatterdock spp. (Nu	on) 8 geton crispus) 0 sa) 6 beri) 4	boneset (Eupato bugleweed spp. clearweed spp. cup plant (Silphi	
*pitcher plant (Sarracenia pu *sundew spp. (Drosera) 10	rpurea (10)	*gentian spp. (G giant ragweed (A Indian hamp (Ap Joe-pye weed s	dicularis lanceolata) 6 Sentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp (Rhynchospo blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / School *bur reed spp. (Sparganium) cat-tail spp. (Typha) 1	era) 10 enoplectus) 5 9	mint spp. e.g. he moneywort (Lys monkey flower s	r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 imachia nummularia) 0 spp. (Mimulus) 4 ocera) 1
*cotton grass spp. (Eriophoru Grasses (family Gramineae) - inc number of species a. *wild rice (Zizania aquaticb. most natuve perennial gra cut-grass, manna-grass, Car foxtail (Alopecrus); otherc. introduced grass spp. 0:re grass (Phalaris, reed (Phragi annual grasses such as annu (Setaria) and barnyard grass	dicate types and a) 10 ass spp. 4: hada bluepoint, eed canary mites), ual foxtail (Echinochloa)	*richweed (Colli St. John's wort s sunflower sp. (F *swamp loosest swamp milkwee toothcup spp. (F *turtlehead spp. virgin's bower (C water purslane (rife (Decodon verticillatus) 8 ed (Asclepias incarnata) 4 Ammania Rotala) 2
meedle sedge spp. (Eleochar *additional = 8 mutsedge spp. (Cyperus) 2 *orchid spp. 10; species (if king rush spp. (Juncus) 4 ✓ sedge spp. (Carex) 1 sp. = 3 *spiderlily (Hymenocallis occus sweet flag (Acorus calamus) *3-way sedge (Dulichium arus twig rush (Cladium mariscoi *umbrella sedge (Fuirena squella sedge (Fuirena squella sedge) *yellow-eyed grass (Xyris tor	additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = additional = addit	American bellflom *asters: bristly a flat-topped aster other aster spp. *black-eyed Sus cardinal flower (cress spp. (Card dock spp.: swan garlic mustard (ots - Ivs. alternate or basal and ower (Campanula americana) 4 laster (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4 damine) 4 mp, water, pale (Rumex) 4 Alliaria petiolata) 0 (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	✓ spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
✓ stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	✓ ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	✓ boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
goto (* 10111/01100 anothinional) c	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poloon damad (rando vornix) 10
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	onvol maple (vicel eacemannen) i
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
✓ poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
water parsilips (Sium suave) 5	
Chruba laguas appasita ar urbarlad	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	✓ sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwood, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W057



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Clear Creek - East/West/Grassy Quadrangle: Cope Basin: 14-digit HUC: 05120201140140 County: Morgan T12N Physiographic Region: Martinsville Hills Township: Eastern Corn Belt Plains R1E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 13 Size of wetland complex (acres): 1.3618 Quarter: SE

USACE JurisdictionYesLatitude:39.478318IDEM Jurisdiction:YesLongitude:-86.370463

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.00	0.0%
							Alt C2	0.00	0.0%
S6W057A	Wet Prairie	PEM	0.1940	poor	poor	fair	Alt C3	0.08	39.1%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%
			0.2176 poor				Alt C1	0.00	0.0%
	Wet Prairie	PEM				Alt C2	0.00	0.0%	
S6W057B				poor	poor	fair	Alt C3	0.08	36.9%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%
							Alt C1	0.00	0.0%
							Alt C2	0.00	0.0%
S6W057C	Wet Meadow		0.7098	fair	poor	fair	Alt C3	0.67	95.1%
							Alt C4	0.00	0.0%
				RPA	0.00	0.0%			
							Alt C1	0.00	0.0%
						Alt C2	0.00	0.0%	
S6W057D	Wet Prairie	et Prairie PEM 0	0.2404	0.2404 fair	poor	fair	Alt C3	0.23	96.3%
						Alt C4	0.00	0.0%	
							RPA	0.00	0.0%



Polygon S6W057A



Polygon S6W057A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: <u>N/A</u>			
Data Reference #:	S6W057			
Date of Site Visit:	Thursday, October 08, 2015			
Tier 1 Summar	y:			
a. Total Wetlar	nd Area (acres): 1.3618			
b. Wetland siz	e and connectivity - contribution to animal habita	it:		
	Valuable Mor	e Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1): 0.41			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	gon ID S	6W057A
a. Indiana We	tland community type: Wet Prairie			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	es to site:			
d. Exotic speci	es rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	tened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	ARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quali	ity protection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and st	torm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMM	ARY:			
a. Zonation an	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratificatio	n as indicator of animal habitat:	Valuable		Neutral
c. Number of	dominant plant taxa observed: 5	Good	Medium	Poor
d. Average coe	efficient of conservatism: 2.4	Good	Medium	Poor
e. Tree canopy	y as indicator of animal habitat:	Valuable		Neutral
f. Mature tree	s as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed: 8	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

Tier 2 SUMMARY:	Polyg	gon ID	S6W057B
a. Indiana Wetland community type: Wet Prairie			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site:			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 2	Good	Medium	Poor
d. Average coefficient of conservatism:0	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:2	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

Tier 2 SUMMARY:	Polyg	on ID	S6W057C
a. Indiana Wetland community type: Wet Meadow			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site:			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed:4	Good	Medium	Poor
d. Average coefficient of conservatism:1.3	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:4	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

Tier 2 SUMMARY:	Polyg	on ID	S6W057D
a. Indiana Wetland community type: Wet Prairie			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site:			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			,
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed:4	Good	Medium	Poor
d. Average coefficient of conservatism:1.3	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:4	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

_ Residential - single family

10 Commercial or multifamily residential

Tier 1: Assessment O 1.1 Site Identification:	verview				
Wetland Site Name: N/A					
Ownership (if known): N/A					
USGS Topographic Quadran	gle: Cope				
USGS Watershed map 14-Di	git HUC: Clear Creek - East/\	Nest/Grassy Forks			
Identify each NWI Polygon v	vithin the Wetland Site (Poly	gon specific data)			
NWI Polygon ID Number	Cowardin Classification	Polygon Size (acres)			
S6W057A	PEM1	0.1940			
S6W057B	PEM1	0.2176			
S6W057C	PEM1	0.7098			
S6W057D	PEM1	0.2404			
1.2 Site Visit					
Team Members: R. Hook, C	C. Meador				
Agency: HNTB					
Date assessed: <u>10/8/2015</u>	Time ass	essed:			
Weather conditions:					
-	-	ced the current conditions withih this wetland an especially early spring etc.)			
1.3 Wetland Size					
Size of site under assessmer	nt: 1.3618				
Size of wetland complex:	1.3618				
1.4 Site Setting	ner wetlands or wetland com	plexes:			
	ed upstream and downstr				
	nnected upstrrem with oth				
	·				
-	nnected downstream with				
	Other wetlands are nearby (within 0.25 mile) but not connected				
The wetland site is	sisolated				
•	cent land use / land cover in e e % abundance of each type	the area within 50 meters of the perimeter of			
10 Native Vegetation	n - woodland 0	Road / highway / railroad bed / parking lot			
0 Native Vegetation	n - old field / scrub0	Industrial			

10

20 Recreation - green space, mowed

50 Agricultural - tilled

__ Agricultural - pasture

0

NWI Polygon # S6W057A	Data Reference# S6W057
see table on page one)	
Tier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	· Flow (check one):
✓ Depressional Slope Floo Riverine (within the river/stream banks)	dplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	r than 2 meters n depth? No
standing water normally present in an adjacent pol	lygon? <u>No</u>
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon /et Prairie .6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams Road or Railroad Embankment	the
7 Presence of Invasive Exotics (Score as: S = Scatte	red, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. so	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thro	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	and Quality Descriptions and check one)
Good ✓ Medium	Poor
	· • • • • • • • • • • • • • • • • • • •

38	a.1 N	Notal	ole Features that influence water quality and hydrology:
Es	stima	ated I	nerbaceouis plant cover (percentage) in the polygon100-75 💉 75-5050-25<25
Es	stima	ated v	woody plant foliar coverage in the polygon100-7575-5050-25 <25
Ar	moui	nt of	dead woody material on the soil surfacenilscatteredfrequen
38	a.2 \	Nate	r Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	Y	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0
38	1.3 F	Flood	d and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
Τ.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description 3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Symphyotrichum lanceolatum b. Vernonia missurica f. Dominant Shrub Species listed in order of relative abundance. Dominant Tree Species listed in order of relative abundance.

Tree and shrub canopy: \square nil separate, seldom touching \square often touching \square more or less close

c. Acer negundo

d. ____

Mature trees (>12" dbh): yes no

a. Acer saccharinum

b. Platanus occidentalis

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W057A	Data Reference# S6W057
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osn sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floatin *bladderwort sp	ing rush spp. (Equisetum) 2 hiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 nunda regalils) 8 Dnoclea sensibilis) 4 (if known ss (Selaginella apoda) 4 ss spp. (Sphagnum) 10	Herbs: wide-leafed *arrow arum (Pe arrow-head spp *green dragon (Jack-in-the-pulp pickerel weed (I *skunk cabbage *water arum (Ca water plantain (A	d monocots eltandra virginica) 6 . (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 s. opposite/whorled (Gallium) 6
duckweed spp.	(Lemnaceae) 3	blue vervain (Be	erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	reed (Potamogeton crispus) 0		
	phaea tuberosa) 6	clearweed spp.	` ,
	rasenia schreberi) 4		ium perfoliatum) 4
yellow spatterd	lock spp. (Nuphar) 6		ehmeria cylindrica) 3 dicularis lanceolata) 6
Herbs: Ivs. floatin	a or submergent		Sentiana Gentianopsis) 8
	Sarracenia purpurea (10)	•	Ambrosia trifida) 0
*sundew spp. ([oocynum cannabinum) 2
	,		pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty *cotton grass sp	cirpus / Schoenoplectus) 5 Sparganium) 9	*loosestrife spp. meadow beauty mint spp. e.g. he moneywort (Lys monkey flower s nettle (Urtica pre purple loosestrif	. (Lysimachia) 6 r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 imachia nummularia) 0 spp. (Mimulus) 4
number of species	amineae) - indicate types and		spp. (Hypericum/Triandeum) 8
	zania aquatica) 10	sunflower sp. (F	
,	perennial grass spp. 4:		rife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
	rass spp. 0:reed canary	*turtlehead spp.	•
	reed (Phragmites),		Clematis virginiana) 3
	such as annual foxtail arnyard grass (Echinochloa)		(Ludwigia palustris) 3
	- · · · · · · · · · · · · · · · · · · ·	winged loosestr	ife (Lythrum alatum) 5
*additional = nutsedge spp. (ots - Ivs. alternate or basal and ower (Campanula americana) 4
	species (if know		ester (Aser puniceus) 7
rush spp. (Junc		·	r (Aster umbellatus) 8
sedge spp. (Ca	,		(e.g. New England, panicled ast
	enocallis occidentalis) 9	*black-eyed Sus	san (Rudbeckia fulgida) 8
sweet flag (Aco	•		Lobelia cardinalis) 4
	Dulichium arundinaceum) 10	cress spp. (Car	•
	dium mariscoides) 10		np, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		Alliaria petiolata) 0
	Samassia scilloides) 5 ass (Xyris torta) 9	goiden ragwort	(Senecio aureus) 4

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 / ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 / stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed / aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus nigra) 7 ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 *ysycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwood, red-osier (Cornus stolonifera) 4 ✓ *dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2 elderberry (Sambucus) 2	additional sp. = 7

NWI Polygon # S6W057B	Data Reference# S6W057
see table on page one)	
Tier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
✓ Depressional Slope Floo Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	r than 2 meters n depth? No
standing water normally present in an adjacent po	lygon? <u>No</u>
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	<u> </u>
Saturated (surface water seldom present	Artificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon Vet Prairie .6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	tiic
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities Phragmities	C Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. so	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
Bog Fen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thro	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	and Quality Descriptions and check one)
Good ✓ Medium	Poor
iviculuiii	

3	a.1	N	otal	ole Features that influence water quality and hydrology:
E	stim	nat	ted h	nerbaceouis plant cover (percentage) in the polygon 🗹 100-7575-5050-25<25
E	stim	nat	ted v	woody plant foliar coverage in the polygon100-7575-5050-25 <25
A	mou	ın	t of	dead woody material on the soil surface nilscattered frequer
3	a.2	W	/ate	r Quality Protection Questions:
1.	Y)	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y)	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	Y		N N	If wetland in question is a depressional wetland answer 3a, in not, answer 3b.3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland?3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y)	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	,	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	,	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
				width of buffer area (in meter0 approximate slope (percen0
3	a.3	FI	lood	I and Stormwater Storage / Attenuation Questions:
1.				If wetland in question is a depressional wetland answer 1a, in not, answer 1b
1.	Y)	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	,	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y)	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	,	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	,	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y)	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Mature trees (>12" dbh): yes

Tier 3b Individual Polygon: Rapid Vegetation Description

	, o . a
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this v	vetland polygon?1
1b. If only one vegetation zone is evident, which	th best describes the site?
Polygon compoosed of amosaic of heterogeneous textures across the	of small vegetation patches, hummocks, or tussocks, ne polygon.
Polygon composed of a single ve the polygon.	gettation type with more or less uniform texture across
2. If more than one vegetation zone is present in trepresents the distribuion of these zone?	the polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zon	ne A
What % of the polygon does this vegetative zone	occupy?
☐ 10 - 25% ☐ 25 - 50%	50 - 75%
Is there notable layering/stratification in this veget	ation zone? No
Dominant Herbaceous Species (i.e., covering morabundance. (Mark with an * any species that form	
a. <i>Phalaris arundinacea</i>	d
b. <i>Polygonum sp.</i>	e
C	f
Dominant Shrub Species listed in order of relative	abundance.
a	C
b	d
Dominant Tree Species listed in order of relative a	abundance.
a	C
b	d
Tree and shrub canopy: nil separate, selo	dom touching often touching more or less close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

no

NWI Polygon # S6W057B	Data Reference# S6W057				
3b.2 Dominant Plant Species: Vegetation Zone B					
What % of the polygon does this vegetative zone occur	py?				
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%				
Is there notable layering/stratification in this vegetation	zone?				
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex					
a	d				
b	e				
C	f				
Dominant Shrub Species listed in order of relative abu					
a	C				
b	d				
Dominant Tree Species listed in order of relative abundance	dance.				
a	c				
b	d				
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close				
Mature trees (>12" dbh): yes no					
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this				
3b.2 Dominant Plant Species: Vegetation Zone C					
What % of the polygon does this vegetative zone occur	py?				
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%				
Is there notable layering/stratification in this vegetation	zone?				
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex					
a	d				
b	e				
C	f				
Dominant Shrub Species listed in order of relative abu					
a	c				
b	d				
Dominant Tree Species listed in order of relative abundance	dance.				
a	c				
b	d				
Tree and shrub canopy: nil separate, seldom					
Mature trees (>12" dbh): yes no					
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this				

(N = northern Indiana) $SW = southwestern Indiana$ n	umbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - Ivs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0	bugleweed spp. (Lycopus) 5
*water lily (Nymphaea tuberosa) 6	clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
yellow spatterdook spp. (redpilar) o	*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
Sundew Spp. (Dioscia) 10	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	swamp minweed (Asciepias incamata) 4toothcup spp. (Ammania Rotala) 2
✓ c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	winged loosestille (Lythidill alatum) 5
*additional = 8	Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3 additional =	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	golden ragwort (Ocheclo aureus) 4
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	tamaraon (Early tanolina) To
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1	*ash, pumpkin (Fraxinus tomentosa) 8
	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
Harlas Pasta has basel an alternation of	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
5.45.55.17 (

NWI Polygon # S6W057C	Data Reference# S6W057
(see table on page one)	
Fier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	Flow (check one):
✓ Depressional Slope Floo Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	r than 2 meters n depth? No
standing water normally present in an adjacent pol	lygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon /et Meadow .6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams Road or Railroad Embankment	the
Road of Namoad Embankment	
7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	C Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. so	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
Bog Fen	_Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Thro	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
44 Walland Palman Onelli Para i tarif	land Ovelike Descriptions and the description
.11 Wetland Polygon Quality Descriptor (see: Wetl	
Good✓ _Medium	_Poor

3а	.1 N	Notak	ole Features that influence water quality and hydrology:
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25
Es	tima	ated v	voody plant foliar coverage in the polygon
An	nour	nt of o	dead woody material on the soil surface nilscatteredfrequent
3а	.2 V	Nate	Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.
	(Y)	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended
	v		materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before
	Y	(N)	entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Υ	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0
3a	.3 F	Flood	l and Stormwater Storage / Attenuation Questions:
4			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
1.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

socks,
across
closely
>90%
/e
ess close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W057C	Data Reference# S6W057				
3b.2 Dominant Plant Species: Vegetation Zone B					
What % of the polygon does this vegetative zone occur	py?				
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%				
Is there notable layering/stratification in this vegetation	zone?				
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex					
a	d				
b	e				
C	f				
Dominant Shrub Species listed in order of relative abur	ndance.				
a	C				
b	d				
Dominant Tree Species listed in order of relative abundance	dance.				
a	c				
b	d				
Tree and shrub canopy: nil separate, seldom to	touching often touching more or less close				
Mature trees (>12" dbh): yes no					
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this				
3b.2 Dominant Plant Species: Vegetation Zone C					
What % of the polygon does this vegetative zone occu	py?				
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%				
Is there notable layering/stratification in this vegetation	zone?				
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex					
a	d				
b	e				
C	f				
Dominant Shrub Species listed in order of relative abur					
a	c				
b	d				
Dominant Tree Species listed in order of relative abundance	dance.				
a	C				
b	d				
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close				
Mature trees (>12" dbh): yes no					
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this				

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed particles in horsetail, scouring the ferns: marsh slate to the ferns: marsh slate to the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for the ferns for	blants ing rush spp. (Equisetum) 2 hiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 hunda regalils) 8 Dnoclea sensibilis) 4 (if known as (Selaginella apoda) 4 as spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 ophyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pe arrow-head spp. *green dragon (A Jack-in-the-pulp pickerel weed (F *skunk cabbage *water arum (Ca water plantain (A Herbs: dicots - lvs beggar's tick spp	I monocots Illustration of the standard virginica) 6 (Sagittaria) 4 Arisaema dracontium) 6 it (Arisaema triphyllum) 4 Pontederia cordata) 5 (Symplocarpus foetidus) 8 illa palustris) 10 Alisma plantago-aquatica) 2 I opposite/whorled Gallium) 6 D. (Bidens) 3
duckweed spp.	•		rbena hastata) 3
curlyleaf pondw	. (Potamogeton) 8 eed (Potamogeton crispus) 0 phaea tuberosa) 6		
	asenia schreberi) 4		um perfoliatum) 4
*yellow spatterd	ock spp. (Nuphar) 6	false nettle (Boe *fen betony (Ped	hmeria cylindrica) 3 dicularis lanceolata) 6
Herbs: Ivs. floating		•	entiana Gentianopsis) 8
	Sarracenia purpurea (10)		Ambrosia trifida) 0
*sundew spp. ([prosera) 10		ocynum cannabinum) 2
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9	*loosestrife spp. meadow beauty mint spp. e.g. he moneywort (Lysi monkey flower s nettle (Urtica pro	(Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 machia nummularia) 0 pp. (Mimulus) 4
	amineae) - indicate types and		nsonia canadensis) 8
number of speciesa. *wild rice (Zizb. most natuve	zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint,	St. John's wort s sunflower sp. (H swamp loosesti swamp milkwee	spp. (Hypericum/Triandeum) 8 elianthus) 4 rife (Decodon verticillatus) 8 d (Asclepias incarnata) 4
	rass spp. 0:reed canary	turtlehead spp. (**	mmania Rotala) 2 (Chelone) 8
grass (Phalaris, annual grasses (Setaria) and ba	reed (Phragmites), such as annual foxtail arnyard grass (Echinochloa)	virgin's bower (C water purslane (Clematis virginiana) 3 Ludwigia palustris) 3 fe (Lythrum alatum) 5
*additional		` ,	ts - lvs. alternate or basal and
nutsedge spp. (cyperus) 2 species (if know		wer (Campanula americana) 4 ster (Aser puniceus) 7
rush spp. (Junc			(Aster umbellatus) 8
sedge spp. (Cai *spiderlily (Hym sweet flag (Aco	rex) 1 sp. = 3additional enocallis occidentalis) 9 rus calamus) 0	= 7other aster spp. *black-eyed Sus cardinal flower ((e.g. New England, panicled ast an (Rudbeckia fulgida) 8 Lobelia cardinalis) 4
	Dulichium arundinaceum) 10	cress spp. (Card	· · · · · · · · · · · · · · · · · · ·
*umbrella sedge wild hyacinth (C	lium mariscoides) 10 e (Fuirena squarrosa) 10 ramassia scilloides) 5 ass (Xyris torta) 9	garlic mustard (A	np, water, pale (Rumex) 4 Alliaria petiolata) 0 Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	,
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	✓ cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
water parsinps (Glain Saave) o	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	✓ sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	additional sp. – 7
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Data Reference# S6W057

NWI Polygon # S6W057D	Data Reference# S6W057
see table on page one)	
ier 2: Individual Polygon: Preliminary o be completted on-site for each NWI polygon pro	
.1 Wetland Geomorphic Setting and Surface Wat	ter Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks	oodplainLacustrine s)
2.2 Presence of Standing Water:	
s standing water normally present in the polygon?	P No
Is standing water is present, is the water grea	iter than 2 meters n depth? No
s standing water normally present in an adjacent p	polygon? No
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom prese	ntArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Minera	alBoth Mineral and Organic Present
2.5 Wetland Community Type for this NWI polygo Wet Prairie 2.6 Disturbances of Hydrology (check all that appl	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Scat	ttered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	C Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e.	. seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
BogFen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, Th	hreatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
2 11 Wotland Polygon Quality Passyinton Issay We	otland Quality Descriptions and shock analy
2.11 Wetland Polygon Quality Descriptor (see: We Good ✓ Medium	Poor

3а	.1 N	Notak	ole Features that influence water quality and hydrology:				
Es	Estimated herbaceouis plant cover (percentage) in the polygon vercentage) in the polygon <a a="" href="mailto:vercentage) in the polygon <a href=" mailto:vercentage<="">) in the polygon <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) in the polygon <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a a="" href="mailto:vercentage) <a href=" mailto:vercentage<="">) <a href="mailto:vercentage) <a href=" mai<="" td="">						
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25 <25				
An	nour	nt of o	dead woody material on the soil surface nilscatteredfrequent				
3а	.2 V	Vate	Quality Protection Questions:				
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?				
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?				
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.				
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended				
	Υ	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?				
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?				
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?				
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.				
			width of buffer area (in meter0 approximate slope (percen0				
3а	.3 F	Flood	and Stormwater Storage / Attenuation Questions:				
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b				
	(Y)	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)				
	Υ	N	that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?				
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?				
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?				
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?				
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?				

Tier 3b Individual Polygon: Rapid Vegetation Description

The ob marriadari orygon. Rapid regetation	Description
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland po	olygon?1
1b. If only one vegetation zone is evident, which best de	escribes the site?
heterogeneous textures across the polygor	
Polygon composed of a single vegettation the polygon.	type with more or less uniform texture across
2. If more than one vegetation zone is present in the polygorepresents the distribuion of these zone?	on, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy?	
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 75%	√s
Is there notable layering/stratification in this vegetation zone	e? Yes
Dominant Herbaceous Species (i.e., covering more than 10 abundance. (Mark with an * any species that forms extens	
a. <u>Phalaris arundinacea</u> d.	
b e.	
c f.	
Dominant Shrub Species listed in order of relative abundan	ce.
·	
Dominant Tree Species listed in order of relative abundanc	
	Platanus occidentalis
Tree and shrub canopy: Inil separate, seldom touch	ing orten touching more or less close
Mature trees (>12" dbh): yes no	

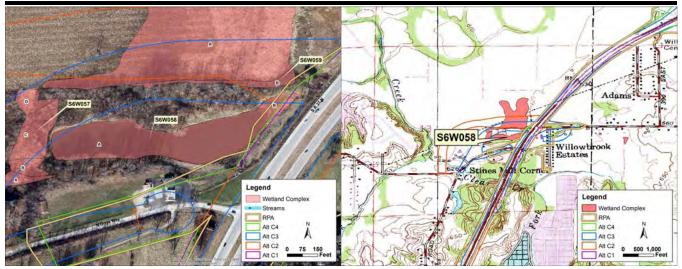
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W057D	Data Reference# S6W057
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	ıpy?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	- 75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom to	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	ipy?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75 - 90%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed particles horsetail, scourd a ferns: marsh single fern (Osmosensitive	ing rush spp. (Equisetum) 2 hiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 hunda regalils) 8 Dnoclea sensibilis) 4 (if known ss (Selaginella apoda) 4 ss spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 ophyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (F*skunk cabbage*water arum (Cawater plantain (A) Herbs: dicots - lvs*bedstraw spp. (beggar's tick spp	d monocots eltandra virginica) 6 . (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 s. opposite/whorled (Gallium) 6 p. (Bidens) 3
duckweed spp.	,		erbena hastata) 3
curlyleaf pondw *water lily (Nym water shield (Br	. (Potamogeton) 8 eed (Potamogeton crispus) 0 phaea tuberosa) 6 asenia schreberi) 4 lock spp. (Nuphar) 6	bugleweed spp. clearweed spp. cup plant (Silphi false nettle (Boe	
*sundew spp. ([Sarracenia purpurea (10) Orosera) 10	*gentian spp. (G giant ragweed (A Indian hamp (Ap Joe-pye weed s	Gentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9	mint spp. e.g. he moneywort (Lys monkey flower s	(Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 imachia nummularia) 0 spp. (Mimulus) 4
Grasses (family Granumber of species a. *wild rice (Zib. most natuve cut-grass, many foxtail (Alopecruc)c. introduced grass (Phalaris, annual grasses (Setaria) and batters.	zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint, us); other rass spp. 0:reed canary reed (Phragmites), such as annual foxtail arnyard grass (Echinochloa)	*richweed (Collii St. John's wort s sunflower sp. (H *swamp loosest swamp milkwee toothcup spp. (A *turtlehead spp. virgin's bower (C water purslane (nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8 Helianthus) 4 trife (Decodon verticillatus) 8 Ed (Asclepias incarnata) 4 Ammania Rotala) 2
*additional :nutsedge spp. (*orchid spp. 10;rush spp. (Juncsedge spp. (Ca*spiderlily (Hymsweet flag (Aco*3-way sedge (I*twig rush (Clac*umbrella sedgewild hyacinth (C	Cyperus) 2 species (if know us) 4 rex) 1 sp. = 3additional enocallis occidentalis) 9	American bellflo *asters: bristly a flat-topped aster other aster spp. *black-eyed Sus cardinal flower (cress spp. (Card dock spp.: swan garlic mustard (ots - Ivs. alternate or basal and ower (Campanula americana) 4 lister (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4 damine) 4 mp, water, pale (Rumex) 4 Alliaria petiolata) 0 (Senecio aureus) 4

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 ✓ smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus nigra) 7 ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 sycamore, American (Platanus occidentalis) 3
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4
bladderhut (Staphylea thiolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwwod, red-osier (Cornus stolonifera) 4 *dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2 elderberry (Sambucus) 2	willow spp. (Salix) 1 sp. = 3additional sp. = 7

Wetland S6W058



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Martinsville 14-digit HUC: 05120201140140 County: Morgan 12N Physiographic Region: Martinsville Hills Township: Interior Plateau Ecoregion: 1E Range: **Natural Region:** Highland Rim Section: 13

Size of wetland complex (acres): 3.2703

USACE JurisdictionYesLatitude:39.478816IDEM Jurisdiction:YesLongitude:-86.367167

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Shallow Open Water	PUB	3.0619	poor	poor	fair	Alt C1	0.00	0.0%
							Alt C2	0.00	0.2%
S6W058A							Alt C3	0.05	1.6%
							Alt C4	0.01	0.2%
							RPA	0.10	3.4%
	Shallow Marsh		0.2084	poor	poor	fair	Alt C1	0.03	15.0%
							Alt C2	0.12	56.9%
S6W058B							Alt C3	0.09	44.1%
							Alt C4	0.06	29.5%
							RPA	0.16	76.5%

Quarter:



Polygon S6W058B

In-WRAP Summary Sheet

Date Report Generate	d: Friday, September 15, 2017			
Wetland Site Name:	N/A			
Data Reference #: S6	W058			
Date of Site Visit: Tue	esday, April 11, 2017			
Tier 1 Summary:				
a. Total Wetland A	rea (acres): 3.2703			
b. Wetland size ar	nd connectivity - contribution to animal habit	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding lar	nd use - numerical rank (max. = 1):0.66			
d. Value surround	ing area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY	:	Polyg	on ID	66W058A
a. Indiana Wetlan	nd community type: Deep Marsh/Shallow Op	en Water		
b. Standing water	- contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to	site: road/railroad culvert			
d. Exotic species r	ating:	Good	Medium	Poor
e. Special Hydrolo	gic Conditions Observed:			
f. Special Commu	nity Type: None			
g. Rare-Threatene	ed-Endangered Species: None			
h. Polygon Quality	/ Descriptor:	Good	Medium	Poor
Tier 3A SUMMAR	Y:			
a: Dead woody m	aterial as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality p	protection - numerical rank (6 max.):2	Good	Medium	Poor
c. Flood and storn	n water storage - numerical rank (5 ma2	Good	Medium	Poor
Tier 3B SUMMAR	Y:			
a. Zonation and in	iterspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as	s indicator of animal habitat:	Valuable		Neutral
c. Number of dom	ninant plant taxa observed: 1	Good	Medium	Poor
d. Average coeffic	cient of conservatism: 0	Good	Medium	Poor
e. Tree canopy as	indicator of animal habitat:	Valuable		Neutral
f. Mature trees as	indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophy	tic taxa observed:0	Good	Medium	Poor
h. Number of indi	cator taxa: 0	Good	Medium	Poor

Tier 2 SUMMARY:	Polyg	S6W058B	
a. Indiana Wetland community type: Shallow Marsh			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: culvert			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed:			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma2	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed:2	Good	Medium	Poor
d. Average coefficient of conservatism:1.5	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed: 2	Good	Medium	Poor
h. Number of indicator taxa: 2	Good	Medium	Poor

Tier 1: Assessment O 1.1 Site Identification:	verview		
Wetland Site Name: N/A			
Ownership (if known): N/A			
USGS Topographic Quadran	gle: Martinsville		
USGS Watershed map 14-Di	git HUC: Clear Creek - East/	West/Grassy Forks	
Identify each NWI Polygon v	vithin the Wetland Site (Poly	gon specific data)	
NWI Polygon ID Number	Cowardin Classification	Polygon Size (acres)]
S6W058A	PUBHx	3.0619]
S6W058B	PEM1	0.2084]
1.2 Site Visit			
Team Members: Rusty Yea	ger, Brenten Reust		
Agency: Lochmueller Group)		
Date assessed: <u>4/11/2017</u>	Time as	sessed: <u>12:30:00 PM</u>	
Weather conditions: Sunn	у		
Note any unusual weahter e system (e.g. recent heay rain			
None			
1.3 Wetland Size			
Size of site under assessmer	nt: 3.2703		
Size of wetland complex:	3.2703		
	ner wetlands or wetland com ted upstream and downstr nnected upstrrem with oth	eam with other wetlands	5
The site is only cor	nnected downstream with	other wetlands	
Other wetlands are	e nearby (within 0.25 mile) but not connected	
The wetland site is	sisolated		
General assessment of adjace the wetland site (indicate the			of the perimeter of
30 Native Vegetation	ı - woodland 5	Road / highway / railroad	d bed / parking lot

20 Native Vegetation - old field / scrub 0 Industrial 20 Agricultural - tilled 0 Residential - single family

0 Agricultural - pasture 5 Commercial or multifamily residential

20 Recreation - green space, mowed

NWI Polygon # S6W058A	Data Reference# S6W058
see table on page one)	
Fier 2: Individual Polygon: Prelimin to be completted on-site for each NWI polygon.	
2.1 Wetland Geomorphic Setting and Surface	Water Flow (check one):
✓ Depressional Slope Riverine (within the river/stream be	FloodplainLacustrine anks)
2.2 Presence of Standing Water:	
s standing water normally present in the poly	gon? Yes
Is standing water is present, is the water	greater than 2 meters n depth? Yes
s standing water normally present in an adjac	ent polygon? Yes
2.3 Apparent Hydroperiod (check one):	
✓ Permanently Flooded	Artificially Flooded
Seasonally Flooded	·
Saturated (surface water seldom p	resentArtificailly Drained
2.4 Soil Type	
✓ Organic (i.e. peat, etc.)Mi	ineralBoth Mineral and Organic Present
Deep Marsh/Shallow Open Water 2.6 Disturbances of Hydrology (check all that	olygon (see Key to Wetland Communities of Indiana): apply):
Ditching	✓ Culvert
Tiles	Other Human Distrubances to
Dams	the
✓ Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S =	Scattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities Phragmities	S Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions	(i.e. seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Ra	ar, Threatened or Endangered Species:
✓ None observed or known to be pre	sen
	
	e: Wetland Quality Descriptions and check one):
GoodMedium	Poor

3а	.1	Notak	ble Features that influence water quality and hydrolo	gy:				
Estimated herbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25								
Estimated woody plant foliar coverage in the polygon100-7575-5050-25<2								
Ar	nou	nt of o	dead woody material on the soil surface 🗸 nil	sca	attered		frequent	
3а	.2	Wate	r Quality Protection Questions:					
1.	Y	N	Does the wetland have a significant amount of vegetati woody plant) density to potentially uptake dissolved nut		cally herba	ceous a	nd	
2.	Y	N	Managed water (e.g. municipal or road stromwater drai industrial or municipal wastewater) is not discharged in				utlet,	
3.			If wetland in question is a depressional wetland answer	· 3a, in not	, answer 3	b.		
	Y	N	3a. Does the wetland have a shape or flow that allows materials before teh water reaches the center of the			suspend	bet	
	Y	N	3b. Is the position of the wetland in the landscape such entering a surface body of water down gradient?			r filtered	before	
4.	Y	N	Does the wetland lack steep slopes, large impervious a cropping, or areas with severe overgrazing within 10				ЭW	
5.	Ŷ) N	Are there recreational lakes, fishable or navigable water down gradient in the local watershed?	rcourses,	or water su	ipply sou	ırces	
6.	Ŷ) N	Is a vegetative buffer area or another wetland polygon be filtered) located upland and adjacent to the wetland area width and slope.					
			width of buffer area (in meter60 approximate s	slope (perc	en <u>3</u>	_		
32	3	Flood	d and Stormwater Storage / Attenuation Questions:					
Ju		1 1000	-	. 4				
1.			If wetland in question is a depressional wetland answer 1a. Around the wetland is there a buffer strip of natural				d ecrub)	
	Y) N	that will slow overland flow into the wetland?					
	Y	N	1b. Is there a significant amount of microtopography or to reduce the veolocity of the water leaving the wet	vegetative land?	e density w	ithin the	wetland	
2.	Y	N	Does the wetland lack man-made structure that would swetland (tiles, culverts, ditches)?	speed the	flow of wat	er from t	he	
3.	Y	N	Is the flood potential high in the local watershed in which flood damages)?	the wetla	and is loca	ted (hist	ory of	
4.	Y	N	Is the wetland located in a watershed where the majorit impermeable, or is bedrock within two feet of the top of			re claye	and	
5.	Y) N	Is the wetland located in a local watershed which has h to existing development?	ighly modi	fied runoff	conditio	ns due	

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. 3883 f. Dominant Shrub Species listed in order of relative abundance. Dominant Tree Species listed in order of relative abundance. C. _____ d. _____ Tree and shrub canopy: nil separate, seldom touching often touching more or less close Mature trees (>12" dbh): yes

NWI Polygon # S6W058A	Data Reference# S6W058
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osm sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floating *bladderwort sp coontail (Cerato	ng rush spp. (Equisetum) 2 niled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 nunda regalils) 8 Dnoclea sensibilis) 4 (if known as (Selaginella apoda) 4 as spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 phyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (F*skunk cabbage*water arum (Cawater plantain (A) Herbs: dicots - lvs*bedstraw sppbeggar's tick sp	d monocots eltandra virginica) 6 c. (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 c. opposite/whorled (Gallium) 6 p. (Bidens) 3
duckweed spp.	(Lemnaceae) 3 . (Potamogeton) 8		erbena hastata) 3 orium perfoliatum) 4
curlyleaf pondw *water lily (Nym water shield (Br	eed (Potamogeton) 6 eed (Potamogeton crispus) 0 phaea tuberosa) 6 asenia schreberi) 4 ock spp. (Nuphar) 6	bugleweed spp. clearweed spp. cup plant (Silphi false nettle (Boe	(Lycopus) 5 (Pilea) 3 ium perfoliatum) 4 ehmeria cylindrica) 3
*sundew spp. (E	arracenia purpurea (10) Orosera) 10	*gentian spp. (G giant ragweed (A Indian hamp (Ap Joe-pye weed s	dicularis lanceolata) 6 Gentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9	mint spp. e.g. he moneywort (Lys monkey flower s	r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 simachia nummularia) 0 spp. (Mimulus) 4
Grasses (family Granumber of species a. *wild rice (Zizb. most natuve cut-grass, mann foxtail (Alopecruc. introduced grass (Phalaris, annual grasses (Setaria) and ba	zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint,	*richweed (Collii St. John's wort s sunflower sp. (F *swamp loosest swamp milkwee toothcup spp. (F *turtlehead spp. virgin's bower (C water purslane (nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8 Helianthus) 4 trife (Decodon verticillatus) 8 ed (Asclepias incarnata) 4 Ammania Rotala) 2
*additional =nutsedge spp. (*orchid spp. 10;rush spp. (Junctsedge spp. (Cai _*spiderlily (Hymoles)*sweet flag (Acoi _**a-way sedge (E*twig rush (Clad _*umbrella sedgewild hyacinth (C	= 8 Cyperus) 2 species (if know us) 4 rex) 1 sp. = 3additional enocallis occidentalis) 9	American bellflom *asters: bristly a flat-topped aster other aster spp. *black-eyed Sustardinal flower (cress spp. (Cardinal flower) dock spp.: swan garlic mustard (ots - Ivs. alternate or basal and ower (Campanula americana) 4 aster (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4 damine) 4 mp, water, pale (Rumex) 4 Alliaria petiolata) 0 (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstorii (/totinoriiona alterniiona) o	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poison sumac (ithus vernix) to
*buttercup spp.: cursed b., hooked b., swamp	Trace leaves simple and appeals
b.(Ranunculus) 6	Trees - leaves simple and opposite
·	red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1
chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7	Silver maple (Acer Sacchamillum) i
	Trees leaves simple and alternate
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

NWI Polygon # S6W058B	Data Reference# S6W058
see table on page one)	
ier 2: Individual Polygon: Prelim o be completted on-site for each NWI poly	
.1 Wetland Geomorphic Setting and Surfac	ce Water Flow (check one):
Depressional ✓ Slope Riverine (within the river/stream	· · ·
.2 Presence of Standing Water:	
standing water normally present in the po	lygon? Yes
Is standing water is present, is the water	er greater than 2 meters n depth? No
s standing water normally present in an adja	acent polygon? Yes
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom	presentArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.)	Mineral Both Mineral and Organic Present
2.5 Wetland Community Type for this NWI Shallow Marsh 2.6 Disturbances of Hydrology (check all tha	polygon (see Key to Wetland Communities of Indiana):
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S	= Scattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	C Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditio	ns (i.e. seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana	Rar, Threatened or Endangered Species:
✓ None observed or known to be properties.	resen
<u> </u>	
	ee: Wetland Quality Descriptions and check one):
Good Medium	ee: wetland Quanty Descriptions and check one): √ Poor
IVICUIUIII	<u> </u>

3а	.1 I	Notal	ole Features that influence water quality and hydrology:
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Phalaris arundinacea f. Dominant Shrub Species listed in order of relative abundance. a. Salix interior Dominant Tree Species listed in order of relative abundance. C. _____ d. _____ Tree and shrub canopy: nil separate, seldom touching often touching more or less close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

Mature trees (>12" dbh): yes

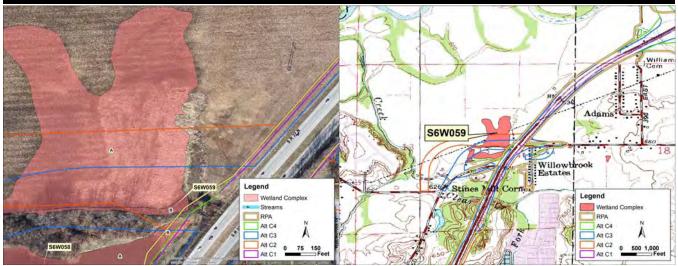
NWI Polygon # S6W058B	Data Referer	1ce# S6W058	
3b.2 Dominant Plant Species: Vegetation Zone E	3		
What % of the polygon does this vegetative zone occ	upy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	n zone?		
Dominant Herbaceous Species (i.e., covering more to abundance. (Mark with an * any species that forms expecies that forms to the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second			relative
a	d		
b	e		
C	f		
Dominant Shrub Species listed in order of relative ab			
a	c		
b	d		
Dominant Tree Species listed in order of relative abu	ndance.		
a	c		
b	d		
Tree and shrub canopy: nil separate, seldon	n touching 🔲 o	ften touching more	e or less close
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about wh wetland site).	nat adds to or de	etracts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone C	;		
What % of the polygon does this vegetative zone occ	upy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	n zone?		
Dominant Herbaceous Species (i.e., covering more to abundance. (Mark with an * any species that forms expecies that forms to the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second			relative
a	d		
b	e		
C			
Dominant Shrub Species listed in order of relative ab			
a	C		
b			
Dominant Tree Species listed in order of relative abu			
a	C		
b			
Tree and shrub canopy: nil separate, seldon			
Mature trees (>12" dbh): yes no	5 🗀 -	5 🗀	
Other remarks (include personal comments about wh	nat adds to or de	etracts from the quality	of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana) $SW = southwestern Indiana$ n	umbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - Ivs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0	bugleweed spp. (Lycopus) 5
*water lily (Nymphaea tuberosa) 6	clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
yellow spatterdook spp. (reapriar) o	*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
Sundew Spp. (Dioscia) 10	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	swamp minweed (Asciepias incamata) 4toothcup spp. (Ammania Rotala) 2
✓ c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	winged loosestille (Lythidill alatum) 5
*additional = 8	Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3 additional =	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	golden ragwort (Ocheclo aureus) 4
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstern (/telinemens ditermiolia) o	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poison sumae (renas vernix) 10
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	Silver maple (Acer sacchamium) i
*great angelica (Angelica atropurpurea) 6	Troop looves simple and alternate
	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and Apios) 5	*alder, speckled (Alnus rugosa) 9
• •	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W059



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Cope

Physiographic Region:New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R1E

Natural Region:Tipton Till PlainSection:13Size of wetland complex (acres):12.5821Quarter:SE

USACE JurisdictionYesLatitude:39.47991IDEM Jurisdiction:YesLongitude:-86.367176

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
			12.2436	poor			Alt C1	0.00	0.0%
		PEM			poor	fair	Alt C2	5.14	42.0%
S6W059A	Wet Meadow						Alt C3	3.17	25.9%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%
		oodplain PFO	0.3385	fair	poor	fair	Alt C1	0.00	0.0%
							Alt C2	0.21	61.2%
S6W059B	Floodplain						Alt C3	0.34	100.0%
	Forest						Alt C4	0.00	0.0%
							RPA	0.01	2.7%



Polygon S6W059D



Polygon S6W059A



Polygon S6W059B



Polygon S6W059A

In-WRAP Summary Sheet

Date Report Generated: Frid	lay, September 15, 2017			
Wetland Site Name: N/A				
Data Reference #: S6W059				
Date of Site Visit: Thursday	, October 08, 2015			
Tier 1 Summary:				
a. Total Wetland Area (a	cres): 12.5821			
b. Wetland size and con	nectivity - contribution to animal hab	bitat:		
	Valuable N	логе Favorable	Favorable	Neutral
c. Surrounding land use	- numerical rank (max. = 1): 0.64			
d. Value surrounding are	ea adds to animal habitat:	 Valuable	Favorable	Low
Tier 2 SUMMARY:		Polyg	on ID	6W059A
a. Indiana Wetland com	munity type: Wet Meadow			
b. Standing water - cont	ribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site:	road/railroad culvert			
d. Exotic species rating:		Good	Medium	Poor
e. Special Hydrologic Co	nditions Observed: None			
f. Special Community Ty	pe: None			
g. Rare-Threatened-End	angered Species: None			
h. Polygon Quality Descr	iptor:	Good	Medium	Poor
Tier 3A SUMMARY:				
a: Dead woody material	as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protect	ion - numerical rank (6 max.): 2	Good	Medium	Poor
c. Flood and storm wate	r storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMARY:				
a. Zonation and interspe	ersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indica	ator of animal habitat:	Valuable		Neutral
c. Number of dominant	plant taxa observed:4	Good	Medium	Poor
d. Average coefficient of	f conservatism:2	Good	Medium	Poor
e. Tree canopy as indica	tor of animal habitat:	Valuable		Neutral
f. Mature trees as indica	tor of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa	a observed:9	Good	Medium	Poor
h. Number of indicator t	axa: 0	Good	Medium	Poor

Tier 2 SUMMARY:	Polygon ID		S6W059B	
a. Indiana Wetland community type: Floodplain Forest				
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral	
c. Disturbances to site: road/railroad culvert				
d. Exotic species rating:	Good	Medium	Poor	
e. Special Hydrologic Conditions Observed: None				
f. Special Community Type: None				
g. Rare-Threatened-Endangered Species: None				
h. Polygon Quality Descriptor:	Good	Medium	Poor	
Tier 3A SUMMARY:				
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral	
b. Water quality protection - numerical rank (6 max.):3	Good	Medium	Poor	
c. Flood and storm water storage - numerical rank (5 ma2	Good	Medium	Poor	
Tier 3B SUMMARY:				
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral	
b. Stratification as indicator of animal habitat:	Valuable		Neutral	
c. Number of dominant plant taxa observed:3	Good	Medium	Poor	
d. Average coefficient of conservatism:1.7	Good	Medium	Poor	
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral	
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral	
g. Total hydrophytic taxa observed:3	Good	Medium	Poor	
h. Number of indicator taxa: 0	Good	Medium	Poor	

0 Recreation - green space, mowed

Tier 1:	Assessment	Overview
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1.1 Site Identification:	reiview				
Wetland Site Name: N/A					
Ownership (if known): N/A					
USGS Topographic Quadrang	le: Cope				
USGS Watershed map 14-Dig	git HUC: Clear Creek	- East/	West/Grassy Forks		
Identify each NWI Polygon w	·		•		
NWI Polygon ID Number	Cowardin Classifica	tion	Polygon Size (acres)	1	
S6W059A	PEM1		12.2436	1	
S6W059B	PFO1		0.3385]	
1.2 Site Visit				-	
Team Members: R. Hook, C.	. Meador (Originally J	IFNew)			
Agency: HNTB					
Date assessed: 10/8/2015	T	ime as	sessed:		
Weather conditions:					
Note any unusual weahter ex system (e.g. recent heay rain	•				
1.3 Wetland Size					
Size of site under assessment	t: 12.5821				
Size of wetland complex: 1	2.5821				
1.4 Site Setting Degree of isolation from other	er wetlands or wetlar	nd com	nplexes:		
✓ The site is connected.	ed upstream and do	ownst	ream with other wetlands	;	
The site is only con	nected upstrrem w	ith otl	ner wetlands		
The site is only con	nected downstrean	n with	other wetlands		
Other wetlands are nearby (within 0.25 mile) but not connected					
The wetland site is	isolated				
General assessment of adjace the wetland site (indicate the				of the perimeter of	
60 Native Vegetation	- woodland	20	Road / highway / railroad	d bed / parking lot	
0 Native Vegetation	- old field / scrub_	0	Industrial		
20 Agricultural - tilled	<u> </u>	0	Residential - single family	у	
0 Agricultural - pastu	ure	0	Commercial or multifami	ily residential	

NWI Polygon # S6W059A	Data Reference# S6W059
see table on page one)	
Tier 2: Individual Polygon: Preliminary Associated to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
DepressionalSlope✓ Floo Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	lygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	· ·
Saturated (surface water seldom present	Artificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon /et Meadow	(see Key to Wetland Communities of Indiana):
.6 Disturbances of Hydrology (check all that apply)) :
Ditching	✓ Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	S Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	land Quality Descriptions and check one):
Good ✓ Medium	Poor

3a	.1 I	Notak	ole Features that influence water quality and hydrology:		
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25		
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25<25		
An	noui	nt of o	dead woody material on the soil surface nilscatteredfrequent		
3а	.2 \	Nate	Quality Protection Questions:		
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?		
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?		
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.		
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended		
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?		
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?		
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?		
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.		
			width of buffer area (in meter0 approximate slope (percen0		
3а	3a.3 Flood and Stormwater Storage / Attenuation Questions:				
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b		
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?		
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?		
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?		
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?		
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?		
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?		

Tier 3b Individual Polygon: Rapid Vegetation Description

70 . 0	•
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland	nd polygon?1
1b. If only one vegetation zone is evident, which be	st describes the site?
Polygon composed of amosaic of sm heterogeneous textures across the po	nall vegetation patches, hummocks, or tussocks, lygon.
Polygon composed of a single vegetta the polygon.	tion type with more or less uniform texture across
2. If more than one vegetation zone is present in the p represents the distribuion of these zone?	olygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone? Yes
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a. <u>Leersia oryzoides</u>	d. <i>Typha latifolia</i>
b. Echinochloa crus-galli	e
c. Phalaris arundinacea	f
Dominant Shrub Species listed in order of relative abu	ndance.
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	с
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	

NWI Polygon # S6W059A	Data Refer	ence# <u>S6W059</u>	
3b.2 Dominant Plant Species: Vegetation Zo	ne B		
What % of the polygon does this vegetative zone	occupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vege	tation zone?		
Dominant Herbaceous Species (i.e., covering moabundance. (Mark with an * any species that form			of relative
a	d		
b	e		
C	f.		
Dominant Shrub Species listed in order of relative			
a	C		
b.	d.		
Dominant Tree Species listed in order of relative			
a			
b			
Tree and shrub canopy: nil separate, sel			
·· — — ·		j orton todoming me	70 01 1000 01000
Mature trees (>12" dbh): yes no		datus ata fuana tha accali	h, of this
Other remarks (include personal comments about wetland site).	it what adds to or	detracts from the quali	ty or triis
3b.2 Dominant Plant Species: Vegetation Zo	ne C		
What % of the polygon does this vegetative zone	occupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vege	tation zone?		
Dominant Herbaceous Species (i.e., covering moabundance. (Mark with an * any species that form			of relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative			
a			
b			
Dominant Tree Species listed in order of relative			
TOURNAME FREE SUBCIES IISTED IT OLDER OF TELANVE			
·			
a	C		
ab	c d		
a	c d		

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plantshorsetail, scouring rush spp. (Equisetum) 2 _*ferns: marsh shiled fern spp. (Dryopteris) 7 _*cinnamon fern (Osmunda cinnamomea) 9 _*royal fern (Osmunda regalils) 8 _sensitive fern (Onoclea sensibilis) 4 _*other: species (if known _marsh club moss (Selaginella apoda) 4 _Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent _*bladderwort spp. (Utricularia) 10 _coontail (Ceratophyllum demersum) 1 _duckweed spp. (Lemnaceae) 3 _*pondweed spp. (Potamogeton) 8	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 _arrow-head spp. (Sagittaria) 4 _*green dragon (Arisaema dracontium) 6 _Jack-in-the-pulpit (Arisaema triphyllum) 4 pickerel weed (Pontederia cordata) 5 *skunk cabbage (Symplocarpus foetidus) 8 *water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorled _*bedstraw spp. (Gallium) 6 _beggar's tick spp. (Bidens) 3 _blue vervain (Berbena hastata) 3 _boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6	 bugleweed spp. (Lycopus) 5 clearweed spp. (Pilea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6
*pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10	*gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10blueflag iris (Iris virginica) 5bulrush spp. (Scirpus / Schoenoplectus) 5*bur reed spp. (Sparganium) 9cat-tail spp. (Typha) 1*cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of speciesa. *wild rice (Zizania aquatica) 10b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); otherc. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)needle sedge spp. (Eleocharis) 1 sp. =2	*loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 ✓ moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 ✓ toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5
<pre>*additional = 8nutsedge spp. (Cyperus) 2*orchid spp. 10; species (if knowrush spp. (Juncus) 4</pre>	Herbs (vines): dicots - Ivs. alternate or basal andAmerican bellflower (Campanula americana) 4*asters: bristly aster (Aser puniceus) 7flat-topped aster (Aster umbellatus) 8 = 7 ✓ other aster spp. (e.g. New England, panicled ast*black-eyed Susan (Rudbeckia fulgida) 8cardinal flower (Lobelia cardinalis) 4cress spp. (Cardamine) 4dock spp.: swamp, water, pale (Rumex) 4garlic mustard (Alliaria petiolata) 0golden ragwort (Senecio aureus) 4

Herbs (vines): dicots - lvs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
✓ sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	,
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

NWI Polygon # S6W059B	Data Reference# S6W059
see table on page one)	
ier 2: Individual Polygon: Preliminary A o be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	Flow (check one):
Depressional Slope ✓ Floo Riverine (within the river/stream banks)	dplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	r than 2 meters n depth? No
standing water normally present in an adjacent po	lygon? <u>No</u>
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
5 Wetland Community Type for this NWI polygon oodplain Forest6 Disturbances of Hydrology (check all that apply)	
Ditching	✓ Culvert
Tiles	Other Human Distrubances to the
Dams ✓ Road or Railroad Embankment	tile
7 Presence of Invasive Exotics (Score as: S = Scatte	red, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. so	eeps, wet slopes, floating mat):
9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Thro	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	and Quality Descriptions and check one)
Good ✓ Medium	Poor
ooouiviculuiii	

3а	ı.1 N	Notak	ole Features that influence water quality and hydrology:		
Es	stima	ated h	nerbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25		
Es	stima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25<25		
Ar	nour	nt of o	dead woody material on the soil surfacenilscatteredfrequent		
3а	.2 \	Nate	Quality Protection Questions:		
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?		
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?		
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.		
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland?		
	Y	N	3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?		
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?		
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?		
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.		
			width of buffer area (in meter0 approximate slope (percen0		
3а	.3 F	Flood	and Stormwater Storage / Attenuation Questions:		
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b		
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)		
	Y	N	that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?		
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?		
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?		
4.	Υ	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?		
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?		

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetlan	d polygon?1
1b. If only one vegetation zone is evident, which bes	st describes the site?
Polygon compoosed of amosaic of sma heterogeneous textures across the pol	all vegetation patches, hummocks, or tussocks, ygon.
Polygon composed of a single vegettat the polygon.	ion type with more or less uniform texture across
2. If more than one vegetation zone is present in the porepresents the distribuion of these zone?	olygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occup	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone? Yes
Dominant Herbaceous Species (i.e., covering more tha abundance. (Mark with an * any species that forms ext	
a	d
b	e
с	f
Dominant Shrub Species listed in order of relative abun	dance.
a	C
b	d
Dominant Tree Species listed in order of relative abund	ance.
a. Acer negundo	c. Platanus occidentalis
b. Populus deltoides	d
Tree and shrub canopy: nil separate, seldom to	_
Mature trees (>12" dbh): yes no	

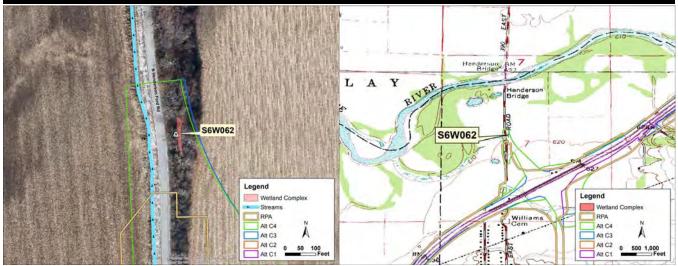
NWI Polygon # S6W059B	Data Reference# S6W059					
3b.2 Dominant Plant Species: Vegetation Zone B						
What % of the polygon does this vegetative zone occupy?						
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%					
Is there notable layering/stratification in this vegetation	zone?					
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex						
a	d					
b	e					
c	f					
Dominant Shrub Species listed in order of relative abun	ndance.					
a	C					
b	d					
Dominant Tree Species listed in order of relative abundance	dance.					
a	c					
b	d					
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close					
Mature trees (>12" dbh): yes no						
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this					
3b.2 Dominant Plant Species: Vegetation Zone C						
What % of the polygon does this vegetative zone occu	py?					
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%					
Is there notable layering/stratification in this vegetation	zone?					
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex						
a	d					
b	e					
C	f					
Dominant Shrub Species listed in order of relative abuse						
a	C					
b	d					
Dominant Tree Species listed in order of relative abundance	dance.					
a	C					
b	d					
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close					
Mature trees (>12" dbh): yes no						
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this					

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana) $SW = southwestern Indiana$	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - Ivs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0	boneset (Eupatonam perioliatum) 4bugleweed spp. (Lycopus) 5
*water lily (Nymphaea tuberosa) 6	clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
yellow spatterdock spp. (Nuprial) o	
Harbar his flasting or submarrant	*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
Harbas Busan kus an al landinas managata	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	✓ moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
✓ b. most natuve perennial grass spp. 4: out grass manne grass Canada bluenciat	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2
c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)	water purslane (Ludwigia palustris) 3
	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	
*additional = 8	Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3additional =	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	✓ ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	✓ boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	✓ cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
✓ tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	✓ sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W062



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: White River - Henderson Bridge Quadrangle: Cope

Physiographic Region: New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R2E

Natural Region:Tipton Till PlainSection:7Size of wetland complex (acres):0.0276Quarter:NW

USACE JurisdictionYesLatitude:39.495612IDEM Jurisdiction:YesLongitude:-86.35502

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Floodplain Forest	PFO	0.0276	fair	poor	good	Alt C1	0.03	100.0%
S6W062A							Alt C2	0.03	100.0%
							Alt C3	0.03	100.0%
							Alt C4	0.03	100.0%
							RPA	0.00	0.0%



Polygon S6W062A



Polygon S6W062A

In-WRAP Summary Sheet

Date Report Generated:	Friday, September 15, 2017			
Wetland Site Name: N/	Ä			
Data Reference #: S6W0)62			
Date of Site Visit: Mond	day, October 12, 2015			
Tier 1 Summary:				
a. Total Wetland Are	a (acres): 0.0276			
b. Wetland size and	connectivity - contribution to animal habit	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding land	use - numerical rank (max. = 1): 0.18			
d. Value surrounding	g area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:		Polyg	gon ID	66W062A
a. Indiana Wetland	community type: Floodplain Forest			
b. Standing water - o	contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to si	te: road/railroad			
d. Exotic species rat	ing:	Good	Medium	Poor
e. Special Hydrologi	c Conditions Observed: None			
f. Special Communit	y Type: None			
g. Rare-Threatened-	Endangered Species: None			
h. Polygon Quality D	escriptor:	Good	Medium	Poor
Tier 3A SUMMARY	;			
a: Dead woody mate	erial as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality pro	tection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and storm v	vater storage - numerical rank (5 ma4_	Good	Medium	Poor
Tier 3B SUMMARY:	,			
a. Zonation and inte	rspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as ir	ndicator of animal habitat:	Valuable		Neutral
c. Number of domin	ant plant taxa observed: 5	Good	Medium	Poor
d. Average coefficie	nt of conservatism: 1.4	Good	Medium	Poor
e. Tree canopy as in	dicator of animal habitat:	Valuable		Neutral
f. Mature trees as in	dicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic	taxa observed: 10	Good	Medium	Poor
h. Number of indica	tor taxa: 0	Good	Medium	Poor

the wetland site (indicate the % abundance of each type):

- 5 Native Vegetation woodland 45 Road / highway / railroad bed / parking lot Native Vegetation - old field / scrub 0 Industrial 45 Agricultural - tilled 0 Residential - single family
- 0 Agricultural pasture Commercial or multifamily residential
- O Recreation green space, mowed

NWI Polygon # S6W062A	Data Reference# S6W062
see table on page one)	
Tier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
Depressional Slope ✓ Floom Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	No
Is standing water is present, is the water greate	er than 2 meters n depth? No
standing water normally present in an adjacent po	olygon? <u>No</u>
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom present	tArtificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
loodplain Forest 6 Disturbances of Hydrology (check all that apply)):
Ditching	, Culvert
Tiles	Other Human Distrubances to
 Dams	the
✓ Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
S Garlic Mustard	Glossy Buckthorn
 Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
.9 Presence of Special Community Types:	
Bog Fen	_Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
44 Wetland Beligger Quality Descriptor (see 1971)	land Quality Decernations and shorts are a
.11 Wetland Polygon Quality Descriptor (see: Wetl	
Good Medium	Poor

38	a.1 I	Notal	ble Features that influence water quality and hydro	logy:				
E	stima	ated I	herbaceouis plant cover (percentage) in the polygon	_100-75 <u>√</u> 75-50	50-25<25			
E	stima	ated v	woody plant foliar coverage in the polygon	_100-75 <u>√</u> 75-50	50-25 <25			
Aı	mou	nt of	dead woody material on the soil surfacenil	scattered	frequen			
38	a.2 \	N ate	r Quality Protection Questions:					
1.	Y) N	Does the wetland have a significant amount of vegeta woody plant) density to potentially uptake dissolved n		rbaceous and			
2.	Y) N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?					
3.	Y	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient? 					
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?					
5.	Y) N	Are there recreational lakes, fishable or navigable wardown gradient in the local watershed?	tercourses, or wate	r supply sources			
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.					
			width of buffer area (in meter0 approximate	slope (percen)			
38	a.3 I	Flood	d and Stormwater Storage / Attenuation Questions:					
1.			If wetland in question is a depressional wetland answ	er 1a, in not, answe	r 1b			
	Υ	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub that will slow overland flow into the wetland?					
	Y) N	Is there a significant amount of microtopography of the reduce the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the water leaving the well as the reduced the veolocity of the water leaving the well as the reduced the veolocity of the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving the water leaving t	or vegetative densit etland?	y within the wetland			
2.	Y) N	Does the wetland lack man-made structure that would wetland (tiles, culverts, ditches)?	speed the flow of	water from the			
3.	Y) N	Is the flood potential high in the local watershed in wh flood damages)?	ich the wetland is lo	ocated (history of			
4.	Y	N	Is the wetland located in a watershed where the majo impermeable, or is bedrock within two feet of the top of		s are claye and			
5.	Y) N	Is the wetland located in a local watershed which has to existing development?	highly modified run	off conditions due			

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this w	retland polygon?1
1b. If only one vegetation zone is evident, whic	h best describes the site?
Polygon compoosed of amosaic of heterogeneous textures across the	of small vegetation patches, hummocks, or tussocks, e polygon.
Polygon composed of a single vegether polygon.	gettation type with more or less uniform texture across
2. If more than one vegetation zone is present in t represents the distribuion of these zone?	he polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zon	e A
What % of the polygon does this vegetative zone o	occupy?
☐ 10 - 25% ☐ 25 - 50% ☐	50 - 75%
Is there notable layering/stratification in this vegeta	ation zone? Yes
Dominant Herbaceous Species (i.e., covering mor abundance. (Mark with an * any species that form	
a. <u>Campsis radicans</u>	d
b. Toxicodendron radicans	e
C	f
Dominant Shrub Species listed in order of relative	abundance.
a. <u>Acer negundo</u>	C
b	d
Dominant Tree Species listed in order of relative a	bundance.
a. Platanus occidentalis	C
b. Populus deltoides	d
Tree and shrub canopy: nil separate, selo	lom touching often touching more or less close
Mature trees (>12" dbh): yes no	

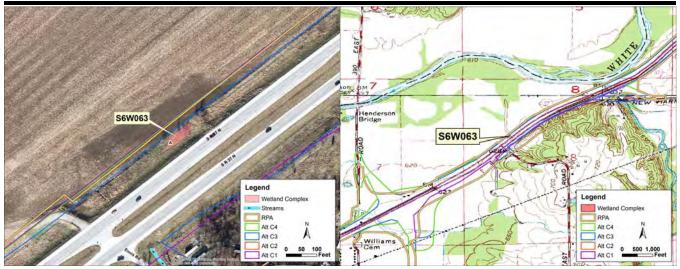
NWI Polygon # S6W062A	Data Referer	nce# S6W062	
3b.2 Dominant Plant Species: Vegetation Zone	В		
What % of the polygon does this vegetative zone or	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 5	0 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetati	on zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms			f relative
a	d		
b	e		
C	f.		
Dominant Shrub Species listed in order of relative a			
a	C		
b	d.		
Dominant Tree Species listed in order of relative ab			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seldo			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about w wetland site).	hat adds to or de	etracts from the qualit	y of this
3b.2 Dominant Plant Species: Vegetation Zone	С		
What % of the polygon does this vegetative zone of	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 5	0 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetati	on zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms			f relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative a			
a	C.		
b			
Dominant Tree Species listed in order of relative ab			
a			
b			
Tree and shrub canopy: nil separate, seldo			
Mature trees (>12" dbh): yes no	<u> </u>		

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p	olants	Herbs: wide-leafe	d monocots
horsetail, scouri	ing rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6
*ferns: marsh sl	hiled fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4
*cinnamon fern	(Osmunda cinnamomea) 9	*green dragon	(Arisaema dracontium) 6
*royal fern (Osn	nunda regalils) 8		oit (Arisaema triphyllum) 4
	Onoclea sensibilis) 4		Pontederia cordata) 5
*other: species		·	e (Symplocarpus foetidus) 8
	ss (Selaginella apoda) 4		alla palustris) 10
	ss spp. (Sphagnum) 10		Alisma plantago-aquatica) 2
Herbs: Ivs. floating	a or submergent	Herbs: dicots - lv	s. opposite/whorled
	p. (Utricularia) 10	*bedstraw spp.	
	phyllum demersum) 1	beggar's tick sp	•
duckweed spp.	• •		erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	reed (Potamogeton crispus) 0	` ` `	. ,
	phaea tuberosa) 6	clearweed spp.	
	asenia schreberi) 4		nium perfoliatum) 4
	lock spp. (Nuphar) 6		ehmeria cylindrica) 3
yellow spatterd	ock spp. (Nuprial) o		edicularis lanceolata) 6
Herbs: Ivs. floatin	a or submorgant		Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)		(Ambrosia trifida) 0
*sundew spp. (E	,		pocynum cannabinum) 2
Suridew Spp. (L	5103C1a) 10		spp. (Eupatorium) 5
Horber linear-lye	or +/- leafless monocots		o. (Lysimachia) 6
	(Rhynchospora) 10		y (Rhexia virginica) 5
blueflag iris (Iris			nedge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
cat-tail spp. (Ty		nettle (Urtica pr	
	op. (Eriophorum) 10		fe (Lythrum salicaria) 0
	amineae) - indicate types and		insonia canadensis) 8
number of species	initicac) indicate types and		spp. (Hypericum/Triandeum) 8
•	zania aquatica) 10	sunflower sp. (I	
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
	rass spp. 0:reed canary	turtlehead spp. *turtlehead spp	
	reed (Phragmites),		Clematis virginiana) 3
	such as annual foxtail		(Ludwigia palustris) 3
ū	arnyard grass (Echinochloa)		rife (Lythrum alatum) 5
	pp. (Eleocharis) 1 sp. =2	wiiliged ioosesti	ine (Eyimani alatam) 5
*additional		Harhs (vines): dic	ots - lvs. alternate or basal and
nutsedge spp. (` ,	ower (Campanula americana) 4
	species (if know		aster (Aser puniceus) 7
rush spp. (Junc			er (Aster umbellatus) 8
✓ sedge spp. (Car	,		. (e.g. New England, panicled ast
	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
sweet flag (Aco	•		(Lobelia cardinalis) 4
	Dulichium arundinaceum) 10	cress spp. (Car	•
	dium mariscoides) 10		mp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0
	Samassia scilloides) 5		(Senecio aureus) 4
	ass (Xyris torta) 9	goldon ragwort	(Schoolo adiodo) T
,, -, -, -, -, -, -, -, -, -, -, -, -,	\ , - \-\ - \\-		

Herbs (vines): dicots - lvs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	✓ ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	✓ boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstern (Actinomens alterniolia) 5	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poison sumac (Khus Vernix) 10
	Trace leaves simple and appeals
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	✓ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	Trees leaves simple and alternate
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	✓ cottonwood, eastern (Populus deltoides) 1
✓ poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	✓ sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W063



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: White River - Henderson Bridge Quadrangle: Cope

Physiographic Region:New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R2E

Natural Region:Tipton Till PlainSection:8Size of wetland complex (acres):0.0545Quarter:NW

USACE JurisdictionYesLatitude:39.49618IDEM Jurisdiction:YesLongitude:-86.342013

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted									
										Alt C1	0.05	100.0%						
							Alt C2	0.05	100.0%									
S6W063A	Wet	PEM	0.0545	poor	poor	fair	Alt C3	0.05	100.0%									
	Meadow																Alt C4	0.05
							RPA	0.05	100.0%									



Polygon S6W063A



Polygon S6W063A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W063			
Date of Site Visit: Monday, October 12, 2015			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.0545			
b. Wetland size and connectivity - contribution to animal hab	itat:		
Valuable M	lore Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1): 0.19			
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID	66W063A
a. Indiana Wetland community type: Wet Meadow			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: tiles road/railroad			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):2	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma2	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 6	Good	Medium	Poor
d. Average coefficient of conservatism: 1.8	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed: 6	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

the wetland site (indicate the % abundance of each type):

- Native Vegetation woodland
 Native Vegetation old field / scrub
 Industrial
- ___85 __ Agricultural tilled ____5 __ Residential single family
- 0 Agricultural pasture 0 Commercial or multifamily residential
- ____0 ___ Recreation green space, mowed

NWI Polygon # S6W063A	Data Reference# S6W063
see table on page one)	
ier 2: Individual Polygon: Preliminary to be completted on-site for each NWI polygon process.	
.1 Wetland Geomorphic Setting and Surface Wa	ter Flow (check one):
✓ Depressional Slope Fl Riverine (within the river/stream banks	loodplainLacustrine s)
.2 Presence of Standing Water:	
standing water normally present in the polygon	? No
Is standing water is present, is the water grea	ater than 2 meters n depth? No
s standing water normally present in an adjacent	polygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom prese	entArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Miner	ralBoth Mineral and Organic Present
2.5 Wetland Community Type for this NWI polygo Vet Meadow	on (see Key to Wetland Communities of Indiana):
2.6 Disturbances of Hydrology (check all that app	oly):
Ditching	Culvert
✓ Tiles	Other Human Distrubances to
 Dams	the
✓ Road or Railroad Embankment	
	ittered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
 Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
8 Presence of Special Hydrologic Conditions (i.e	e. seeps, wet slopes, floating mat):
None	
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, T	hreatened or Endangered Species:
✓ None observed or known to be presen	ı
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: W	
Good √ Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 N	Notal	ole Features that influence water quality and hydrology:
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon 💉 100-7575-5050-25<25
Es	tima	ated v	woody plant foliar coverage in the polygon100-7575-5050-25 <25
Ar	noui	nt of	dead woody material on the soil surfacenilscatteredfrequen
3a	.2 \	Nate	r Quality Protection Questions:
1.	Υ	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Υ	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	ү ү	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0_
3a	.3 F	Flood	I and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Υ	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Υ	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

1. How may vegetation zones are evident in this wetla	and polygon?1
1b. If only one vegetation zone is evident, which b	est describes the site?
Polygon composed of amosaic of se heterogeneous textures across the p	mall vegetation patches, hummocks, or tussocks, olygon.
Polygon composed of a single vegether the polygon.	ation type with more or less uniform texture across
2. If more than one vegetation zone is present in the represents the distribuion of these zone?	polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occ	upy?
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75% T5 - 90% >90%
Is there notable layering/stratification in this vegetatio	n zone? No
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms e	
a. <i>Panicum virgatum</i>	d. Leersia oryzoides
b. Setaria faberi	e. Amaranthus tuberculatus
c. Solidago sp.	f. Digitaria sanguinalis
Dominant Shrub Species listed in order of relative about	undance.
a	C
b	d
Dominant Tree Species listed in order of relative abu	ndance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	

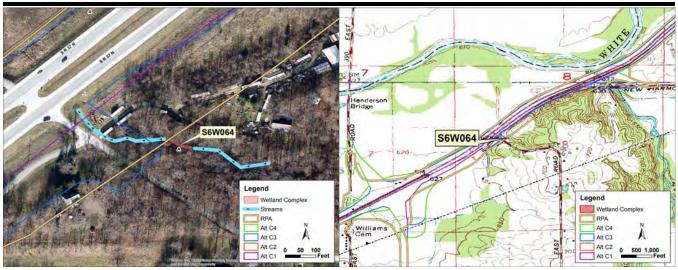
NWI Polygon # S6W063A	Data Reference# S6W063
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more the abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

Herbs: non-seed plants horsetali, scouring rush spp. (Equisetum) 2 "ferns: marsh shiled fern spp. (Dryopteris) 7 "cinnamon fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "royal fern (Osmunda cinnamomea) 9 "skunk cabbage (Symplocarpus foetidus) 8 "water arum (Calla palustris) 10 water plantia (Alisma plantago-aquatica) 2 Herbs: Ivs. floating or submergent "plicher plant (Sarracenia purpurea (10) "sundew spp. (Orbosera) 10 blueflag iris (Iris virginica) 5 "burrush spp. (Sarjus / Schoenoplectus) 5 "bur reed spp. (Sarganium) 9 cat-tail spp. (Typha) 1 "cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtali (Alopecrus); other v. c. introduced grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtali (Alopecrus); other v. c. introduced grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "vild rice (Zizania aquatica) 10 y. b. most natuve perennial grass spp. 4: cut-grass, pp. (Eleocharis) 1 sp. = 2 "additional = 8 v. nutsedge spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "orchid spp. (Cyperus) 2 "	(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Terms: marsh shiled fern spp. (Dryopteris) 7 Teinnamon fern (Osmunda cinnamomea) 9 Troyal fern (Osmunda regallis) 8 sensitive fern (Onoclea sensibilis) 4 Tother: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent bladderwort spp. (Utricularia) 10 contail (Ceratophyllum demersum) 1 duckweed spp. (Emancaea) 3 Tondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton orispus) 0 "water liliy (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 Tyellow spatterdock spp. (Nuphar) 6 Herbs: Inear-Ivs. or +/ leafless monocots bear ush spp. (Ryptan) 10 blueflag iris (Iris virginica) 5 burlush spp. (Scirpus / Schoenoplectus) 5 Tobur reed spp. (Sperganium) 9 cart-tail spp. (Typha) 1 Totton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 ✓ b. most natuve perennial grass sp. 4: cut-grass, manna-grass, Canadab bluepoint, foxtail (Alopecrus); other ✓ c. introduced grass spp. otreed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochioa) eneele sedge spp. (Eleocharis) 1 sp. =2 "additional = 8 ✓ nutsedge spp. (Cyperus) 2 "orchid spp. 10; species (if know rush spp. (Juncus) 4 sedge spp. (Coramogleon) 10 "water lily (Nymphaea tuberosa) 6 buglewed spp. (Elepatorium) 6 betgar's tick spp. (Bidens) 3 bule vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 slaen entle (Boehmeria cylindrica) 3 "fen betony (Pedicularis lanceolata) 6 "gentian spp. (Gentiana Centianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Lepatorium) 5 "inches (Collaris International and transported spp. (Phalaris) 4 "swam pulisweed (Ascleptain in a ransported spp. (Phalaris) 4 "swam pulisweed (Ascleptain in a ransported spp. (Phalaris) 4 "swam pointed for spp. (Hyriam alatum) 5 Herbs (Vince) 5 "inches (Prideria cordata) 5 "such crist spp. (Lycapus) 5 mint spp. eg. hedge	Herbs: non-seed plants	Herbs: wide-leafed monocots
cinnamon fern (Osmunda cinnamomea) 9 *royal fern (Osmunda regalils) 8 sensitive fern (Oncolea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Lemnaceae) 3 *other ill (Paramogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Coraran) 2 Schoenoplectus) 5 *burresh spp. (Scirpus / Schoenoplectus) 5 *burresh spp. (Scirpus / Schoenoplectus) 5 *burresd spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other ver. introduced grass spp. 16:elocharis) 1 sp. =2 *additional = 8 vnutsedge spp. (Cyperus) 2 *orchid spp. 10; species (if know rush spp. (Juncus) 4 seedge spp. (Carew) 1 sp. = 3 *avited provided grass is spp. 3 vornid spp. (Scirpus / Schoenoplectus) 5 *sund provided spp. (Portum altive perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other vornid spp. (Scirpus / Sthoenoplectus) 5 *sund for sunderword for sun	horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
r'royal fern (Osmunda regalils) 8 sensitive fern (Onoclea sensibilis) 4 o'ther: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent bladdenwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 'pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton rispus) 0 water litly (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 'yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent 'pitcher plant (Sarracenia purpurea (10) 'sundew spp. (Drosera) 10 Herbs: Iinear-Ivs. or +/- leafless monocots 'beak rush spp. (Rhynchospora) 10 blueflag iris (fits virginica) 5 bulrush spp. (Scirpus) 5 Schoenoplectus) 5 bulrush spp. (Scirpus) 5 Schoenoplectus) 5 bulrosesses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 ✓ b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other cut-grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barmyard grass (Echinochloa) enecle sedge spp. (Clereck) 1 sp. =2 "additional = 8	*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
sensitive fern (Onoclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sehagnum) 10 Herbs: Ivs. floating or submergent *bladdenvort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton 8 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pilother plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 blueflag iris (Iris virginica) 5 *burreed spp. (Seirpus / Schoenoplectus) 5 *burreed spp. (Sparganium) 9 cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 \$\subseteq \text{. cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other \$\subseteq \text{. cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other \$\subseteq \text{. cut-grass, manna-grass, Echinochloa)} \ needle sedge spp. (Carex) 1 sp. = 3 *\subseteq . cut-grass, Genecia aand surve perennial grass sep. 4: cut-grass (phalaris, reed (Phragmites), annual grasses such as annual toxtail (Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Carex) 1 sp. = 3 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq spp. (Cyorus) 2 *\subseteq s	*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
"orther: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent "bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 "pondweed spp. (Potamogeton (Selaginum) 6 water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 "sundew spp. (Soripus / Schoenoplectus) 5 "bur read spp. (Spripus / Schoenoplectus) 5 "bur read spp. (Spring) 7 Schoenoplectus) 5 "bur read spp. (Spring) 7 Schoenoplectus) 5 "bur read spp. (Spring) 7 Schoenoplectus) 5 "bur read spp. (Spring) 8 Spp. (Eriophorum) 10 —zat-tail spp. (Typha) 1 "cotton grass spp. (Eriophorum) 10 —zasse (Ramily Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 _b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Allopecrus); other _✓ c. introduced grass spp. (Eleocharis) 1 sp. =2 *additional = 8 nutsedge spp. (Cyperus) 2 "orchid spp. (1) (Species (if know rush spp. (Cyperus) 2 "spiderility (Hymenocallis occidentalis) 9 sweet flag (Acorus calamus) 0 "3-way sedge (Dulichium arundinaceum) 10 "twig rush (Calaium mariscoides) 10 "umbrella sedge (Gulima arundinaceum) 10 "twig rush (Cladium mariscoides) 10 "umbrella sedge (Gulima sciolates) 5 "dock spp.: swamp, water, pale (Rumex) 4 garlic mustard (Alliaria peticlus) 8 "water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorted "bedstraw spp. (Gallium) 6 beeggar's tick spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Bedstraw spp. (Gelicala and status) 3 boneset (Eupatorium perfoliatum) 4 false nettle (Bedmeria explication) 3 "fen betory (Pedicula	*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
Marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent	sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
Sphagnum moss spp. (Sphagnum) 10 water plantain (Alisma plantago-aquatica) 2	*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
Herbs: Ivs. floating or submergent	marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
thedstraw spp. (Gallium) 6 contail (Ceratophyllum demersum) 1 duckweed spp. (Potamogeton) 8 "pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 "water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 "yellow spatterdock spp. (Nuphar) 6 "bedstraw spp. (Pilea) 3 curlyleaf pondweed (Potamogeton crispus) 0 "water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 "yellow spatterdock spp. (Nuphar) 6 "bethes: Ivs. floating or submergent "pitcher plant (Sarracenia purpurea (10) "sundew spp. (Drosera) 10 Herbs: Iinear-Ivs. or +/- leafless monocots "beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 "bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1 "cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 _b. most natuve perennial grass spp. 4: ctgrass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other _c. introduced grass spp. (Eleocharis) 1 sp. =2 _radditional = 8 _nutsedge spp. (Cyperus) 2 _rorchid spp. 10; species (if know rush spp. (Juncus) 4 sedge spp. (Carex) 1 sp. = 3 additional = 7 *spiderlily (Hymenocallis occidentalis) 9 sweet flag (Acorus calamus) 0 *3-way sedge (Dulichium arundinaceum) 10 *twig rush (Cladium mariscoides) 10 *wild hyacinth (Calmassia scilloides) 5 *dock spp.: swamp, water, pale (Rumex) 4 *galic mustard (Alliaria petiolata) 0 golden ragwort (Senecio aureus) 4	Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
the destraw spp. (Galilium) 6 contail (Ceratophyllum demersum) 1 duckweed spp. (Potamogeton) 8 "pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 "water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 "yellow spatterdock spp. (Nuphar) 6 "bedstraw spp. (Pilea) 3 curlyleaf pondweed (Potamogeton crispus) 0 "water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 "yellow spatterdock spp. (Nuphar) 6 "bedstraw spp. (Pilea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 "fen betony (Pedicularis lanceolata) 6 "gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5 "boursh spp. (Scirpus / Schoenoplectus) 5 "bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1 "cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 yb. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other √c. introduced grass spp. (Ereocharis) 1 sp. =2 _*additional = 8 vrighe spp. (Cyperus) 2 "orchid spp. 10; species (if know rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 "orchid spp. 10; species (if know rush spp. (Juncus) 4 sedge spp. (Carex) 1 sp. = 3 additional = 7 "spiderlily (Hymenocallis occidentalis) 9 sweet flag (Acorus calamus) 0 "3-way sedge (Dulichium arundinaceum) 10 "twig rush (Cladium mariscoides) 10 "will hyacinth (Calmassia scilloides) 5 "dock spp.: swamp, water, pale (Rumex) 4 garlic mustard (Alliaria petiolata) 0 golden ragwort (Senecio aureus) 4	Herbs: Ive floating or submergent	Harbs: dicats - lys apposite/whorled
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sedge spp. (Carex) 1 sp. = 3additional = 7other aster spp. (e.g. New England, panicled ast *spiderlily (Hymenocallis occidentalis) 9sweet flag (Acorus calamus) 0saway sedge (Dulichium arundinaceum) 10saway sedge (Dulichium arundinaceum) 10saway sedge (Cardamine) 4saway sedge (Fuirena squarrosa) 10saway sedge (Fuirena s		
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sweet flag (Acorus calamus) 0 *3-way sedge (Dulichium arundinaceum) 10 *twig rush (Cladium mariscoides) 10 *umbrella sedge (Fuirena squarrosa) 10 wild hyacinth (Camassia scilloides) 5 cardinal flower (Lobelia cardinalis) 4 cress spp. (Cardamine) 4 dock spp.: swamp, water, pale (Rumex) 4 garlic mustard (Alliaria petiolata) 0 golden ragwort (Senecio aureus) 4		
*3-way sedge (Dulichium arundinaceum) 10 cress spp. (Cardamine) 4 *twig rush (Cladium mariscoides) 10 dock spp.: swamp, water, pale (Rumex) 4 *umbrella sedge (Fuirena squarrosa) 10 garlic mustard (Alliaria petiolata) 0 wild hyacinth (Camassia scilloides) 5 golden ragwort (Senecio aureus) 4		
*twig rush (Cladium mariscoides) 10		
*umbrella sedge (Fuirena squarrosa) 10garlic mustard (Alliaria petiolata) 0golden ragwort (Senecio aureus) 4		
wild hyacinth (Camassia scilloides) 5 golden ragwort (Senecio aureus) 4		
	*yellow-eyed grass (Xyris torta) 9	

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
✓ waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W064



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: White River - Henderson Bridge Quadrangle: Cope

Physiographic Region:New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R2ENatural Region:Tipton Till PlainSection:8

Size of wetland complex (acres): 0.0201 Quarter: NW

USACE JurisdictionYesLatitude:39.495072IDEM Jurisdiction:YesLongitude:-86.341447

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted				
							Alt C1	0.00	0.0%				
							Alt C2	0.00	5.0%				
S6W064A	Floodplain	PFO	0.0201	good	poor	fair	Alt C3	0.00	0.0%				
	Forest										Alt C4	0.00	5.0%
							RPA	0.00	5.0%				



Polygon S6W064A



Polygon S6W064A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W064			
Date of Site Visit:	Thursday, October 08, 2015			
Tier 1 Summar	y:			
a. Total Wetlar	nd Area (acres): 0.0201			
b. Wetland siz	e and connectivity - contribution to animal habita	at:		
	Valuable Mor	e Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1): 0.75			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	on ID	66W064A
a. Indiana We	tland community type: Floodplain Forest			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	s to site: road/railroad culvert			
d. Exotic speci	es rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	ened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	ARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quali	ty protection - numerical rank (6 max.): 4	Good	Medium	Poor
c. Flood and st	torm water storage - numerical rank (5 ma2	Good	Medium	Poor
Tier 3B SUMM	ARY:			
	d interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
	n as indicator of animal habitat:	Valuable		Neutral
	dominant plant taxa observed: 5	Good	Medium	Poor
	efficient of conservatism: 1.4	Good	Medium	Poor
· ·	y as indicator of animal habitat:	Valuable		Neutral
•	s as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed: 8	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

0 Industrial

0 Residential - single family

Commercial or multifamily residential

O Native Vegetation - old field / scrub

Recreation - green space, mowed

0 Agricultural - tilled

0 Agricultural - pasture

NWI Polygon # S6W064A	Data Reference# S6W064
see table on page one)	
Fier 2: Individual Polygon: Preliminary to be completted on-site for each NWI polygon pro	
2.1 Wetland Geomorphic Setting and Surface Wat	er Flow (check one):
Depressional Slope ✓ Floor Riverine (within the river/stream banks)	oodplainLacustrine)
2.2 Presence of Standing Water:	
s standing water normally present in the polygon?	No
Is standing water is present, is the water grea	ter than 2 meters n depth? No
s standing water normally present in an adjacent p	polygon? No
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom preser	ntArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.)/ Minera	alBoth Mineral and Organic Present
2.5 Wetland Community Type for this NWI polygo Floodplain Forest	
2.6 Disturbances of Hydrology (check all that appl	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
✓ Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Scat	tered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	F Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e.	seeps, wet slopes, floating mat):
None	
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, Th	reatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: We	
Good✓ _Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 1	Notak	ole Features that influence water quality and hydrology:						
Es	Estimated herbaceouis plant cover (percentage) in the polygon 100-7575-5050-25<25								
Es	Estimated woody plant foliar coverage in the polygon100-7575-5050-25 <25								
An	nour	nt of o	dead woody material on the soil surfacenilscatteredfrequent						
3а	.2 \	Nate	r Quality Protection Questions:						
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?						
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?						
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.						
	Υ	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended						
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?						
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?						
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?						
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.						
			width of buffer area (in meter15 approximate slope (percen10						
3а	.3 F	lood	I and Stormwater Storage / Attenuation Questions:						
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b						
1.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?						
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?						
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?						
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?						
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?						
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?						

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? Yes Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Impatiens capensis b. Phalaris arundinacea f. Dominant Shrub Species listed in order of relative abundance. Dominant Tree Species listed in order of relative abundance. c. Acer saccharinum a. Platanus occidentalis d. ____ b. Acer negundo Tree and shrub canopy: nil separate, seldom touching often touching more or less close Mature trees (>12" dbh): yes ☐ no

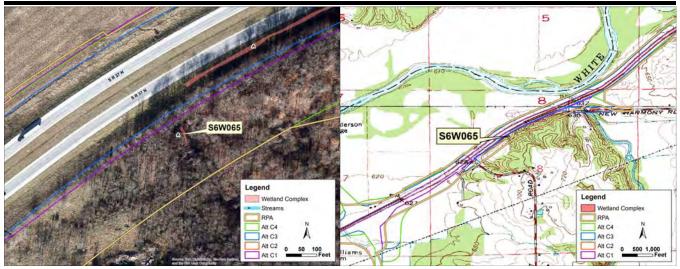
NWI Polygon # S6W064A	Data Reference	ce# S6W064	
3b.2 Dominant Plant Species: Vegetation Zone B			
What % of the polygon does this vegetative zone occur	py?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	zone?		
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms ex			elative
a	d		
b			
C	f.		
Dominant Shrub Species listed in order of relative abu			
a	C		
b			
Dominant Tree Species listed in order of relative abun			
a			
b	d.		
Tree and shrub canopy: nil separate, seldom			
Mature trees (>12" dbh): yes no	у	3	
Other remarks (include personal comments about what wetland site).	at adds to or det	racts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone C			
What % of the polygon does this vegetative zone occu	py?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	zone?		
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	an 10% of the a	rea) listed in order of rultural patches).	relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative abu			
a			
b			
Dominant Tree Species listed in order of relative abun			
a			
b		ton touching \square more	
Tree and shrub canopy: nil separate, seldom	touching [] on	ten touching [_] more	OF TESS CIOSE
Mature trees (>12" dbh): yes no Other remarks (include personal comments about what	at adds to ar dat	racte from the quality	of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scourin ferns: marsh sh *cinnamon fern (Osm sensitive fern (Osm sensitive fern (Osm share species (Osh) Sphagnum moss Herbs: Ivs. floating *bladderwort spp	lants ng rush spp. (Equisetum) 2 niled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 nunda regalils) 8 noclea sensibilis) 4 nif known s (Selaginella apoda) 4 s spp. (Sphagnum) 10 g or submergent o. (Utricularia) 10 ohyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (F*skunk cabbage*water arum (Cawater plantain (A) Herbs: dicots - lvs*bedstraw spp. (beggar's tick sp	d monocots eltandra virginica) 6 . (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 b. opposite/whorled (Gallium) 6
*pondweed spp. curlyleaf pondwe *water lily (Nymp water shield (Bra	(Potamogeton) 8 eed (Potamogeton crispus) 0 phaea tuberosa) 6 asenia schreberi) 4 pock spp. (Nuphar) 6	boneset (Eupato bugleweed spp. clearweed spp. cup plant (Silphi false nettle (Boe	orium perfoliatum) 4 (Lycopus) 5
*sundew spp. (D	arracenia purpurea (10)	*gentian spp. (G giant ragweed (A Indian hamp (Ap	Sentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp (blueflag iris (Iris bulrush spp. (Sc *bur reed spp. (\$ cat-tail spp. (Typ	Rhynchospora) 10 virginica) 5 irpus / Schoenoplectus) 5 Sparganium) 9	meadow beauty mint spp. e.g. he moneywort (Lys monkey flower s nettle (Urtica pro	r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 imachia nummularia) 0 spp. (Mimulus) 4
Grasses (family Granumber of species a. *wild rice (Zizb. most natuve_cut-grass, mannfoxtail (Alopecru_c. introduced grass (Phalaris, annual grasses (Setaria) and ba	mineae) - indicate types and cania aquatica) 10 perennial grass spp. 4: a-grass, Canada bluepoint, s); other ass spp. 0:reed canary reed (Phragmites), such as annual foxtail rnyard grass (Echinochloa)	*richweed (Collii St. John's wort s sunflower sp. (F *swamp loosest swamp milkwee toothcup spp. (A *turtlehead spp. virgin's bower (C water purslane (nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8 Helianthus) 4 trife (Decodon verticillatus) 8 Ed (Asclepias incarnata) 4 Ammania Rotala) 2
*additional =nutsedge spp. (0*orchid spp. 10;rush spp. (Juncusedge spp. (Care*spiderlily (Hymesweet flag (Acore*3-way sedge (Diest)*twig rush (Cladies)*umbrella sedgewild hyacinth (Care	Cyperus) 2 species (if know us) 4 ex) 1 sp. = 3additional enocallis occidentalis) 9	American bellflo *asters: bristly a flat-topped aster other aster spp. *black-eyed Sus cardinal flower (cress spp. (Card dock spp.: swan garlic mustard (ots - Ivs. alternate or basal and ower (Campanula americana) 4 aster (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4 damine) 4 mp, water, pale (Rumex) 4 Alliaria petiolata) 0 (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
✓ *goldenrod spp. (Solidago ohioensis, S. patula, ***********************************	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	✓ boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	✓ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	,
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
water pareimpe (claim daave) e	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod red-osier (Cornus stolonifers) 1	
dogwood, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	

Wetland S6W065



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: White River - Henderson Bridge Quadrangle: Cope

Physiographic Region: New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R2E

Natural Region:Tipton Till PlainSection:8Size of wetland complex (acres):0.0084Quarter:NW

USACE JurisdictionYesLatitude:39.497342IDEM Jurisdiction:YesLongitude:-86.338675

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.00	0.0%
							Alt C2	0.01	100.0%
S6W065A	Floodplain	PFO	0.0084	fair	poor	good	Alt C3	0.00	0.0%
	Forest						Alt C4	0.01	100.0%
							RPA	0.01	100.0%



Polygon S6W065A



Polygon S6W065A



Polygon S6W065A

In-WRAP Summary Sheet

Date Report Generated:	Friday, September 15, 2017			
Wetland Site Name: N/	'A			
Data Reference #: S6W	065			
Date of Site Visit: Thurs	sday, October 08, 2015			
Tier 1 Summary:				
a. Total Wetland Are	ea (acres): 0.0084			
b. Wetland size and	connectivity - contribution to animal hab	itat:		
	Valuable M	lore Favorable	Favorable	Neutral
c. Surrounding land	use - numerical rank (max. = 1):0.56	_		
d. Value surroundin	g area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:		Polyg	on ID	66W065A
a. Indiana Wetland	community type: Floodplain Forest			
b. Standing water -	contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to si	ite:			
d. Exotic species rat	ing:	Good	Medium	Poor
e. Special Hydrologi	c Conditions Observed: None			
f. Special Communit	y Type: None			
g. Rare-Threatened-	Endangered Species: None			
h. Polygon Quality [Pescriptor:	Good	Medium	Poor
Tier 3A SUMMARY	:			
a: Dead woody mat	erial as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality pro	otection - numerical rank (6 max.):5	Good	Medium	Poor
c. Flood and storm v	water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMARY	:			
a. Zonation and inte	erspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as in	ndicator of animal habitat:	Valuable		Neutral
c. Number of domin	nant plant taxa observed: 4	Good	Medium	Poor
d. Average coefficie	nt of conservatism: 2.3	Good	Medium	Poor
e. Tree canopy as in	dicator of animal habitat:	Valuable		Neutral
f. Mature trees as ir	ndicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic	taxa observed:8	Good	Medium	Poor
h. Number of indica	tor taxa: 0	Good	Medium	Poor

NWI Polygon # S6W065A	Data Reference# S6W065
see table on page one)	
ier 2: Individual Polygon: Preliminary Associates to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	dplainLacustrine
.2 Presence of Standing Water:	
s standing water normally present in the polygon?	No
Is standing water is present, is the water greate	r than 2 meters n depth? No
s standing water normally present in an adjacent po	lygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
✓ Saturated (surface water seldom present	Artificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
2.5 Wetland Community Type for this NWI polygon Floodplain Forest 2.6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
) (D	
2.9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: Wetl	and Quality Descriptions and check one):
√ Good Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 I	Notal	ole Features that influence water quality and hydrol	ogy:				
Es	stima	ated h	nerbaceouis plant cover (percentage) in the polygon	_100-75 _	75-50	50-25	<25	
Es	stima	ated v	woody plant foliar coverage in the polygon	_100-75 _	75-50	50-25	<25	
Ar	noui	nt of	dead woody material on the soil surfacenil	so	cattered	fre	equent	
3a	3a.2 Water Quality Protection Questions:							
1.	Y	N	Does the wetland have a significant amount of vegeta woody plant) density to potentially uptake dissolved no		fically herba	aceous and		
2.	Y	N	Managed water (e.g. municipal or road stromwater dra industrial or municipal wastewater) is not discharged in				et,	
3.	Y Y	N N	materials before teh water reaches the center of the wetland?					
4.	Υ	N	Does the wetland lack steep slopes, large impervious cropping, or areas with severe overgrazing within 1					
5.	Y	N	Are there recreational lakes, fishable or navigable wat down gradient in the local watershed?	tercourses	, or water s	upply sourc	es	
6.	Y	N	Is a vegetative buffer area or another wetland polygor be filtered) located upland and adjacent to the wetland area width and slope.					
			width of buffer area (in meter80 approximate	slope (pe	rcen <u>30</u>			
3a	.3 F	Flood	d and Stormwater Storage / Attenuation Questions:					
1.			If wetland in question is a depressional wetland answer	er 1a. in no	ot. answer 1	b		
1.	Y	N	1a. Around the wetland is there a buffer strip of natura that will slow overland flow into the wetland?				scrub)	
	Y	N	Is there a significant amount of microtopography of to reduce the veolocity of the water leaving the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the well and the wel	or vegetativetland?	ve density v	vithin the w	etland	
2.	Y	N	Does the wetland lack man-made structure that would wetland (tiles, culverts, ditches)?	speed the	e flow of wa	ter from the)	
3.	Y	N	Is the flood potential high in the local watershed in wh flood damages)?	ich the we	tland is loca	ated (history	of	
4.	Y	N	Is the wetland located in a watershed where the major impermeable, or is bedrock within two feet of the top of			are claye ar	nd	
5.	Y	N	Is the wetland located in a local watershed which has to existing development?	highly mod	dified runoff	conditions	due	

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:					
1. How may vegetation zones are evident in this wetlar	nd polygon?1				
1b. If only one vegetation zone is evident, which be	st describes the site?				
Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon.					
Polygon composed of a single vegetta the polygon.	tion type with more or less uniform texture across				
2. If more than one vegetation zone is present in the p represents the distribuion of these zone?	olygon, which intersperision diagram most closely				
Type One Interspersion	Type Two Interspersion				
3b.2 Dominant Plant Species: Vegetation Zone A					
What % of the polygon does this vegetative zone occu	ру?				
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%				
Is there notable layering/stratification in this vegetation	zone? Yes				
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex					
a. <i>Pilea pumila</i>	d				
b. Polygonum sp.	e				
c. Dryopteris carthusiana	f				
Dominant Shrub Species listed in order of relative abu					
a	c				
b	d				
Dominant Tree Species listed in order of relative abund	dance.				
a. Acer saccharinum	C				
b	d				
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close				
Mature trees (>12" dbh): yes no					
Oth	to adde to our detuncte from the countility of this				

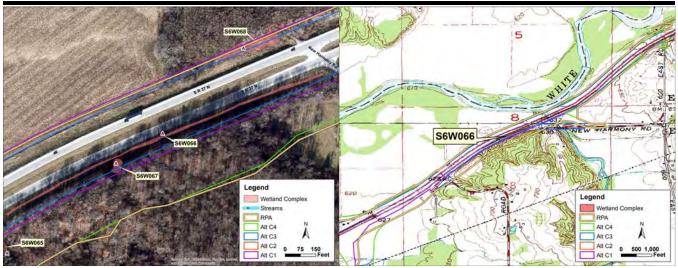
NWI Polygon # S6W065A	Data Referer	1 ce# S6W065	
3b.2 Dominant Plant Species: Vegetation Zone	3		
What % of the polygon does this vegetative zone occ	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 56	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	on zone?		
Dominant Herbaceous Species (i.e., covering more tabundance. (Mark with an * any species that forms			relative
a	d		
b	e		
C	f		
Dominant Shrub Species listed in order of relative ab			
a	c		
b	d		
Dominant Tree Species listed in order of relative abu	ndance.		
a	C		
b	d		
Tree and shrub canopy: nil separate, seldor	n touching 🔲 o	often touching more	e or less close
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about w wetland site).	nat adds to or de	etracts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone			
What % of the polygon does this vegetative zone occ	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 56) - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	on zone?		
Dominant Herbaceous Species (i.e., covering more tabundance. (Mark with an * any species that forms			relative
a	d		
b	e		
C			
Dominant Shrub Species listed in order of relative ab			
a	C		
b			
Dominant Tree Species listed in order of relative abu			
a	C		
b			
Tree and shrub canopy: nil separate, seldor			
Mature trees (>12" dbh): yes no	5 🗀 -	<u> </u>	· · · · · · ·
Other remarks (include personal comments about w	nat adds to or de	etracts from the quality	of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p		Herbs: wide-leafe	
	ng rush spp. (Equisetum) 2		eltandra virginica) 6
	niled fern spp. (Dryopteris) 7	arrow-head spp	
	(Osmunda cinnamomea) 9	•	Arisaema dracontium) 6
	nunda regalils) 8		pit (Arisaema triphyllum) 4
	Onoclea sensibilis) 4		Pontederia cordata) 5
*other: species (•		e (Symplocarpus foetidus) 8
	s (Selaginella apoda) 4		alla palustris) 10
Spriagrium mos	s spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating			s. opposite/whorled
	p. (Utricularia) 10	*bedstraw spp.	,
,	phyllum demersum) 1	beggar's tick sp	• •
duckweed spp.	•		erbena hastata) 3
	(Potamogeton) 8		orium perfoliatum) 4
	eed (Potamogeton crispus) 0		
	ohaea tuberosa) 6	✓ clearweed spp.	•
	asenia schreberi) 4		ium perfoliatum) 4
yellow spattero	ock spp. (Nuphar) 6		ehmeria cylindrica) 3 dicularis lanceolata) 6
Herbs: Ivs. floating	a or submorgant		Gentiana Gentianopsis) 8
	arracenia purpurea (10)		Ambrosia trifida) 0
*sundew spp. (D			pocynum cannabinum) 2
Surfactiv Spp. (L	703014) 10		pp. (Eupatorium) 5
Herbs: linear-lys	or +/- leafless monocots		. (Lysimachia) 6
	(Rhynchospora) 10		(Rhexia virginica) 5
blueflag iris (Iris			edge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (\$			spp. (Mimulus) 4
cat-tail spp. (Typ		nettle (Úrtica pr	
	p. (Eriophorum) 10		fe (Lythrum salicaria) 0
	mineae) - indicate types and		nsonia canadensis) 8
number of species		St. John's wort	spp. (Hypericum/Triandeum) 8
a. *wild rice (Ziz	zania aquatica) 10	sunflower sp. (H	Helianthus) 4
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
	a-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru	· · · · · · · · · · · · · · · · · · ·		Ammania Rotala) 2
	ass spp. 0:reed canary	*turtlehead spp.	
•	reed (Phragmites),	`	Clematis virginiana) 3
	such as annual foxtail		(Ludwigia palustris) 3
	rnyard grass (Echinochloa)	winged loosestr	ife (Lythrum alatum) 5
	pp. (Eleocharis) 1 sp. =2	Hawka (vinaa), dia	ata lua altamata ay basal ay d
*additional =			ots - Ivs. alternate or basal and ower (Campanula americana) 4
nutsedge spp. (0	species (if know		nster (Aser puniceus) 7
rush spp. (Junci			r (Aster umbellatus) 8
sedge spp. (Car	,		(e.g. New England, panicled ast
	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
sweet flag (Acor	,		(Lobelia cardinalis) 4
	Oulichium arundinaceum) 10	cress spp. (Car	•
	ium mariscoides) 10		np, water, pale (Rumex) 4
	(Fuirena squarrosa) 10		Alliaria petiolata) 0
	amassia scilloides) 5		(Senecio aureus) 4
	ass (Xyris torta) 9		,

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	✓ ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	✓ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	✓ elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	✓ sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W066



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: White River - Henderson Bridge Quadrangle: Cope

Physiographic Region:New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R2E

Natural Region: Tipton Till Plain Section: 8

Size of wetland complex (acres): 0.4067Quarter:NE and NWUSACE Jurisdiction YesLatitude:39.498892IDEM Jurisdiction: YesLongitude:-86.336285

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
S6W066A Wet Meadov			PEM 0.4067	fair	poor	fair	Alt C1	0.41	100.0%
		: PEM					Alt C2	0.41	100.0%
	Wet						Alt C3	0.41	100.0%
	Meadow						Alt C4	0.41	100.0%
							RPA	0.41	100.0%



Polygon S6W066A



Polygon S6W066A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W066			
Date of Site Visit:	Thursday, October 08, 2015			
Tier 1 Summaı	ry:			
a. Total Wetlar	nd Area (acres): 0.4067			
b. Wetland siz	e and connectivity - contribution to animal hab	oitat:		
	Valuable M	lore Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1):0.49	_		
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	IRY:	Polyg	on ID	6W066A
a. Indiana We	etland community type: Wet Meadow			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	es to site: ditches road/railroad culvert			
d. Exotic speci	ies rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	tened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	IARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water qual	ity protection - numerical rank (6 max.):3	Good	Medium	Poor
c. Flood and s	torm water storage - numerical rank (5 ma2	. Good	Medium	Poor
Tier 3B SUMM	IARY:			
a. Zonation ar	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
	on as indicator of animal habitat:	Valuable	' 	Neutral
c. Number of	dominant plant taxa observed: 4	Good	Medium	Poor
d. Average co	efficient of conservatism: 1.8	Good	Medium	Poor
e. Tree canop	y as indicator of animal habitat:	Valuable		Neutral
f. Mature tree	es as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed:5	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

0 Agricultural - pasture

0 Recreation - green space, mowed

0 Commercial or multifamily residential

Tier 1: Assessment O 1.1 Site Identification:	verview		
Wetland Site Name: N/A			
Ownership (if known): N/A			
USGS Topographic Quadran	gle: Cope		
USGS Watershed map 14-Di	git HUC: White River - Hend	derson Bridge	
Identify each NWI Polygon v			
NWI Polygon ID Number	Cowardin Classification	Polygon Size (acres)]
S6W066A	PEM1	0.4067]
1.2 Site Visit Team Members: R. Hook, C	Meador		
Agency: HNTB			
Date assessed: <u>10/8/2015</u>	Time as	sessed:	
Weather conditions:			
Note any unusual weahter e system (e.g. recent heay rain	•		
1.3 Wetland Size			
Size of site under assessmer	nt: 0.4067		
Size of wetland complex:).4067		
The site is only cor	ed upstream and downst nnected upstrrem with ot nnected downstream with e nearby (within 0.25 mile	ream with other wetlands her wetlands n other wetlands	;
General assessment of adjace the wetland site (indicate the	•		of the perimeter of
40 Native Vegetation	- woodland 30	Road / highway / railroad	d bed / parking lot
0 Native Vegetation	- old field / scrub <u>0</u>	Industrial	
15 Agricultural - tilled	d 15	Residential - single family	у

NWI F	Polygon # S6W	/066A	Data Reference# S6W066
(see table on page one)			
			ninary Assessment ygon present in the wetland)
2.1 W	etland Geomor	phic Setting and Surfa	ce Water Flow (check one):
✓	Depressiona Riverine (wi	alSlope thin the river/stream	FloodplainLacustrine banks)
2.2 Pr	esence of Stand	ding Water:	
Is star	nding water nor	mally present in the po	olygon? No
	_	•	er greater than 2 meters n depth? No
Is star	nding water nor	mally present in an adj	acent polygon? No
2.3 Ap	pparent Hydrop	eriod (check one):	
	Permanentl	y Flooded	Artificially Flooded
√	Seasonally F	·looded	
	Saturated (s	urface water seldom	presentArtificailly Drained
2.4 So	oil Type		
	Organic (i.e.	peat, etc.) 🗸	Mineral Both Mineral and Organic Present
2.6 Di		Hydrology (check all th	
V	Ditching Tiles		✓Culvert Other Human Distrubances to
	Thes Dams		the
√		road Embankment	
2.7.0			S. Carthanal E. Engagest and C. Camanan's
2./ Pr		· ·	S = Scattered, F = Frequent, or C = Common):
	Garlic Musta		Glossy Buckthorn
	Phragmities		C Reed Canary Grass
	Purple Loos	estriie	Other (list):
2.8 Pr None	esence of Spec	ial Hydrologic Conditio	ons (i.e. seeps, wet slopes, floating mat):
2.9 Pr	esence of Spec	ial Community Types:	
	Bog	Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 F	Presence of Kno	own Federal or Indiana	Rar, Threatened or Endangered Species:
✓	None observ	ved or known to be p	
2.11 V	Netland Polvgo	n Quality Descriptor (s	see: Wetland Quality Descriptions and check one):
		Medium	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 1	Notak	ole Features that influence water quality and hydrology:			
Es	Estimated herbaceouis plant cover (percentage) in the polygon <u>75-50</u> 50-25 50-25 					
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25<25			
Ar	noui	nt of o	dead woody material on the soil surface nilscatteredfrequent			
3а	.2 \	Nate	r Quality Protection Questions:			
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?			
2.	Υ	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?			
3.	Y	(N) N	If wetland in question is a depressional wetland answer 3a, in not, answer 3b.3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland?3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?			
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?			
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?			
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.			
			width of buffer area (in meter0 approximate slope (percen0			
3а	.3 F	Flood	I and Stormwater Storage / Attenuation Questions:			
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b			
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?			
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?			
2.	Υ	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?			
3.	Υ	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?			
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?			
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?			

Tier 3b Individual Polygon: Rapid Vegetation Description

,,,	•
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetlan	d polygon?1
1b. If only one vegetation zone is evident, which bes	t describes the site?
Polygon composed of amosaic of smanning heterogeneous textures across the polygon	all vegetation patches, hummocks, or tussocks, ygon.
Polygon composed of a single vegettat the polygon.	ion type with more or less uniform texture across
2. If more than one vegetation zone is present in the porepresents the distribuion of these zone?	lygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occup	y?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - ·	75%
Is there notable layering/stratification in this vegetation	zone? No
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ext	
a. Impatiens capensis	d
b. <i>Phalaris arundinacea</i>	e
c. Scirpus cyperinus	f
Dominant Shrub Species listed in order of relative abun	dance.
a	c
b	d
Dominant Tree Species listed in order of relative abund	ance.
a. Salix interior	c
b	d
Tree and shrub canopy: nil separate, seldom to	
Mature trees (>12" dbh): yes no	

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

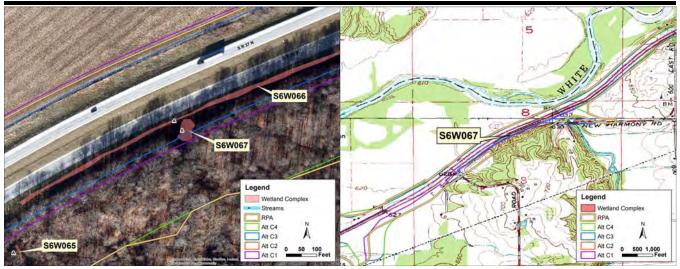
NWI Polygon # S6W066A	Data Reference# S6W066
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
 (N = northern Indiana	Herbs: wide-leafed monocots 2*arrow arum (Peltandra virginica) 6 3 7arrow-head spp. (Sagittaria) 4
*pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispu *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6	boneset (Eupatorium perfoliatum) 4 s) 0 bugleweed spp. (Lycopus) 5 clearweed spp. (Pilea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots	*fen betony (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5 *loosestrife spp. (Lysimachia) 6
 *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) = *bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1 	meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1
 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types in number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoi foxtail (Alopecrus); other c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochlo 	St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 nt, swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3
needle sedge spp. (Eleocharis) 1 sp. =2*additional = 8nutsedge spp. (Cyperus) 2*orchid spp. 10; species (if knowrush spp. (Juncus) 4sedge spp. (Carex) 1 sp. = 3addition _*spiderlily (Hymenocallis occidentalis) 9sweet flag (Acorus calamus) 0*3-way sedge (Dulichium arundinaceum) _*twig rush (Cladium mariscoides) 10*twig rush (Cladium mariscoides) 10*umbrella sedge (Fuirena squarrosa) 10wild hyacinth (Camassia scilloides) 5 _*yellow-eyed grass (Xyris torta) 9	Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4 *asters: bristly aster (Aser puniceus) 7 flat-topped aster (Aster umbellatus) 8 onal = 7other aster spp. (e.g. New England, panicled ast *black-eyed Susan (Rudbeckia fulgida) 8 cardinal flower (Lobelia cardinalis) 4 cress spp. (Cardamine) 4 dock spp.: swamp, water, pale (Rumex) 4 garlic mustard (Alliaria petiolata) 0 golden ragwort (Senecio aureus) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
✓ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W067



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: White River - Henderson Bridge Quadrangle: Cope

Physiographic Region:New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R2E

Natural Region:Tipton Till PlainSection:8Size of wetland complex (acres):0.0519Quarter:NW

USACE JurisdictionYesLatitude:39.498379IDEM Jurisdiction:YesLongitude:-86.337113

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted			
S6W067A									Alt C1	0.05	100.0%	
			0.0519 good	0.0519				Alt C2	0.05	100.0%		
	Floodplain	PFO			0.0519	0.0519 good	0.0519 good poor fair	0.0519 good poor	fair	Alt C3	0.04	75.9%
	Forest	Forest										Alt C4
							RPA	0.05	100.0%			



Polygon S6W067A



Polygon S6W067A

In-WRAP Summary Sheet

Date Report Generate	ed: Friday, September 15, 2017			
Wetland Site Name:	N/A			
Data Reference #: S6	SW067			
Date of Site Visit: Th	nursday, October 08, 2015			
Tier 1 Summary:				
a. Total Wetland	Area (acres): 0.0519			
b. Wetland size a	and connectivity - contribution to animal habita	it:		
	Valuable Mor	e Favorable	Favorable	Neutral
c. Surrounding la	nd use - numerical rank (max. = 1):0.70			
d. Value surround	ding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY	/ :	Polyg	on ID S	6W067A
a. Indiana Wetla	nd community type: Floodplain Forest			
b. Standing wate	r - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances t	o site:			
d. Exotic species	rating:	Good	Medium	Poor
e. Special Hydrol	ogic Conditions Observed: Wet slope			
f. Special Commu	unity Type: None			
g. Rare-Threaten	ed-Endangered Species: None			
h. Polygon Qualit	ty Descriptor:	Good	Medium	Poor
Tier 3A SUMMAI	RY:			
a: Dead woody n	naterial as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality	protection - numerical rank (6 max.):4	Good	Medium	Poor
c. Flood and stor	m water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMAR	R <i>Y:</i>			
a. Zonation and i	nterspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification a	as indicator of animal habitat:	Valuable		Neutral
c. Number of dor	minant plant taxa observed: 6	Good	Medium	Poor
d. Average coeffi	icient of conservatism: 2.3	Good	Medium	Poor
e. Tree canopy as	s indicator of animal habitat:	Valuable	ĺ	Neutral
f. Mature trees a	s indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophy	ytic taxa observed:9	Good	Medium	Poor
h. Number of ind	licator taxa: 0	Good	Medium	Poor

- 70Native Vegetation woodland30Road / highway / railroad bed / parking lot0Native Vegetation old field / scrub0Industrial0Agricultural tilled0Residential single family
- _____0 ___ Agricultural pasture ______0 ___ Commercial or multifamily residential
- 0 Recreation green space, mowed

NWI Polygon # S6W067A	Data Reference# S6W067
see table on page one)	
ier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	Flow (check one):
Depressional Slope ✓ Floo Riverine (within the river/stream banks)	dplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	Yes
Is standing water is present, is the water greate	r than 2 meters n depth? No
standing water normally present in an adjacent pol	lygon? Yes
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	· ·
Saturated (surface water seldom present	Artificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon oodplain Forest .6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams Road or Railroad Embankment	the
ROAU OF RAIIFOAU ETIIDATIKITIETIL	
7 Presence of Invasive Exotics (Score as: S = Scatte	ered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	FOther (list):
.8 Presence of Special Hydrologic Conditions (i.e. se	eeps, wet slopes, floating mat):
Vet slope	_
9 Presence of Special Community Types:	
Bog Fen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thro	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wetl	
Good✓ _Medium	_Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a.	.1 N	lotal	ole Features that influence water quality and hydrology:
Es	tima	ited h	nerbaceouis plant cover (percentage) in the polygon100-75 💉 75-5050-25<25
Es	tima	ted v	woody plant foliar coverage in the polygon100-7575-5050-25 <25
Am	nour	nt of	dead woody material on the soil surfacenilscatteredfrequen
3a.	.2 V	Vate	r Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.
	Υ	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter50 approximate slope (percen30
3a.	.3 F	lood	I and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

wetland site).

Tier 3b Individual Polygon: Rapid Veg	etation Description
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this we	etland polygon?1
1b. If only one vegetation zone is evident, which	best describes the site?
Polygon composed of amosaic of heterogeneous textures across the	small vegetation patches, hummocks, or tussocks, polygon.
Polygon composed of a single veg the polygon.	ettation type with more or less uniform texture across
2. If more than one vegetation zone is present in the represents the distribuion of these zone?	e polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone	A
What % of the polygon does this vegetative zone o	ccupy?
☐ 10 - 25% ☐ 25 - 50% ☐ 9	50 - 75%
Is there notable layering/stratification in this vegetar	tion zone? Yes
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms	
a. Impatiens capensis	d
b. Solidago sp.	e
c	f
Dominant Shrub Species listed in order of relative a	abundance.
a. Rosa multiflora	C
b. Asimina parviflora	d
Dominant Tree Species listed in order of relative ab	oundance.
a. Salix nigra	C
b. Acer saccharinum	d

Mature trees (>12" dbh): yes no

Other remarks (include personal comments about what adds to or detracts from the quality of this

Tree and shrub canopy:

nil separate, seldom touching often touching more or less close

NWI Polygon # S6W067A	Data Refere	nce# <u>S6W067</u>	
3b.2 Dominant Plant Species: Vegetation Zone	вВ		
What % of the polygon does this vegetative zone of	ccupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegeta	tion zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that form			f relative
a	d		
b	e		
C	f.		
Dominant Shrub Species listed in order of relative			
a	C		
b	d.		
Dominant Tree Species listed in order of relative a			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seld			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about wetland site).	what adds to or d	etracts from the qualit	y of this
3b.2 Dominant Plant Species: Vegetation Zone	C		
What % of the polygon does this vegetative zone of	ccupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegeta	tion zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that form			f relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative			
a	C		
b			
Dominant Tree Species listed in order of relative a			
a	C.		
b			
Tree and shrub canopy: nil separate, seld			
Mature trees (>12" dbh): yes no		,	1 111 0.000
Mataro (1000 (212 abil) yes 110			

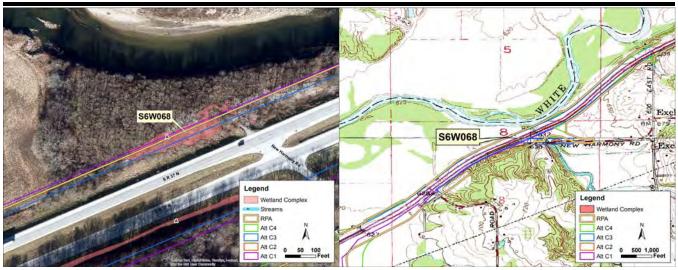
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - lvs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
· · · · · · · · · · · · · · · · ·	` ` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6	bugleweed spp. (Lycopus) 5
	clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
Harlas Ibas Bas Communication and a	**renting and (Continue Continue six) 8
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2
c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	
*additional = 8	Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3additional =	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) ✓ *goldenrod spp. (Solidago ohioensis, S. patula, — *grass of Parnassus (Parnassia glauca) 10 — *Indian plantain (Cacalia plantaginea) 10 — ironweed spp. (Vernonia) 4 ✓ jewelweed, touch-me-not spp. (Impatiens) 3 — lizard's tail (Saururus cernuus) 4 — lobelia spp. (Lobelia) 4 — *marsh marigold (Caltha palustris) 7 — *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 _*dwarf birch (Betula pumila) 10 _*highbush blueberry (Vaccinium corymbosum) 9 _*leatherleaf (Chamaedaphne calyculata) 10 _meadowsweet and Hardhack spp. (Spiraea) 4 _*ninebark (Physocarpus opulifoius) 7 _*shrubby cinquefoil (Potentilla fruticosa) 9 _spice bush (Lindera benzoin) 5 _*swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum)	Trees - leaves needle shaped*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10sneezeweed (Helenium autumnale) 3stinging nettle (Laportea canadensis) 2*swamp saxifrage (Saxifraga pennsylvanica) 10*Virginia bluebells (Mertensia virginica) 6waterhemp (Amaranthus tuberculatus) 1wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobedaven spp.: round, white (Geum) 2*buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6chervil (Chaerophyllum procumbens) 3*cowbane (Oxypolis rigidior) 7*great angelica (Angelica atropurpurea) 6hog peanut / ground nut (Amphicarpaea and Apios) 5honewort (Cryptotaenia canadensis) 3meadow rue spp. (Thalictrum) 5✓ poison ivy (Rhus radicans) 1*queen-of-the prairie (Filipendula rubra) 9senna spp. (Cassia) 4swamp agrimony (Agrimonia parviflora) 4*swamp thistle (Cirsium muticum) 8tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7	Trees - leaves compound *ash, black (Fraxinus nigra) 7 ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 ✓ silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white ✓ *pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled	*sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 sycamore, American (Platanus occidentalis) 3
 bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwwod, red-osier (Cornus stolonifera) 4 *dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2 elderberry (Sambucus) 2 	willow spp. (Salix) 1 sp. = 3additional sp. = 7

Wetland S6W068



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: White River - Henderson Bridge Quadrangle: Cope

Physiographic Region: New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R2E

Natural Region:Tipton Till PlainSection:8Size of wetland complex (acres):0.3479Quarter:NE

USACE JurisdictionYesLatitude:39.500024IDEM Jurisdiction:YesLongitude:-86.335779

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
		loodplain PFO 0.3			fair poor	good	Alt C1	0.27	77.2%
			PFO 0.3479	fair			Alt C2	0.22	63.8%
S6W068A	Floodplain						Alt C3	0.09	26.2%
	Forest						Alt C4	0.22	63.8%
							RPA	0.22	63.8%



Polygon S6W068A



Polygon S6W068A

In-WRAP Summary Sheet

Date Report Generated: Frida	ıy, September 15, 2017			
Wetland Site Name: N/A				
Data Reference #: S6W068				
Date of Site Visit: Thursday,	October 08, 2015			
Tier 1 Summary:				
a. Total Wetland Area (acr	es): 0.3479			
b. Wetland size and conne	ectivity - contribution to animal hab	bitat:		
	Valuable N	More Favorable	Favorable	Neutral
c. Surrounding land use -	numerical rank (max. = 1): 0.38	<u></u>		
d. Value surrounding area	adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:		Polyg	on ID	6W068A
a. Indiana Wetland comm	nunity type: Floodplain Forest			
b. Standing water - contri	bution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: ro	oad/railroad			
d. Exotic species rating:		Good	Medium	Poor
e. Special Hydrologic Cond	ditions Observed: None			
f. Special Community Type	e: None			
g. Rare-Threatened-Endar	ngered Species: None			
h. Polygon Quality Descrip	otor:	Good	Medium	Poor
Tier 3A SUMMARY:				
a: Dead woody material a	s indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection	on - numerical rank (6 max.):5	Good	Medium	Poor
c. Flood and storm water	storage - numerical rank (5 ma	Good	Medium	Poor
Tier 3B SUMMARY:				
a. Zonation and interspers	sion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicate		Valuable		Neutral
c. Number of dominant pl	lant taxa observed: 4	Good	Medium	Poor
d. Average coefficient of o	conservatism: 1.5	Good	Medium	Poor
e. Tree canopy as indicato	or of animal habitat:	Valuable		Neutral
f. Mature trees as indicate	or of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa	observed: 6	Good	Medium	Poor
h. Number of indicator ta	xa: 0	Good	Medium	Poor

	_The site is connected upstream and downstream with other wetlands
\checkmark	_The site is only connected upstrrem with other wetlands
	The site is only connected downstream with other wetlands
	Other wetlands are nearby (within 0.25 mile) but not connected
	_The wetland site is isolated

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type):

30	Native Vegetation - woodland	30	Road / highway / railroad bed / parking lot
0	Native Vegetation - old field / scrub_	0	_ Industrial
40	Agricultural - tilled	0	Residential - single family
0	Agricultural - pasture	0	Commercial or multifamily residential
0	Recreation - green space mowed		

NWI Polygon # S6W068A	Data Reference# S6W068
see table on page one)	
ier 2: Individual Polygon: Preliminary o be completted on-site for each NWI polygon p	
.1 Wetland Geomorphic Setting and Surface Wa	ter Flow (check one):
✓ Depressional Slope Fl Riverine (within the river/stream bank	loodplainLacustrine :s)
2.2 Presence of Standing Water:	
s standing water normally present in the polygon	? No
Is standing water is present, is the water great	ater than 2 meters n depth? No
s standing water normally present in an adjacent	polygon? No
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom prese	entArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.)	ralBoth Mineral and Organic Present
Floodplain Forest 2.6 Disturbances of Hydrology (check all that app	on (see Key to Wetland Communities of Indiana): blv):
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
✓ Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Sca	attered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e	e. seeps, wet slopes, floating mat):
3.0 Dunganas of Chapiel Community Tymps	
2.9 Presence of Special Community Types:	
BogFen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, T	hreatened or Endangered Species:
✓ None observed or known to be presen	I
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: W	/etland Quality Descriptions and check one):
Good ✓ Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a.1 Nota	ble Features that influence water quality and hydrology:
Estimated	nerbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25
Estimated	woody plant foliar coverage in the polygon100-7575-5050-25 <25
Amount of	dead woody material on the soil surfacenilscatteredfrequen
3a.2 Wate	r Quality Protection Questions:
1. Y N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2. Y N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3. (Y) N Y (N)	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4. Y N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5. Y N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6. Y N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
	width of buffer area (in meter0 approximate slope (percen0_
3a.3 Floor	d and Stormwater Storage / Attenuation Questions:
1.	If wetland in question is a depressional wetland answer 1a, in not, answer 1b
Ý N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
Y N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2. Y N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3. Y N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4. Y N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5. Y N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description 3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 25 - 50% 10 - 25% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? Yes

Dominant	Herbaceous	Species (i.e	., covering mor	e than 10% of t	he area) listed ir	order of relative
_		•		_		

b. Acer saccharinum c. _____ d. ____

Tree and shrub canopy: nil separate, seldom touching often touching more or less close

Mature trees (>12" dbh): yes ___ no

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W068A	Data Referer	1 ce# S6W068	
3b.2 Dominant Plant Species: Vegetation Zone E	3		
What % of the polygon does this vegetative zone occ	upy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	n zone?		
Dominant Herbaceous Species (i.e., covering more to abundance. (Mark with an * any species that forms expecies that forms to the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second			relative
a	d		
b	e		
C	f		
Dominant Shrub Species listed in order of relative ab			
a	c		
b	d		
Dominant Tree Species listed in order of relative abu	ndance.		
a	C		
b	d		
Tree and shrub canopy: nil separate, seldon	n touching 🔲 o	often touching more	e or less close
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about wh wetland site).	nat adds to or de	etracts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone (;		
What % of the polygon does this vegetative zone occ	upy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	n zone?		
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms expecies the forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that expecies the forms expecies that forms expecies that for expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that forms expecies that expecies the forms expecies that forms expecies that expecies the forms expecies that forms expecies that expecies the forms expecies that expecies the forms expecies that expecies the forms expecies that expecies the forms expecies that expecies the forms expecies the forms expecies that expecies the expecies that e			relative
a	d		
b	e		
C			
Dominant Shrub Species listed in order of relative ab			
a	C		
b			
Dominant Tree Species listed in order of relative abu			
a	C		
b			
Tree and shrub canopy: nil separate, seldon			
Mature trees (>12" dbh): yes no	5 🗀 -	5 🗀	
Other remarks (include personal comments about wh	nat adds to or de	etracts from the quality	of this

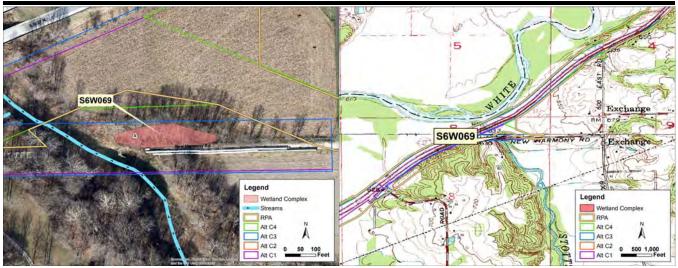
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - lvs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6	bugleweed spp. (Lycopus) 5 ✓ clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
Harlas Iva Baadan anadan anna	*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2
c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	
*additional = 8	Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3additional :	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
✓ sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	✓ silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
water paretripe (claim caave) c	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	✓ sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	additional Sp. /
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
olderberry (dambdedd) 2	

Wetland S6W069



Wetland Location on 2015 Aerial Photograph

Wetland Location on Cope USGS Quadrangle

Basin: Stotts Creek-Exchange Quadrangle: Cope 14-digit HUC: 05120201140120 County: Morgan T12N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R2E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 8 Size of wetland complex (acres): 0.3290 Quarter: NE

USACE JurisdictionYesLatitude:39.499781IDEM Jurisdiction:YesLongitude:-86.330981

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Floodplain Forest	PFO	0.3290	fair	poor	fair	Alt C1	0.33	100.0%
S6W069A							Alt C2	0.00	0.0%
							Alt C3	0.33	100.0%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%



Polygon S6W069A

In-WRAP Summary Sheet

Date Report Generated: Friday, Septer	nber 15, 2017				
Wetland Site Name: N/A					
Data Reference #: S6W069					
Date of Site Visit: Thursday, October 0	08, 2015				
Tier 1 Summary:					
a. Total Wetland Area (acres): 0.33	290				
b. Wetland size and connectivity -	contribution to anima	al habitat:			
	Valuab	le More F	avorable	Favorable	Neutral
c. Surrounding land use - numerica	ıl rank (max. = 1):(0.36			
d. Value surrounding area adds to	animal habitat:	V	'aluable	Favorable	Low
Tier 2 SUMMARY:			Polyg	on ID S	6W069A
a. Indiana Wetland community ty	pe: Floodplain Forest	:			
b. Standing water - contribution to	animal habitat:	V	'aluable	Favorable	Neutral
c. Disturbances to site: road/railro	oad				
d. Exotic species rating:			Good	Medium	Poor
e. Special Hydrologic Conditions O	bserved: None				
f. Special Community Type: None					
g. Rare-Threatened-Endangered Sp	pecies: None				
h. Polygon Quality Descriptor:			Good	Medium	Poor
Tier 3A SUMMARY:					
a: Dead woody material as indicate	or of animal habitat:	V	aluable/	Favorable	Neutral
b. Water quality protection - nume	erical rank (6 max.):	3	Good	Medium	Poor
c. Flood and storm water storage -	numerical rank (5 ma	a <u>3</u>	Good	Medium	Poor
Tier 3B SUMMARY:					
a. Zonation and interspersion as in	dicator of animal hab	oitat: V	aluable/	Favorable	Neutral
b. Stratification as indicator of anir	nal habitat:	V	aluable		Neutral
c. Number of dominant plant taxa	observed: 6		Good	Medium	Poor
d. Average coefficient of conservat	tism: 2.2		Good	Medium	Poor
e. Tree canopy as indicator of anim	nal habitat:	V	aluable	ĺ	Neutral
f. Mature trees as indicator of anir	nal habitat:	V	'aluable	Favorable	Neutral
g. Total hydrophytic taxa observed	l: <u>6</u>		Good	Medium	Poor
h. Number of indicator taxa: 0)		Good	Medium	Poor

Native Vegetation - old field / scrub 0 Industrial

0 Residential - single family

Commercial or multifamily residential

0

80 Agricultural - tilled

0 Agricultural - pasture

Recreation - green space, mowed

NWI Polygon # S6W069A	Data Reference# S6W069
see table on page one)	
ier 2: Individual Polygon: Preliminar to be completted on-site for each NWI polygon p	
.1 Wetland Geomorphic Setting and Surface Wa	ater Flow (check one):
✓ Depressional Slope F Riverine (within the river/stream bank	FloodplainLacustrine ks)
.2 Presence of Standing Water:	
standing water normally present in the polygon	n? No
Is standing water is present, is the water gre	eater than 2 meters n depth? No
s standing water normally present in an adjacent	t polygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom pres	entArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mine	ralBoth Mineral and Organic Present
Floodplain Forest 2.6 Disturbances of Hydrology (check all that app	ply):
Ditching	Culvert
Tiles	Other Human Distrubances to
 Dams	the
✓ Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Sca	attered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.d	e. seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar,	Threatened or Endangered Species:
✓ None observed or known to be preser	n
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: W	Vetland Quality Descriptions and check one):
Good Medium	/ Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

38	a.1 i	Notal	ble Features that influence water quality and hydrology:				
E	Estimated herbaceouis plant cover (percentage) in the polygon100-7550-25<2						
E	Estimated woody plant foliar coverage in the polygon100-7575-50 <25						
Aı	mou	nt of	dead woody material on the soil surfacenilscatteredfrequen				
38	a.2 \	Wate	r Quality Protection Questions:				
1.	Y) N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?				
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?				
3.	Y	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient? 				
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?				
5.	Y) N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?				
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.				
			width of buffer area (in meter0 approximate slope (percen0				
38	a.3 l	Flood	d and Stormwater Storage / Attenuation Questions:				
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b				
1.	Y) N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?				
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?				
2.	Ŷ) N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?				
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?				
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?				
5.	Y) N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?				

wetland site).

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetlan	d polygon?1
1b. If only one vegetation zone is evident, which bes	t describes the site?
heterogeneous textures across the poly	
the polygon.	ion type with more or less uniform texture across
2. If more than one vegetation zone is present in the porepresents the distribuion of these zone?	lygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occup	y?
□ 10 - 25% □ 25 - 50% □ 50 - 1	75%
Is there notable layering/stratification in this vegetation	zone? Yes
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ext	
a. <i>Polygonum sp.</i>	d. <i>Rudbeckia laciniata</i>
b. <i>Vernonia missurica</i>	e. Symphyotrichum lanceolatum
c. Ambrosia trifida	f
Dominant Shrub Species listed in order of relative abun	dance.
a	C
b	d
Dominant Tree Species listed in order of relative abund	ance.
a. Celtis occidentalis	c
b	d
Tree and shrub canopy: nil separate, seldom to	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what	adds to ar datracts from the quality of this

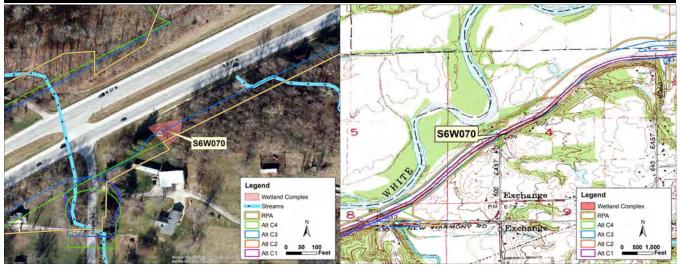
NWI Polygon # S6W069A	Data Reference# S6W069
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plantshorsetail, scouring rush spp. (Equisetum) 2 _*ferns: marsh shiled fern spp. (Dryopteris) 7 _*cinnamon fern (Osmunda cinnamomea) 9 _*royal fern (Osmunda regalils) 8 _sensitive fern (Onoclea sensibilis) 4 _*other: species (if known _marsh club moss (Selaginella apoda) 4 _Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent _*bladderwort spp. (Utricularia) 10 _coontail (Ceratophyllum demersum) 1 _duckweed spp. (Lemnaceae) 3 _*pondweed spp. (Potamogeton) 8	Herbs: wide-leafed monocots *arrow arum (Peltandra virginica) 6 _arrow-head spp. (Sagittaria) 4 _*green dragon (Arisaema dracontium) 6 _Jack-in-the-pulpit (Arisaema triphyllum) 4 pickerel weed (Pontederia cordata) 5 *skunk cabbage (Symplocarpus foetidus) 8 *water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorled _*bedstraw spp. (Gallium) 6 _beggar's tick spp. (Bidens) 3 _blue vervain (Berbena hastata) 3 _boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6	 bugleweed spp. (Lycopus) 5 clearweed spp. (Pilea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10	*gentian spp. (Gentiana Gentianopsis) 8 ✓ giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echinochloa)needle sedge spp. (Eleocharis) 1 sp. =2	*loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3 winged loosestrife (Lythrum alatum) 5
*additional = 8 nutsedge spp. (Cyperus) 2 *orchid spp. 10; species (if know rush spp. (Juncus) 4	Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4*asters: bristly aster (Aser puniceus) 7flat-topped aster (Aster umbellatus) 8 = 7 ✓ other aster spp. (e.g. New England, panicled ast*black-eyed Susan (Rudbeckia fulgida) 8cardinal flower (Lobelia cardinalis) 4cress spp. (Cardamine) 4dock spp.: swamp, water, pale (Rumex) 4garlic mustard (Alliaria petiolata) 0golden ragwort (Senecio aureus) 4

simple (continued)	Herbs (vines): dicots - lvs. alternate or basal and	
- 'grass of Parnassus (Parnassia glauca) 10 'Indian plantain (Cacalia plantaginea) 10 'Indian plantain (Cacalia plantaginea) 10 'Jironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 ilizard's tail (Saurrus cernuus) 4 lobelia spp. (Lobelia) 4 "marsh marigold (Caltha palustris) 7 "monoseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Epilobium Ludwigia) 3 stinging nettle (Laportea canadensis) 2 "swamp saxifrage (Saurifraga pennsylvanica) 10 "Virginia bluebelis (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 "buttercup spp: cursed b, hooked b, swamp b. (Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 "cowbane (Oxypolis rigidior) 7 "great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 "queen-of-the prairie (Filippendula rubra) 9 sena spp. (Cassia) 4 "swamp pagrimony (Agrimonia parviflora) 4 "swamp pagrimony (Agrimonia parviflora) 4 "swamp thistle (Cirsium muticum) 8 Juli coneflower (Rudbeckia Iaciniata) 3 "water hemplok spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 dogwood, red-osier (Cornus stolonifera) 4 "dogwood, plue-fuited or silky (Cornus obliqua) dogwood, gray (Cornus scoloniera) 2 "dora fibrical paraines (Sarapa benzina paraines) 3 "additional sp. = 7 "shubbosh bueberry (Rubbechtila facinata) 3 "ash, pumplin (Fraxinus pensylvanica) 3 "ash, pumplin (Fraxinus pensylvanica) 3 "ash, pumplin (Fraxinus pensy	simple (continued)	Shrubs - leaves alternate
indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saurrus cernuus) 4 lobella spp. (Lobella) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 ysmartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) halbredleaf tearthumb (Polygonum arifolium) sneezeweed (Helenium autumale) 3 stinging nettle (Laportea canadensis) 2 *wamp saxifrage (Saxifraga pennsylvanica) 10 wirgina bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senas spp. (Cassia) 4 **iniebark (Physocarpus opulifous) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 *swamp holly and winterberry spp. (Ilex) 7 swamp radewberry (Rubus hispidus) 6 *swamp newberry (Rubus hispidus) 6 *swamp newbery (Rubus hispidus) 6 *swamp newberry (Rubus hispidus) 6		*cranberry spp. (Vaccinium) 10
✓ ironweed spp. (Vernonia) 4	*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 "marsh marigold (Caltha palustris) 7 "moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4smartweed spp.; jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laprothea canadensis) 2 "swamp saxifrage (Saxifraga pennsylvanica) 10 "virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - lvs, basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 "buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 "cowbane (Oxypolis rigidior) 7 "great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 "queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 "shrubby cinquefoil (Potentilala fruticosa) 9 spice bush (Lindera benzoin) 5 "swamp padwebrry (Rubus hispidus) 6 "swamp holly and winterberry spp. (Ilex) 7 "swamp pad weberry (Rubus hispidus) 6 "swamp rose (Rosa palustris) 5 Trees - leaves compound "ash, black (Fraxinus pigra) 7 ash, green (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitterrut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 "poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer saccharinum) 1 "cottonwood, eastern (Populus deltiodes) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 "oak, Shrumard's, swamp chestrut, swamp white "pawpaw (Asimina triloba) 6 "sugarberry (Celtis laevigata) 7 sweet	*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ilizard's tail (Saururus cernuus) 4	✓ ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
ilizard's tail (Saururus cernuus) 4	jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
"marsh marigold (Caltha palustris) 7 "moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 "swamp saxifrage (Saxifraga pennsylvanica) 10 wirigrinia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 wingstem (Actinomeris alternifolia) 3 honey locust (Gleditisa triacanthos) 1 poison virginian) 10 trees - leaves compound "ash, black (Fraxinus nigra) 7 ash, plack (Fraxinus pensylvanica) 3 "ash, pumpkin (Fraxinus benentosa) 8 boxelder (Acer negundo) 1 hickory, shellbark (Carya lacriniosa) 8 honey locust (Gleditisa triacanthos) 1 poison sunauc (Rhus vernix) 10 manual (Carya lacriniosa) 8 honey locust (Gleditisa triacanthos) 1 "poison sunauc (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus vernix) 10 manual (Rhus ver		
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buckthorn spp. (Rhamnus cathartica, Radditional sp. = 7 frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwwod, red-osier (Cornus stolonifera) 4 *dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2	Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
frangula) 0buttonbush (Cephalanthus occidentalis) 5dogwood, red-osier (Cornus stolonifera) 4*dogwood, blue-fruited or silky (Cornus obliqua)dogwood, gray (Cornus racemosa) 2	bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buttonbush (Cephalanthus occidentalis) 5dogwwod, red-osier (Cornus stolonifera) 4*dogwood, blue-fruited or silky (Cornus obliqua)dogwood, gray (Cornus racemosa) 2	buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
buttonbush (Cephalanthus occidentalis) 5dogwwod, red-osier (Cornus stolonifera) 4*dogwood, blue-fruited or silky (Cornus obliqua)dogwood, gray (Cornus racemosa) 2		
dogwwod, red-osier (Cornus stolonifera) 4*dogwood, blue-fruited or silky (Cornus obliqua)dogwood, gray (Cornus racemosa) 2		
*dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2		
dogwood, gray (Cornus racemosa) 2		

Wetland S6W070



Wetland Location on 2015 Aerial Photograph

Wetland Location on Mooresville East USGS Quadra

Basin: White River - North Trib (Centena Quadrangle: Mooresville East

Physiographic Region:New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R2ENatural Region:Tipton Till PlainSection:4

Size of wetland complex (acres): 0.1047 Quarter: SW

USACE JurisdictionYesLatitude:39.507749IDEM Jurisdiction:YesLongitude:-86.321619

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted								
				fair			Alt C1	0.09	88.0%								
							Alt C2	0.09	88.0%								
S6W070A	Wet	PEM	0.1047		fair	fair	fair	fair	fair	fair	fair	fair	poor	fair	Alt C3	0.04	40.5%
	Meadow								Alt C4	0.09	88.0%						
							RPA	0.09	88.2%								



Polygon S6W070A



Polygon S6W070A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W070			
Date of Site Visit:	Thursday, September 24, 2015			
Tier 1 Summaı	ry:			
a. Total Wetla	nd Area (acres): 0.1047			
b. Wetland siz	e and connectivity - contribution to animal habit	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1): 0.62			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	on ID	6W070A
a. Indiana We	tland community type: Wet Meadow			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	es to site: road/railroad other			
d. Exotic speci	ies rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: Potential artesian	well/spring	feeding the v	vetland
f. Special Com	munity Type: None			
g. Rare-Threat	tened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	IARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water qual	ity protection - numerical rank (6 max.): 4	Good	Medium	Poor
c. Flood and s	torm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMM	ARY:			
a. Zonation ar	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratificatio	on as indicator of animal habitat:	Valuable		Neutral
c. Number of	dominant plant taxa observed: 3	Good	Medium	Poor
d. Average co	efficient of conservatism: 2	Good	Medium	Poor
e. Tree canop	y as indicator of animal habitat:	Valuable		Neutral
f. Mature tree	es as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed: 12	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

Native Vegetation - woodland 20 Road / highway / railroad bed / parking lot

Native Vegetation - old field / scrub 0 Industrial

Agricultural - tilled 20 Residential - single family

Agricultural - pasture 0 Commercial or multifamily residential

____0 ___ Recreation - green space, mowed

NWI Polygon # S6W070A	Data Reference# S6W070
(see table on page one)	
Fier 2: Individual Polygon: Preliminary A to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Water	r Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
.2 Presence of Standing Water:	
standing water normally present in the polygon?	Yes
Is standing water is present, is the water greate	·
standing water normally present in an adjacent po	lygon? <u>Yes</u>
.3 Apparent Hydroperiod (check one):	
✓ Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	Artificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon /et Meadow	
.6 Disturbances of Hydrology (check all that apply)	
Ditching	Culvert
Tiles	Other Human Distrubances to the
Dams ✓ Road or Railroad Embankment	tile
.7 Presence of Invasive Exotics (Score as: S = Scatte	and F - Francisch au C - Comman).
Garlic Mustard	Glossy Buckthorn
<i>Phragmities</i> Purple Loosestrife	<pre> F Reed Canary Grass Other (list):</pre>
ruipie Loosestille	Other (list).
8 Presence of Special Hydrologic Conditions (i.e. s	eeps, wet slopes, floating mat):
otential artesian well/spring feeding the wetland	
.9 Presence of Special Community Types:	
BogFen	_Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Thr	eatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: Wet	land Quality Descriptions and check one):
Good √ Medium	_Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	ı.1 N	Notal	ble Features that influence water quality and hydrology:
Es	stima	ated I	herbaceouis plant cover (percentage) in the polygon 🗹 100-7575-5050-25<25
Es	stima	ated v	woody plant foliar coverage in the polygon100-7575-5050-25 <25
Ar	nour	nt of	dead woody material on the soil surfacenilscatteredfrequen
3 <i>a</i>	1.2 V	Nate	r Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.
	(Y)	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended
	Υ	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter approximate slope (percen
3 <i>a</i>	ı.3 F	Flood	d and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
1.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid	Vegetation Description
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in t	this wetland polygon?1
1b. If only one vegetation zone is evident,	which best describes the site?
Polygon compoosed of amos heterogeneous textures acro	saic of small vegetation patches, hummocks, or tussocks, oss the polygon.
Polygon composed of a singlethe polygon.	le vegettation type with more or less uniform texture across
2. If more than one vegetation zone is preser represents the distribuion of these zone?	nt in the polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation	Zone A
What $\%$ of the polygon does this vegetative z	one occupy?
☐ 10 - 25% ☐ 25 - 50%	☐ 50 - 75% ☐ 75 - 90%
Is there notable layering/stratification in this v	regetation zone? No
Dominant Herbaceous Species (i.e., covering abundance. (Mark with an * any species that	g more than 10% of the area) listed in order of relative forms extensive monocultural patches).
a. Phalaris arundinacea	d
b. Impatiens capensis	e
c. Eupatorium perfoliatum	f
Dominant Shrub Species listed in order of rela	ative abundance.
a	c
b	d
Dominant Tree Species listed in order of relati	tive abundance.
a	c
b	d

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

Mature trees (>12" dbh): yes

Tree and shrub canopy: nil separate, seldom touching often touching more or less close

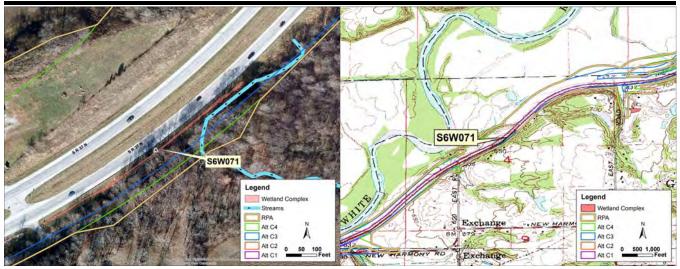
NWI Polygon # S6W070A	Data Reference# S6W070
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sh *cinnamon fern *royal fern (Osm sensitive fern (C *other: species of marsh club mos Sphagnum mos Herbs: Ivs. floating *bladderwort spi coontail (Cerato duckweed spp.	plants ng rush spp. (Equisetum) 2 niled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 nunda regalils) 8 Dnoclea sensibilis) 4 (if known s (Selaginella apoda) 4 s spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 phyllum demersum) 1	Herbs: wide-leafee *arrow arum (Pe arrow-head spp *green dragon (Jack-in-the-pulp pickerel weed (I *skunk cabbage *water arum (Ca water plantain (A	d monocots eltandra virginica) 6 . (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 s. opposite/whorled (Gallium) 6 p. (Bidens) 3 erbena hastata) 3
curlyleaf pondwown water lily (Nym) water shield (Brown)	eed (Potamogeton crispus) 0 chaea tuberosa) 6 asenia schreberi) 4 ock spp. (Nuphar) 6	bugleweed spp. clearweed spp. cup plant (Silph false nettle (Boo	(Lycopus) 5
*sundew spp. (E	arracenia purpurea (10)	*gentian spp. (G √ giant ragweed (Indian hamp (A	Gentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (Sc *bur reed spp. (Sc cat-tail spp. (Typ	(Rhynchospora) 10 virginica) 5 sirpus / Schoenoplectus) 5 Sparganium) 9	meadow beauty mint spp. e.g. h moneywort (Lys monkey flower s nettle (Urtica pro	r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 iimachia nummularia) 0 spp. (Mimulus) 4
Grasses (family Granumber of species a. *wild rice (Ziz b. most natuve	mineae) - indicate types and zania aquatica) 10 perennial grass spp. 4: ia-grass, Canada bluepoint,	*richweed (Colli St. John's wort s sunflower sp. (H *swamp loosest swamp milkwee	nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8
c. introduced grass (Phalaris, annual grasses (Setaria) and ba	rass spp. 0:reed canary reed (Phragmites), such as annual foxtail arnyard grass (Echinochloa) op. (Eleocharis) 1 sp. =2	*turtlehead spp. virgin's bower (0 water purslane	
*additional =nutsedge spp. (0*orchid spp. 10;rush spp. (Juncous)sedge spp. (Carus) _*spiderlily (Hymous)sweet flag (Acous) _*3-way sedge (Eust) _*twig rush (Cladus) _*umbrella sedgewild hyacinth (C	= 8 Cyperus) 2 species (if know us) 4 rex) 1 sp. = 3additional renocallis occidentalis) 9	American bellflom *asters: bristly a flat-topped aste other aster spp. *black-eyed Sus cardinal flower (cress spp. (Cardinal flower) dock spp.: swar garlic mustard (ots - Ivs. alternate or basal and ower (Campanula americana) 4 aster (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4 damine) 4 mp, water, pale (Rumex) 4 Alliaria petiolata) 0 (Senecio aureus) 4

Herbs (vines): dicots - lvs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
✓ ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
√ jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	onamp rose (resea parasaris) s
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	tamardok (Ednx lanolila) 10
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	
` ` ` ` ,	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
Harba Parta has basel an alternate and	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	

Wetland S6W071



Wetland Location on 2015 Aerial Photograph

Wetland Location on Mooresville East USGS Quadra

Basin: White River - North Trib (Centena Quadrangle: Mooresville East

Physiographic Region: New Castle Till PlainsTownship:T12NEcoregion:Eastern Corn Belt PlainsRange:R2E

Natural Region: Tipton Till Plain Section: 4

Size of wetland complex (acres): 0.1119Quarter:NE and NWUSACE JurisdictionYesLatitude:39.510187IDEM Jurisdiction:YesLongitude:-86.317571

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted																					
					Alt C1	0.11	100.0%																							
				9 fair	fair			Alt C2	0.11	100.0%																				
S6W071A	Wet	PEM	0.1119			fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair	fair poor	poor	Alt C3
	Meadow						Alt C4	0.11	100.0%																					
							RPA	0.11	100.0%																					



Polygon S6W071A



Polygon S6W071A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W071			
Date of Site Visit: Thursday, September 24, 2015			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.1119			
b. Wetland size and connectivity - contribution to anin	nal habitat:		
Valua	ble More Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1):	0.54		
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID S	6W071A
a. Indiana Wetland community type: Wet Meadow			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: road/railroad culvert			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat	: Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):	1 Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 r	ma <u>1</u> Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal ha	abitat: Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 2	Good	Medium	Poor
d. Average coefficient of conservatism: 2	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable	ĺ	Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:2	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type):

50	Native Vegetation - woodland	40	_ Road / highway / railroad bed / parking lo
0	Native Vegetation - old field / scrub _	0	_ Industrial
0	Agricultural - tilled	10	Residential - single family

0 Agricultural - pasture 0 Commercial or multifamily residential

____0 __ Recreation - green space, mowed

NWI Polygon # S6W071A	Data Reference# S6W071
see table on page one)	
ier 2: Individual Polygon: Prelimina to be completted on-site for each NWI polygon	
.1 Wetland Geomorphic Setting and Surface \	Nater Flow (check one):
✓ Depressional Slope Riverine (within the river/stream ba	_FloodplainLacustrine nks)
.2 Presence of Standing Water:	
standing water normally present in the polygon	on? Yes
Is standing water is present, is the water g	reater than 2 meters n depth? No
standing water normally present in an adjace	nt polygon? Yes
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	·
Saturated (surface water seldom pre	esentArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mir	neralBoth Mineral and Organic Present
2.5 Wetland Community Type for this NWI pol Wet Meadow	ygon (see Key to Wetland Communities of Indiana):
2.6 Disturbances of Hydrology (check all that a	ipply):
Ditching	✓ Culvert
Tiles	Other Human Distrubances to
Dams	the
✓ Road or Railroad Embankment	
7 Presence of Invasive Exotics (Score as: S = S	Scattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	C Reed Canary Grass
Purple Loosestrife	Other (list):
8.8 Presence of Special Hydrologic Conditions	(i.e. seeps, wet slopes, floating mat):
None	
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rai	r, Threatened or Endangered Species:
✓ None observed or known to be pres	en
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see:	Wetland Quality Descriptions and check one):
Good Medium	✓ Poor
	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	Notak	ole Features that influence water quality and hydrology:				
Es	Estimated herbaceouis plant cover (percentage) in the polygon <u></u>75-50 50-25<25						
Es	Estimated woody plant foliar coverage in the polygon100-7575-5050-25✓ <25						
An	nour	nt of o	dead woody material on the soil surfacenilscatteredfrequent				
3а	3a.2 Water Quality Protection Questions:						
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?				
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?				
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.				
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended				
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?				
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?				
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?				
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.				
			width of buffer area (in meter0 approximate slope (percen0				
3а	.3 F	Flood	and Stormwater Storage / Attenuation Questions:				
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b				
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?				
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?				
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?				
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?				
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?				
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?				

wetland site).

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland	polygon?1
1b. If only one vegetation zone is evident, which best	describes the site?
Polygon composed of amosaic of smal heterogeneous textures across the polygon	vegetation patches, hummocks, or tussocks, jon.
Polygon composed of a single vegettation the polygon.	n type with more or less uniform texture across
2. If more than one vegetation zone is present in the poly represents the distribuion of these zone?	gon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy	?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 75	5%
Is there notable layering/stratification in this vegetation zo	one? No
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms extended)	
a. Phalaris arundinacea	d
b. Solidago sp.	e
C	f
Dominant Shrub Species listed in order of relative abund	ance.
a	c
b	d
Dominant Tree Species listed in order of relative abunda	nce.
a	c
b	d
Tree and shrub canopy: Inil separate, seldom too	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what a	adds to or detracts from the quality of this

NWI Polygon # S6W071A	Data Refer	rence# <u>S6W071</u>	
3b.2 Dominant Plant Species: Vegetation Zo	ne B		
What % of the polygon does this vegetative zone	occupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vege:	tation zone?		
Dominant Herbaceous Species (i.e., covering moabundance. (Mark with an * any species that form			of relative
a	d		
b	e		
C	f.		
Dominant Shrub Species listed in order of relative			
a	C		
b.	d.		
Dominant Tree Species listed in order of relative			
a			
b			
Tree and shrub canopy: nil separate, sel			
·· — — ·		j onon todoming me	70 01 1000 01000
Mature trees (>12" dbh): yes no		datuanta funna tha accali	h, of this
Other remarks (include personal comments about wetland site).	it what adds to or	detracts from the quali	ty of this
3b.2 Dominant Plant Species: Vegetation Zo	ne C		
What % of the polygon does this vegetative zone	occupy?		
☐ 10 - 25% ☐ 25 - 50%	50 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vege:	tation zone?		
Dominant Herbaceous Species (i.e., covering mo abundance. (Mark with an * any species that form			of relative
a	d		
b			
	e.		
C			
c	f		
Dominant Shrub Species listed in order of relative	f e abundance.		
Dominant Shrub Species listed in order of relative a.	f e abundance. c		
Dominant Shrub Species listed in order of relative a	fe abundance. c		
Dominant Shrub Species listed in order of relative a b Dominant Tree Species listed in order of relative	fe abundance. cdabundance.		
Dominant Shrub Species listed in order of relative a b Dominant Tree Species listed in order of relative a	f e abundance. c d abundance. c		
Dominant Shrub Species listed in order of relative a b Dominant Tree Species listed in order of relative a b	f e abundance. c d abundance. c d		
Dominant Shrub Species listed in order of relative a b Dominant Tree Species listed in order of relative a	f e abundance. c d abundance. c d		

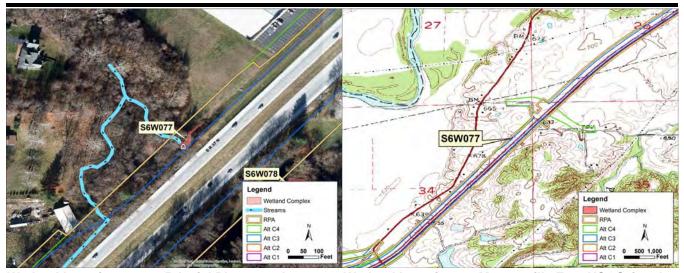
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana) $SW = southwestern Indiana$ n	umbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - Ivs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0	bugleweed spp. (Lycopus) 5
*water lily (Nymphaea tuberosa) 6	clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
yellow spatterdook spp. (redpilar) o	*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
Sundew Spp. (Dioscia) 10	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	swamp minweed (Asciepias incamata) 4toothcup spp. (Ammania Rotala) 2
✓ c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	winged loosestille (Lythidill alatum) 5
*additional = 8	Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3 additional =	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	golden ragwort (Ocheclo aureus) 4
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) ✓ *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 bucktorn spp. (Rhamnus cathartica, R.	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus pensylvanica) 3 *ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 sycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3 additional sp. = 7
bladdernut (Staphylea trifolia) 5	sycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3

Wetland S6W077



Wetland Location on 2015 Aerial Photograph

Wetland Location on Mooresville East USGS Quadra

Basin: White River - Sinking Creek Quadrangle: Mooresville East

Physiographic Region:New Castle Till PlainsTownship:T13NEcoregion:Eastern Corn Belt PlainsRange:R2ENatural Region:Tipton Till PlainSection:34

Size of wetland complex (acres): 0.0305 Quarter: NE

USACE JurisdictionYesLatitude:39.527458IDEM Jurisdiction:YesLongitude:-86.289808

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Scrub-Carr	Scrub-Carr PSS 0.0305 fair	0.0305	fair			Alt C1	0.03	100.0%
							Alt C2	0.03	100.0%
S6W077A					fair	fair	poor	fair	Alt C3
						Alt C4	0.03	100.0%	
						RPA	0.03	100.0%	



Polygon S6W077A



Polygon S6W077A

In-WRAP Summary Sheet

Date Report Generate	d: Friday, September 15, 2017			
Wetland Site Name:	N/A			
Data Reference #: S6\	W077			
Date of Site Visit: Mo	onday, August 31, 2015			
Tier 1 Summary:				
a. Total Wetland A	rea (acres): 0.0305			
b. Wetland size ar	nd connectivity - contribution to animal habita	at:		
	Valuable Mor	re Favorable	Favorable	Neutral
c. Surrounding lan	nd use - numerical rank (max. = 1): 0.63			
d. Value surround	ing area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY	:	Polyg	gon ID S	6W077A
a. Indiana Wetlan	d community type: Shrub-Carr			
b. Standing water	- contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to	site: ditches road/railroad culvert			
d. Exotic species r	ating:	Good	Medium	Poor
e. Special Hydrolo	gic Conditions Observed: None			
f. Special Commu	nity Type: None			
g. Rare-Threatene	ed-Endangered Species: None			
h. Polygon Quality	/ Descriptor:	Good	Medium	Poor
Tier 3A SUMMAR	Y:			
a: Dead woody ma	aterial as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality p	protection - numerical rank (6 max.):3	Good	Medium	Poor
c. Flood and storn	n water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMMAR	Y:			
a. Zonation and in	iterspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as	s indicator of animal habitat:	Valuable	ı '	Neutral
c. Number of dom	ninant plant taxa observed: 4	Good	Medium	Poor
d. Average coeffic	ient of conservatism: 1.5	Good	Medium	Poor
_	indicator of animal habitat:	Valuable	ı '	Neutral
f. Mature trees as	indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophy	tic taxa observed: 8	Good	Medium	Poor
h. Number of indi	cator taxa: 0	Good	Medium	Poor

0 Agricultural - pasture

Recreation - green space, mowed

Tier 1: Assessment Overview 1.1 Site Identification: Wetland Site Name: N/A Ownership (if known): N/A USGS Topographic Quadrangle: Mooresville East USGS Watershed map 14-Digit HUC: White River - Sinking Creek Identify each NWI Polygon within the Wetland Site (Polygon specific data) NWI Polygon ID Number **Cowardin Classification** Polygon Size (acres) S6W077A PSS1 0.0305 1.2 Site Visit Team Members: R. Hook, R. Connolly, C. Meador Agency: HNTB Date assessed: 8/31/2015 Time assessed: Weather conditions: Note any unusual weahter events that may have influenced the current conditions within this wetland system (e.g. recent heav rains, an unusually dry season, an especially early spring etc.) 1.3 Wetland Size Size of site under assessment: 0.0305 Size of wetland complex: 0.0305 1.4 Site Setting Degree of isolation from other wetlands or wetland complexes: The site is connected upstream and downstream with other wetlands The site is only connected upstrrem with other wetlands The site is only connected downstream with other wetlands ✓ Other wetlands are nearby (within 0.25 mile) but not connected The wetland site is isolated General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type): 10 Road / highway / railroad bed / parking lot 50 Native Vegetation - woodland 0 Industrial O Native Vegetation - old field / scrub 0 Agricultural - tilled 10 Residential - single family

30

Commercial or multifamily residential

NWI Polygon # S6W077A	Data Reference# S6W077
see table on page one)	
Tier 2: Individual Polygon: Preliminary at to be completted on-site for each NWI polygon pres	
.1 Wetland Geomorphic Setting and Surface Wate	r Flow (check one):
✓ Depressional Slope Floor Riverine (within the river/stream banks)	odplainLacustrine
2.2 Presence of Standing Water:	
s standing water normally present in the polygon?	Yes
Is standing water is present, is the water greate	er than 2 meters n depth? No
s standing water normally present in an adjacent po	olygon? Yes
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom present	tArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mineral	Both Mineral and Organic Present
.5 Wetland Community Type for this NWI polygon hrub-Carr .6 Disturbances of Hydrology (check all that apply)	
✓ Ditching	√ Culvert
Tiles	Other Human Distrubances to
Tiles Dams	the
Road or Railroad Embankment	tile
.7 Presence of Invasive Exotics (Score as: S = Scatte	ered. F = Frequent. or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	F Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. slone	seeps, wet slopes, floating mat):
9 Presence of Special Community Types	
	Mot Cond / Much Flata an Maril Cons
.9 Presence of Special Community Types:BogFen	_Wet Sand / Muck Flats or Marl Seeps
BogFenFenBogFenThr	
Bog Fen 10 Presence of Known Federal or Indiana Rar, Thr ✓ None observed or known to be presen	
Bog Fen .10 Presence of Known Federal or Indiana Rar, Thr	
10 Presence of Known Federal or Indiana Rar, Thr ✓ None observed or known to be presen	reatened or Endangered Species:

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

38	a.1 I	Notal	ble Features that influence water quality and hydrology:				
Es	Estimated herbaceouis plant cover (percentage) in the polygon100-7550-25<2						
Estimated woody plant foliar coverage in the polygon100-7575-5050-25 <2							
Ar	moui	nt of	dead woody material on the soil surface 🗸 nilscatteredfrequen				
38	a.2 \	Wate	r Quality Protection Questions:				
1.	Y) N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?				
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?				
3.	Y	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient? 				
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?				
5.	Y) N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?				
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.				
			width of buffer area (in meter0 approximate slope (percen0				
38	a.3 F	Flood	d and Stormwater Storage / Attenuation Questions:				
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b				
٠.	Y) N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?				
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?				
2.	Y) N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?				
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?				
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?				
5.	Y) N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?				

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? Yes Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Leersia oryzoides f. Dominant Shrub Species listed in order of relative abundance. a. Lonicera X bella Dominant Tree Species listed in order of relative abundance. a. Platanus occidentalis d._____ b. Salix sp. Tree and shrub canopy: nil separate, seldom touching fiten touching more or less close Mature trees (>12" dbh): yes ☐ no

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

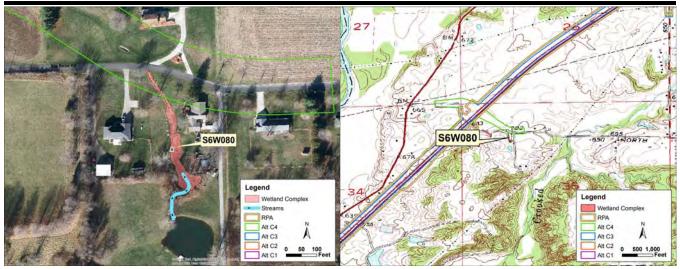
NWI Polygon # S6W077A	Data Reference# S6W077					
3b.2 Dominant Plant Species: Vegetation Zone B						
What % of the polygon does this vegetative zone occur	py?					
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%					
Is there notable layering/stratification in this vegetation	zone?					
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex						
a	d					
b	e					
C	f					
Dominant Shrub Species listed in order of relative abu						
a	C					
b	d					
Dominant Tree Species listed in order of relative abundance	dance.					
a	c					
b	d					
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close					
Mature trees (>12" dbh): yes no						
Other remarks (include personal comments about what wetland site).	it adds to or detracts from the quality of this					
3b.2 Dominant Plant Species: Vegetation Zone C						
What % of the polygon does this vegetative zone occur	py?					
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%					
Is there notable layering/stratification in this vegetation	zone?					
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).						
a	d					
b	e					
C	f					
Dominant Shrub Species listed in order of relative abundance.						
a	c					
b	d					
Dominant Tree Species listed in order of relative abundance	dance.					
a	c					
b	d					
Tree and shrub canopy: nil separate, seldom						
Mature trees (>12" dbh): yes no						
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this					

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osm sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floating *bladderwort sp coontail (Cerato	ng rush spp. (Equisetum) 2 niled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 nunda regalils) 8 Dnoclea sensibilis) 4 (if known as (Selaginella apoda) 4 as spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 aphyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (F*skunk cabbage*water arum (Cawater plantain (A) Herbs: dicots - lvs*bedstraw sppbeggar's tick sp	d monocots eltandra virginica) 6 . (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 s. opposite/whorled (Gallium) 6 p. (Bidens) 3
duckweed spp.	•		erbena hastata) 3
	. (Potamogeton) 8 eed (Potamogeton crispus) 0		orium perfoliatum) 4
	eed (Polamogelon chspus) o phaea tuberosa) 6	clearweed spp.	
	asenia schreberi) 4		ium perfoliatum) 4
	ock spp. (Nuphar) 6		ehmeria cylindrica) 3
your opationa	con opp. (Haphai) c		dicularis lanceolata) 6
Herbs: Ivs. floating	a or submeraent		Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)		Ambrosia trifida) 0
*sundew spp. (E	Drosera) 10		oocynum cannabinum) 2
		Joe-pye weed s	pp. (Eupatorium) 5
Herbs: linear-lvs.	or +/- leafless monocots	*loosestrife spp.	. (Lysimachia) 6
	(Rhynchospora) 10		(Rhexia virginica) 5
blueflag iris (Iris			edge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		imachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
cat-tail spp. (Typ	•	nettle (Urtica pro	•
	pp. (Eriophorum) 10		fe (Lythrum salicaria) 0
number of species	amineae) - indicate types and		nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8
·	zania aquatica) 10	sunflower sp. (F	, , , , ,
	perennial grass spp. 4:		rife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
c. introduced gr	rass spp. 0:reed canary	*turtlehead spp.	
grass (Phalaris,	reed (Phragmites),	virgin's bower (0	Clematis virginiana) 3
	such as annual foxtail	water purslane ((Ludwigia palustris) 3
(Setaria) and ba	arnyard grass (Echinochloa)	winged loosestr	ife (Lythrum alatum) 5
*additional =			ots - Ivs. alternate or basal and
nutsedge spp. (ower (Campanula americana) 4
	species (if know		ster (Aser puniceus) 7
rush spp. (Junc	•		r (Aster umbellatus) 8
sedge spp. (Car			(e.g. New England, panicled ast
	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
sweet flag (Aco	Dulichium arundinaceum) 10	cress spp. (Card	(Lobelia cardinalis) 4
	lium mariscoides) 10		np, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		Alliaria petiolata) 0
	amassia scilloides) 5	`	(Senecio aureus) 4
	ass (Xyris torta) 9		(==:::000)

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) ✓ *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 ✓ poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 ✓ spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus nigra) 7 ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white ✓*pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 ✓ sycamore, American (Platanus occidentalis) 3 ✓ willow spp. (Salix) 1 sp. = 3

Wetland S6W080



Wetland Location on 2015 Aerial Photograph

Size of wetland complex (acres): 0.1984

Wetland Location on Mooresville East USGS Quadra

NW

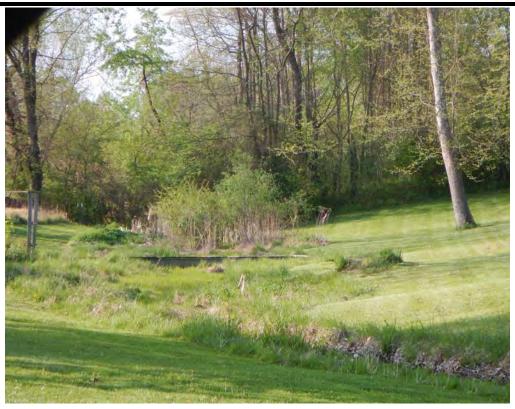
Basin: White River - Sinking Creek Quadrangle: Mooresville East

Physiographic Region:New Castle Till PlainsTownship:T13NEcoregion:Eastern Corn Belt PlainsRange:R2ENatural Region:Tipton Till PlainSection:35

USACE JurisdictionYesLatitude:39.527706IDEM Jurisdiction:YesLongitude:-86.283715

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
S6W080A	Scrub-Carr	PSS	0.1984	fair	poor	fair	Alt C1	0.02	8.8%
							Alt C2	0.02	8.8%
							Alt C3	0.02	8.8%
							Alt C4	0.02	8.8%
							RPA	0.00	0.0%

Quarter:



Polygon S6W080A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W080			
Date of Site Visit:	Monday, August 31, 2015			
Tier 1 Summar	·y:			
a. Total Wetlar	nd Area (acres): 0.1984			
b. Wetland siz	e and connectivity - contribution to animal habita	at:		
	Valuable Moi	re Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1):0.63			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	gon ID	6W080A
a. Indiana We	tland community type: Shrub-Carr			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	s to site: road/railroad culvert other			
d. Exotic speci	es rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	ened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	ARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quali	ity protection - numerical rank (6 max.):4_	Good	Medium	Poor
c. Flood and st	torm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMM	ARY:			
a. Zonation an	d interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratificatio	n as indicator of animal habitat:	Valuable	İ	Neutral
c. Number of	dominant plant taxa observed: 7	Good	Medium	Poor
d. Average coe	efficient of conservatism: 3.3	Good	Medium	Poor
e. Tree canopy	y as indicator of animal habitat:	Valuable		Neutral
f. Mature tree	s as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed:8	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

75 Recreation - green space, mowed

Tier 1: Assessment Of 1.1 Site Identification:	verview				
Wetland Site Name: N/A					
Ownership (if known): N/A					
USGS Topographic Quadrang	gle: Mooresville East	t			
USGS Watershed map 14-Dig	git HUC: White River	r - Sinki	ing Creek		
Identify each NWI Polygon w	vithin the Wetland Si	te (Poly	ygon specific data)		
NWI Polygon ID Number	Cowardin Classifica	ation	Polygon Size (acres)		
S6W080A	PSS1		0.1984		
1.2 Site Visit					
Team Members: R. Hook, R	. Connolly, C. Meado	r (origi	nally JFNew)		
Agency: HNTB					
Date assessed: <u>8/31/2015</u>		Time as	sessed:		
Weather conditions:					
Note any unusual weahter e system (e.g. recent heay rain					
1.3 Wetland Size					
Size of site under assessmen	it: 0.1984				
Size of wetland complex: ().1984				
1.4 Site Setting					
Degree of isolation from oth	er wetlands or wetla	nd con	nplexes:		
•			· ream with other wetlands		
	nnected upstrrem w				
<u> </u>	nnected downstrear				
			e) but not connected		
The wetland site is isolated					
General assessment of adjacthe wetland site (indicate th				f the perimeter of	
0 Native Vegetation	- woodland	0	Road / highway / railroad	d bed / parking lot	
0 Native Vegetation	- old field / scrub	0	Industrial	-	
0 Agricultural - tilled	_ _	25	Residential - single family	/	
0 Agricultural - past	ure _	0	Commercial or multifami	ly residential	

NWI Polygon # S6W080A	Data Reference# S6W080
see table on page one)	
ier 2: Individual Polygon: Preliminary to be completted on-site for each NWI polygon pre	
.1 Wetland Geomorphic Setting and Surface Wate	er Flow (check one):
DepressionalSlope✓_Flo- Riverine (within the river/stream banks)	· · · · · · · · · · · · · · · · · · ·
.2 Presence of Standing Water:	
standing water normally present in the polygon?	Yes
Is standing water is present, is the water great	er than 2 meters n depth? No
standing water normally present in an adjacent po	olygon? Yes
3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom presen	ntArtificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Minera	IBoth Mineral and Organic Present
.5 Wetland Community Type for this NWI polygor hrub-Carr	າ (see Key to Wetland Communities of Indiana):
mas can	
.6 Disturbances of Hydrology (check all that apply	<i>y</i>):
Ditching	✓ Culvert
Tiles	✓ Other Human Distrubances to
Dams	the
✓ Road or Railroad Embankment	
7 Presence of Invasive Exotics (Score as: S = Scatt	tered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	C Other (list):
8 Presence of Special Hydrologic Conditions (i.e.	seeps, wet slopes, floating mat):
one	
9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
10 Presence of Known Federal or Indiana Rar, Th	reatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: We	tland Quality Descriptions and check one):
Good √ Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a.	1 N	lotal	ole Features that influence water quality and hydrology:					
Est	ima	ited h	nerbaceouis plant cover (percentage) in the polygon100-75 💉 75-5050-25<25					
Est	ima	ited v	woody plant foliar coverage in the polygon100-7575-5050-25<25					
Am	our	nt of	dead woody material on the soil surfacenilscatteredfrequen					
3a.:	2 V	Vate	r Quality Protection Questions:					
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?					
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?					
3.	Y (Y)	(N) N	materials before teh water reaches the center of the wetland?					
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?					
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?					
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.					
			width of buffer area (in meter0 approximate slope (percen0					
3a.:	3 F	lood	I and Stormwater Storage / Attenuation Questions:					
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b					
	Υ	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)					
,	Y	N	that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?					
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?					
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?					
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?					
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?					

Mature trees (>12" dbh): yes

Tier 3b Individual Polygon: Rapid Vegetation Description

Tiel 30 ilidividual Folygoli. Kapid ve	getation Description
3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this	wetland polygon?1
1b. If only one vegetation zone is evident, wh	nich best describes the site?
Polygon compoosed of amosaid heterogeneous textures across	of small vegetation patches, hummocks, or tussocks, the polygon.
Polygon composed of a single very the polygon.	regettation type with more or less uniform texture across
2. If more than one vegetation zone is present in represents the distribuion of these zone?	n the polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zo	one A
What % of the polygon does this vegetative zone	e occupy?
☐ 10 - 25% ☐ 25 - 50%	50 - 75% □ 75 - 90% ■ >90%
Is there notable layering/stratification in this vege	etation zone? Yes
Dominant Herbaceous Species (i.e., covering mabundance. (Mark with an * any species that for	ore than 10% of the area) listed in order of relative rms extensive monocultural patches).
a. Impatiens capensis	_ d
b. Leersia oryzoides	e
C	f
Dominant Shrub Species listed in order of relativa. Sambucus nigra	
	_
b. Lonicera X bella	_ d
Dominant Tree Species listed in order of relative	abundance.
a. <u>Cornus amomum</u>	c. <u>Salix nigra</u>
b. Celtis occidentalis	_ d
Tree and shrub canopy: nil separate, se	eldom touching often touching more or less close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

no

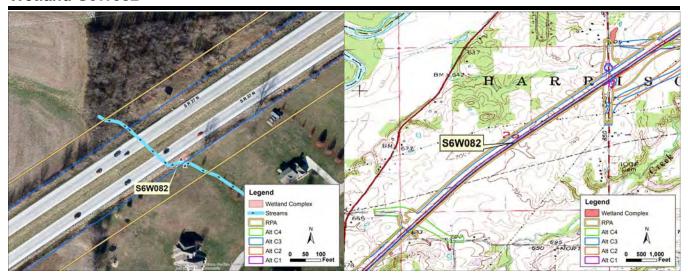
NWI Polygon # S6W080A	Data Referen	ce# S6W080	
3b.2 Dominant Plant Species: Vegetation Zone	3		
What % of the polygon does this vegetative zone occ	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50) - 75%	<u> </u>	Section >90%
Is there notable layering/stratification in this vegetation	on zone?		
Dominant Herbaceous Species (i.e., covering more tabundance. (Mark with an * any species that forms			relative
a	d		
b	e		
C	f.		
Dominant Shrub Species listed in order of relative ab			
a	C		
b	d.		
Dominant Tree Species listed in order of relative abu			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seldor			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about w wetland site).	nat adds to or de	tracts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone			
What % of the polygon does this vegetative zone occ	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	on zone?		
Dominant Herbaceous Species (i.e., covering more tabundance. (Mark with an * any species that forms	han 10% of the a	area) listed in order of ultural patches).	relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative ab			
a			
b			
Dominant Tree Species listed in order of relative abu			
a			
b			
Tree and shrub canopy: nil separate, seldor			
Mature trees (>12" dbh): yes no	. todoming of	totodorining illoit	0 01 1000 01000
Other remarks (include personal comments about w	nat adds to or de	tracts from the quality	of this

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed	olants	Herbs: wide-leafe	d monocots
horsetail, scouri	ing rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6
*ferns: marsh sl	hiled fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4
*cinnamon fern	(Osmunda cinnamomea) 9	*green dragon	(Arisaema dracontium) 6
*royal fern (Osn	nunda regalils) 8	Jack-in-the-pul	pit (Arisaema triphyllum) 4
sensitive fern (C	Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species	(if known	*skunk cabbage	e (Symplocarpus foetidus) 8
marsh club mos	ss (Selaginella apoda) 4	*water arum (C	alla palustris) 10
Sphagnum mos	ss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floatin	a or submergent	Herbs: dicots - lv	s. opposite/whorled
	p. (Utricularia) 10	*bedstraw spp.	
	phyllum demersum) 1	beggar's tick sp	•
duckweed spp.			erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	eed (Potamogeton crispus) 0	` ` `	·
	phaea tuberosa) 6	✓ clearweed spp.	
	asenia schreberi) 4		nium perfoliatum) 4
	lock spp. (Nuphar) 6		ehmeria cylindrica) 3
yellow spatterd	lock spp. (Nuprial) 6		edicularis lanceolata) 6
Harbar Iva floatin	a ar aubmaraant		•
Herbs: Ivs. floatin	g or submergent Sarracenia purpurea (10)		Gentiana Gentianopsis) 8
	,		(Ambrosia trifida) 0
*sundew spp. ([Dioseia) io		pocynum cannabinum) 2
Hankar Busan kia	an de la aflaca managasta		spp. (Eupatorium) 5
	or +/- leafless monocots		o. (Lysimachia) 6
	(Rhynchospora) 10		y (Rhexia virginica) 5
blueflag iris (Iris			edge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
cat-tail spp. (Ty		nettle (Urtica pr	·
	op. (Eriophorum) 10		fe (Lythrum salicaria) 0
	amineae) - indicate types and		insonia canadensis) 8
number of species			spp. (Hypericum/Triandeum) 8
	zania aquatica) 10	sunflower sp. (I	
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
	rass spp. 0:reed canary	*turtlehead spp	,
	reed (Phragmites),		Clematis virginiana) 3
	such as annual foxtail arnyard grass (Echinochloa)		(Ludwigia palustris) 3
` ,	, , ,	winged loosesti	rife (Lythrum alatum) 5
	pp. (Eleocharis) 1 sp. =2		
*additional =			ots - Ivs. alternate or basal and
nutsedge spp. (• •		ower (Campanula americana) 4
	species (if know		aster (Aser puniceus) 7
rush spp. (Junc	,		er (Aster umbellatus) 8
sedge spp. (Ca			. (e.g. New England, panicled ast
	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
sweet flag (Aco			(Lobelia cardinalis) 4
	Dulichium arundinaceum) 10	cress spp. (Car	•
	lium mariscoides) 10		mp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0
`	amassia scilloides) 5	golden ragwort	(Senecio aureus) 4
*yellow-eyed gra	ass (Xyris torta) 9		

*cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 *Trees - leaves needle shaped *tamarack (Larix laricina) 10 *Trees - leaves compound *ash, piech (Fraxinus pensylvanica) 3 *ash, piech (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 *Trees - leaves simple and opposite red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1 *Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 √ hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 sycamore, American (Platanus occidentalis) 3 ✓ willow spp. (Salix) 1 sp. = 3 additional sp. = 7



Wetland Location on 2015 Aerial Photograph

Wetland Location on Mooresville East USGS Quadra

Basin: White River - Sinking Creek Quadrangle: Mooresville East

14-digit HUC:05120201140040County:MorganPhysiographic Region:New Castle Till PlainsTownship:T13NEcoregion:Eastern Corn Belt PlainsRange:R2E

Natural Region:Tipton Till PlainSection:26Size of wetland complex (acres):0.0240Quarter:SE

USACE JurisdictionYesLatitude:39.536903IDEM Jurisdiction:YesLongitude:-86.277928

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Wet Meadow	PEM 0.0240	0.0240	poor	poor	fair	Alt C1	0.02	100.0%
							Alt C2	0.02	100.0%
S6W082A							Alt C3	0.02	81.2%
							Alt C4	0.02	100.0%
							RPA	0.02	100.0%



Polygon S6W082A



Polygon S6W082A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W082			
Date of Site Visit: Wednesday, October 21, 2015			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.0240			
b. Wetland size and connectivity - contribution to animal h	nabitat:		
Valuable	More Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1): 0.3	32		
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID	6W082A
a. Indiana Wetland community type: Wet Meadow			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: road/railroad			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):3	Good Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma	2 Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habita	nt: Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 2	Good	Medium	Poor
d. Average coefficient of conservatism: 0	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed: 4	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type):

- 0
 Native Vegetation woodland
 20
 Road / highway / railroad bed / parking lot

 0
 Native Vegetation old field / scrub
 0
 Industrial

 0
 Agricultural tilled
 80
 Residential single family
- 0 Agricultural pasture 0 Commercial or multifamily residential
- 0 Recreation green space, mowed

	Polygon # S6W0 able on page one		Data R	eference# S6W082
		l Polygon: Preli		
2.1 W	etland Geomor _l	phic Setting and Surf	face Water Flow (c	heck one):
✓	Depressional Riverine (wit	ISlope hin the river/stream	Floodplain m banks)	Lacustrine
2.2 Pr	esence of Stand	ling Water:		
s star	nding water norr	mally present in the p	oolygon? Yes	
	_	r is present, is the wa	•	meters n depth? No
star	nding water norr	mally present in an a	djacent polygon?	Yes
.3 Ap	parent Hydrop	eriod (check one):		
	Permanently	/ Flooded		Artificially Flooded
\checkmark	Seasonally Fl			
	Saturated (su	urface water seldor	n present	Artificailly Drained
.4 So	il Type			
	Organic (i.e.	peat, etc.)	Mineral	_Both Mineral and Organic Present
	etland Commur ⁄leadow	nity Type for this NW	/I polygon (see Key	to Wetland Communities of Indiana):
2.6 Di	sturbances of H	ydrology (check all t	hat apply):	
	Ditching			Culvert
	Tiles			Other Human Distrubances to
	Dams			the
√	Road or Railr	road Embankment		
.7 Pr	esence of Invasi	ive Exotics (Score as	: S = Scattered, F =	Frequent, or C = Common):
	Garlic Musta	rd		Glossy Buckthorn
	 Phragmities			Reed Canary Grass
	Purple Loose	estrife		Other (list):
	esence of Specia	al Hydrologic Condit	ions (i.e. seeps, we	et slopes, floating mat):
None				
.9 Pr	esence of Specia	al Community Types	:	
	Bog	Fen	Wet Sa	and / Muck Flats or Marl Seeps
.10 P	Presence of Know	wn Federal or Indian	a Rar, Threatened	or Endangered Species:
\checkmark	None observ	ed or known to be	presen	
		t (list):	•	
11 V				ality Descriptions and check one):
	Good	√ Medium	Poor	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 N	Notak	ole Features that influence water quality and hydrology:					
Es	Estimated herbaceouis plant cover (percentage) in the polygon √ 100-7575-5050-25<25							
Es	Estimated woody plant foliar coverage in the polygon100-7575-5050-25<25							
			dead woody material on the soil surface nilscatteredfrequent					
3а	.2 V	Vate	Quality Protection Questions:					
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?					
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?					
3.	(Υ)	If wetland in question is a depressional wetland answer 3a, in not, answer 3b.						
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?					
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?					
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.					
			width of buffer area (in meter0 approximate slope (percen0					
3a	.3 F	lood	and Stormwater Storage / Attenuation Questions:					
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b					
1.	Υ	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)					
	Y	N	that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?					
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?					
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?					
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?					
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?					

Tier 3b Individual Polygon: Rapid Vegetation Description 3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Phalaris arundinacea b. Setaria faberi f. Dominant Shrub Species listed in order of relative abundance.

Dominant Tree Species listed in order of relative abundance.

C. _____

d. ____ Tree and shrub canopy: nil separate, seldom touching often touching more or less close

Mature trees (>12" dbh): yes

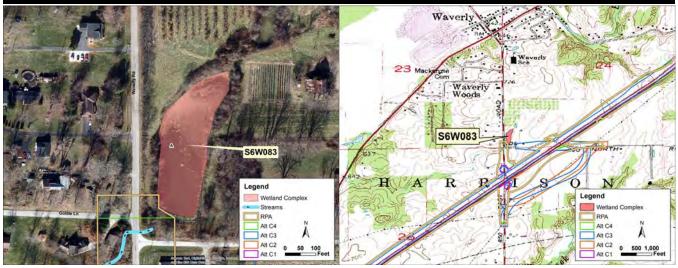
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W082A	Data Reference# S6W082
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more the abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed particles in the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the con	ing rush spp. (Equisetum) 2 hiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 hunda regalils) 8 Dnoclea sensibilis) 4 (if known is (Selaginella apoda) 4 is spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 ophyllum demersum) 1	Herbs: wide-leafed*arrow arum (Pelarrow-head spp*green dragon (AJack-in-the-pulpipickerel weed (P*skunk cabbage*water arum (Calwater plantain (A Herbs: dicots - Ivs*bedstraw spp. (6beggar's tick spp	Itandra virginica) 6 (Sagittaria) 4 Arisaema dracontium) 6 It (Arisaema triphyllum) 4 Iontederia cordata) 5 (Symplocarpus foetidus) 8 Ila palustris) 10 Ilisma plantago-aquatica) 2 I opposite/whorled Gallium) 6 Ididens) 3
duckweed spp.	•	blue vervain (Ber	•
curlyleaf pondw *water lily (Nym water shield (Br	. (Potamogeton) 8 eed (Potamogeton crispus) 0 phaea tuberosa) 6 asenia schreberi) 4 lock spp. (Nuphar) 6	bugleweed spp. (clearweed spp. (cup plant (Silphiu false nettle (Boel	Pilea) 3 um perfoliatum) 4 hmeria cylindrica) 3
*sundew spp. ([Sarracenia purpurea (10) Orosera) 10	*gentian spp. (Gegiant ragweed (A	licularis lanceolata) 6 entiana Gentianopsis) 8 Ambrosia trifida) 0 ocynum cannabinum) 2 op. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9	mint spp. e.g. he moneywort (Lysii monkey flower specifical nettle (Urtica pro	(Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 machia nummularia) 0 pp. (Mimulus) 4
Grasses (family Granumber of species a. *wild rice (Zizeb. most natuve cut-grass, many foxtail (Alopecrus)c. introduced grass (Phalaris, annual grasses	zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint, us); other rass spp. 0:reed canary reed (Phragmites), such as annual foxtail	*richweed (Collin St. John's wort specific sunflower sp. (Head sympole) *swamp loosestreswamp milkweed toothcup spp. (Augustus) *turtlehead spp. (Virgin's bower (Collin)	nsonia canadensis) 8 pp. (Hypericum/Triandeum) 8 elianthus) 4 rife (Decodon verticillatus) 8 d (Asclepias incarnata) 4 mmania Rotala) 2
,		Herbs (vines): dicot	fe (Lythrum alatum) 5 ts - Ivs. alternate or basal and wer (Campanula americana) 4
*orchid spp. 10; rush spp. (Junc sedge spp. (Ca *spiderlily (Hym sweet flag (Aco *3-way sedge (I *twig rush (Clac *umbrella sedge wild hyacinth (C	species (if know us) 4 rex) 1 sp. = 3additional enocallis occidentalis) 9	*asters: bristly as flat-topped aster other aster spp. (*black-eyed Susa cardinal flower (L cress spp. (Card dock spp.: swam garlic mustard (A	ster (Aser puniceus) 7 (Aster umbellatus) 8 (e.g. New England, panicled ast an (Rudbeckia fulgida) 8 Lobelia cardinalis) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
migotom (/ totallomento alternational) o	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	polooii sainao (rinas vernix) 10
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	silver maple (Acci saccinamium) i
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, eastern (Populus deitoides) 1 cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
	ironwood (Carpinus caroliniana) 5
swamp agrimony (Agrimonia parviflora) 4	
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
Olomba da ana anti-ala	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	



Wetland Location on 2015 Aerial Photograph

Wetland Location on Mooresville East USGS Quadra

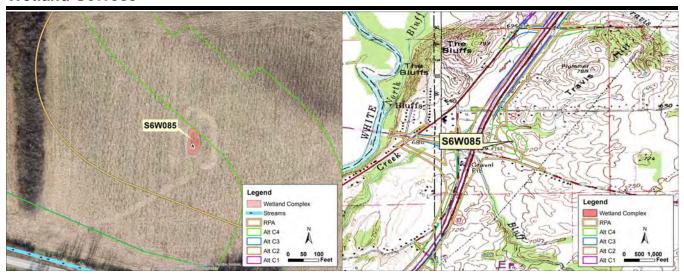
Basin: White River - Sinking Creek Quadrangle: Mooresville East

14-digit HUC:05120201140040County:MorganPhysiographic Region:New Castle Till PlainsTownship:T13NEcoregion:Eastern Corn Belt PlainsRange:R2E

Natural Region:Tipton Till PlainSection:24Size of wetland complex (acres):Quarter:SW

USACE JurisdictionYesLatitude:39.546643IDEM Jurisdiction:YesLongitude:-86.268913

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted												
							Alt C1	0.00	0.0%												
									Alt C2	0.00	0.0%										
S6W083A	Pond	PUB	1.1827	1.1827	1.1827	1.1827	1.1827	no rating	no rating	no rating	no rating	no rating	no rating	no rating	no rating	no rating	no rating	no rating	Alt C3	0.00	0.0%
									Alt C4	0.00	0.0%										
							RPA	0.00	0.2%												



Wetland Location on 2015 Aerial Photograph

Wetland Location on Bargersville USGS Quadrangle

Basin: White River - North Bluff/Bluff Cre Quadrangle: Bargersville

14-digit HUC:05120201140030County:JohnsonPhysiographic Region:New Castle Till PlainsTownship:T13NEcoregion:Eastern Corn Belt PlainsRange:R3E

Natural Region:Tipton Till PlainSection:18Size of wetland complex (acres):0.0538Quarter:SW

USACE JurisdictionNoLatitude:39.566003IDEM Jurisdiction:YesLongitude:-86.243634

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted																					
					Alt C1	0.00	4.3%																							
								Alt C2	0.00	4.3%																				
S6W085A	Wet	PEM	0.0538	0.0538	0.0538	0.0538	0.0538	0.0538	0.0538	0.0538	0.0538	0.0538	0.0538	0.0538	poor	poor	poor	poor	poor	poor	poor	poor	poor	poor	poor	poor	poor	Alt C3	0.00	4.3%
	Meadow					Alt C4	0.00	4.3%																						
							RPA	0.00	0.0%																					



Polygon S6W085A



Polygon S6W085A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W085			
Date of Site Visit: Tuesday, October 20, 2015			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.0538			
b. Wetland size and connectivity - contribution to animal hab	oitat:		
Valuable N	/lore Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1):0.20			
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID	6W085A
a. Indiana Wetland community type: Wet Meadow			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: tiles			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):1	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma	1 Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 2	Good	Medium	Poor
d. Average coefficient of conservatism: 0	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:2	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

0 Residential - single family

Commercial or multifamily residential

O Native Vegetation - old field / scrub O Industrial

100 Agricultural - tilled

0 Agricultural - pasture

O Recreation - green space, mowed

NWI Polygon # S6W085A	Data Reference# S6W085
see table on page one)	
ier 2: Individual Polygon: Preliminal o be completted on-site for each NWI polygon	
.1 Wetland Geomorphic Setting and Surface W	ater Flow (check one):
Depressional ✓ Slope _ I Riverine (within the river/stream ban	·
.2 Presence of Standing Water:	
standing water normally present in the polygon	n? Yes
Is standing water is present, is the water gro	eater than 2 meters n depth? No
standing water normally present in an adjacen	t polygon? Yes
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom pres	sentArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mine	eralBoth Mineral and Organic Present
Net Meadow 2.6 Disturbances of Hydrology (check all that ap	gon (see Key to Wetland Communities of Indiana): oply):
Ditching	Culvert
✓ Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Sc	cattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
 Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.	.e. seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar,	Threatened or Endangered Species:
✓ None observed or known to be prese	n
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: V	Wetland Quality Descriptions and check one):
Good Medium	√ Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 N	Notak	ole Features that influence water quality and hydrology:
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25 _ ✓ <25
An	nour	nt of o	dead woody material on the soil surface nilscatteredfrequent
3а	.2 \	Nate	Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Υ	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0
3a	.3 F	Flood	l and Stormwater Storage / Attenuation Questions:
1			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
1.	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

Ob 4. Zamatian and Intersecutions	•
3b.1 Zonation and Interspersion:	
How may vegetation zones are evident in this we	etland polygon?1
1b. If only one vegetation zone is evident, which	best describes the site?
Polygon compoosed of amosaic of heterogeneous textures across the	f small vegetation patches, hummocks, or tussocks, e polygon.
Polygon composed of a single veg the polygon.	ettation type with more or less uniform texture across
2. If more than one vegetation zone is present in the represents the distribuion of these zone?	ne polygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone	
What % of the polygon does this vegetative zone o	_
10 - 25% 25 - 50%	50 - 75%
Is there notable layering/stratification in this vegeta	tion zone? No
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms	
a. Cyperus esculentus	d
b. Xanthium strumarium	e
C	f
Dominant Shrub Species listed in order of relative a	abundance.
a	C
b	d
Dominant Tree Species listed in order of relative at	
a	C
b	d
	om touching often touching more or less close
Mature trees (>12" dbh): yes no	

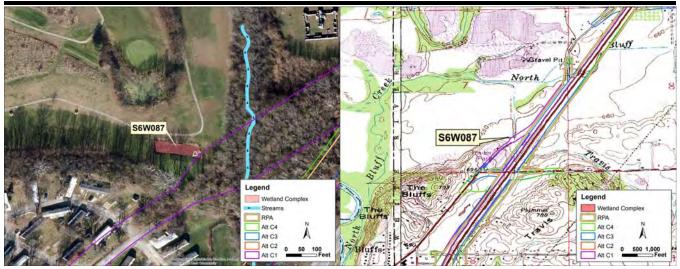
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W085A	Data Reference# S6W085
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom to	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	t adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
c	f
Dominant Shrub Species listed in order of relative abur	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	t adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed	plants	Herbs: wide-leafe	d monocots
horsetail, scour	ing rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6
*ferns: marsh s	hiled fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4
*cinnamon fern	(Osmunda cinnamomea) 9	*green dragon ((Arisaema dracontium) 6
*royal fern (Osn	nunda regalils) 8	Jack-in-the-pulp	oit (Arisaema triphyllum) 4
sensitive fern (C	Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species	(if known	*skunk cabbage	e (Symplocarpus foetidus) 8
marsh club mos	ss (Selaginella apoda) 4	*water arum (C	alla palustris) 10
Sphagnum mos	ss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floatin	a or submergent	Herbs: dicots - lvs	s. opposite/whorled
	pp. (Utricularia) 10	*bedstraw spp.	
	phyllum demersum) 1	beggar's tick sp	•
duckweed spp.			erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	reed (Potamogeton crispus) 0		
	phaea tuberosa) 6	clearweed spp.	` , ,
	asenia schreberi) 4		ium perfoliatum) 4
	lock spp. (Nuphar) 6		ehmeria cylindrica) 3
yollow spattere	iock spp. (Naphar) o		edicularis lanceolata) 6
Herbs: Ivs. floatin	a or submergent		Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)		(Ambrosia trifida) 0
*sundew spp. ([pocynum cannabinum) 2
Suridew Spp. (L	5103C1a) 10		spp. (Eupatorium) 5
Harbe: linear-lye	or +/- leafless monocots		. (Lysimachia) 6
	(Rhynchospora) 10		/ (Rhexia virginica) 5
blueflag iris (Iris			edge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
cat-tail spp. (Ty		nettle (Urtica pr	
	op. (Eriophorum) 10		fe (Lythrum salicaria) 0
	amineae) - indicate types and		insonia canadensis) 8
number of species	armileae) - indicate types and		spp. (Hypericum/Triandeum) 8
•	zania aquatica) 10	sunflower sp. (I	
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
	rass spp. 0:reed canary	turtlehead spp. (/	
	reed (Phragmites),		Clematis virginiana) 3
	such as annual foxtail		(Ludwigia palustris) 3
	arnyard grass (Echinochloa)		rife (Lythrum alatum) 5
` '	pp. (Eleocharis) 1 sp. =2	wiilged ioosesti	ille (Eytillulli alatulli) 3
*additional	, .	Harbs (vines): dice	ots - Ivs. alternate or basal and
✓ nutsedge spp. (ower (Campanula americana) 4
	; species (if know	· · · · · · · · · · · · · · · · · · ·	aster (Aser puniceus) 7
rush spp. (Junc	• •		er (Aster umbellatus) 8
sedge spp. (Ca	•		. (e.g. New England, panicled ast
	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
	•		• • • • • • • • • • • • • • • • • • • •
sweet flag (Aco	•		(Lobelia cardinalis) 4
	Dulichium arundinaceum) 10	cress spp. (Car	•
	dium mariscoides) 10		mp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0
	Camassia scilloides) 5	golden ragwort	(Senecio aureus) 4
yellow-eyed gra	ass (Xyris torta) 9		

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstorii (/totinoriiona alterniiona) o	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	poison sumac (ithus vernix) to
*buttercup spp.: cursed b., hooked b., swamp	Trace leaves simple and appeals
b.(Ranunculus) 6	Trees - leaves simple and opposite
·	red maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1
chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7	Sliver maple (Acer Saccharillum) i
	Trees leaves simple and alternate
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	



Wetland Location on 2015 Aerial Photograph

Wetland Location on Bargersville USGS Quadrangle

Basin: White River - North Bluff/Bluff Cre Quadrangle: Bargersville

14-digit HUC:05120201140030County:JohnsonPhysiographic Region:New Castle Till PlainsTownship:T13N

Ecoregion:Eastern Corn Belt PlainsRange:R3ENatural Region:Tipton Till PlainSection:7Size of wetland complex (acres):0.0912Quarter:SE

USACE Jurisdiction Yes Latitude: 39.579262

IDEM Jurisdiction: Yes Longitude: -86.240291

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted													
							Alt C1	0.00	1.3%													
									Alt C2	0.00	0.0%											
S6W087A	Shallow	PUB	0.0912	0.0912	0.0912	0.0912	poor	poor	poor	poor	poor	poor	poor	poor	poor	poor	poor	poor fair	poor	Alt C3	0.00	0.0%
	Open Water	-					Alt C4	0.00	0.0%													
							RPA	0.00	0.0%													



Polygon S6W086A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017					
Wetland Site Name	e: N/A					
Data Reference #:	S6W087					
Date of Site Visit:	Date of Site Visit: Thursday, July 09, 2015					
Tier 1 Summaı	ry:					
a. Total Wetlar	nd Area (acres): 0.0912					
b. Wetland siz	e and connectivity - contribution to animal habita	nt:				
	Valuable Mor	e Favorable	Favorable	Neutral		
c. Surrounding	g land use - numerical rank (max. = 1): 0.73					
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low		
Tier 2 SUMMA	RY:	Polyg	gon ID S	6W087A		
a. Indiana We	tland community type: Deep Marsh/Shallow Ope	en Water				
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral		
c. Disturbance	es to site: other					
d. Exotic speci	ies rating:	Good	Medium	Poor		
e. Special Hyd	rologic Conditions Observed: None					
f. Special Com	munity Type: None					
g. Rare-Threat	tened-Endangered Species: None					
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor		
Tier 3A SUMM	IARY:					
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral		
b. Water qual	ity protection - numerical rank (6 max.): 1	Good	Medium	Poor		
c. Flood and s	torm water storage - numerical rank (5 ma 2	Good	Medium	Poor		
Tier 3B SUMM	ARY:					
a. Zonation ar	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral		
	on as indicator of animal habitat:	Valuable		Neutral		
c. Number of	dominant plant taxa observed: 5	Good	Medium	Poor		
	efficient of conservatism: 1.6	Good	Medium	Poor		
	y as indicator of animal habitat:	Valuable		Neutral		
•	, es as indicator of animal habitat:	Valuable	Favorable	Neutral		
g. Total hydro	phytic taxa observed: 5	Good	Medium	Poor		
	indicator taxa: 0	Good	Medium	Poor		

 10
 Native Vegetation - woodland
 0
 Road / highway / railroad bed / parking lo

 0
 Native Vegetation - old field / scrub
 0
 Industrial

 0
 Agricultural - tilled
 0
 Residential - single family

 0
 Agricultural - pasture
 0
 Commercial or multifamily residential

90 Recreation - green space, mowed

NWI Polygon # S6W087A	Data Reference# S6W087
see table on page one)	
ier 2: Individual Polygon: Preliminal to be completted on-site for each NWI polygon	
.1 Wetland Geomorphic Setting and Surface W	ater Flow (check one):
✓ Depressional Slope Fiverine (within the river/stream ban	FloodplainLacustrine ks)
.2 Presence of Standing Water:	
standing water normally present in the polygon	n? Yes
Is standing water is present, is the water gre	eater than 2 meters n depth? No
s standing water normally present in an adjacen	t polygon? Yes
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	_ ✓ _Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom pres	sentArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mine	eralBoth Mineral and Organic Present
Deep Marsh/Shallow Open Water 2.6 Disturbances of Hydrology (check all that ap	pply):
Ditching	Culvert
Tiles	✓ Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Sc	cattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
_Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.	.e. seeps, wet slopes, floating mat):
Tone	
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar,	Threatened or Endangered Species:
✓ None observed or known to be prese	n
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: V	Netland Quality Descriptions and check one)
Good Medium	Poor
	<u>- </u>

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 N	Notak	ole Features that influence water quality and hydrology:				
Estimated herbaceouis plant cover (percentage) in the polygon100-7575-50<50-25							
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25 <25				
An	Amount of dead woody material on the soil surface nilscattered frequent						
3a.2 Water Quality Protection Questions:							
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?				
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?				
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.				
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended				
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?				
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?				
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?				
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.				
			width of buffer area (in meter0 approximate slope (percen0				
3a.3 Flood and Stormwater Storage / Attenuation Questions:							
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b				
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?				
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?				
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?				
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?				
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?				
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?				

Tier 3b Individual Polygon: Rapid Vegetation Description

The object of the second				
3b.1 Zonation and Interspersion:				
How may vegetation zones are evident in this wetland polygon?				
1b. If only one vegetation zone is evident, which best describes the site?				
Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. ✓ Polygon composed of a single vegettation type with more or less uniform texture across				
the polygon.	71			
2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone?				
Type One Interspersion	Type Two Interspersion			
3b.2 Dominant Plant Species: Vegetation Zone A				
What % of the polygon does this vegetative zone occup	y?			
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 7	75%			
Is there notable layering/stratification in this vegetation a	zone? No			
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms extended to the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the contro				
a. <i>Typha latifolia</i>	d			
b. Potamogeton sp.	e			
c. Spirodela polyrhiza	f			
Dominant Shrub Species listed in order of relative abun-	dance.			
a	c			
b	d			
Dominant Tree Species listed in order of relative abundance	ance.			
a. Salix interior	C			
b. Acer saccharinum	d			
Tree and shrub canopy: nil separate, seldom to				
Mature trees (>12" dbh): ☐ yes ■ no				

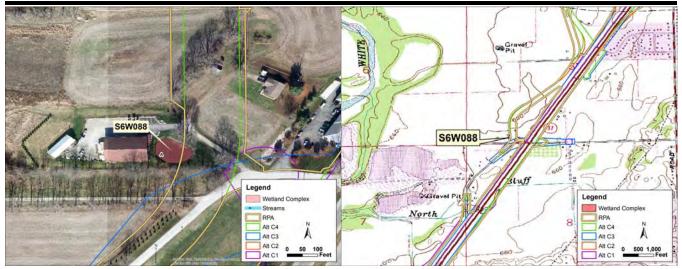
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W087A	Data Reference# S6W087				
3b.2 Dominant Plant Species: Vegetation Zone B					
What % of the polygon does this vegetative zone occur	py?				
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%				
Is there notable layering/stratification in this vegetation	zone?				
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex					
a	d				
b	e				
C	f				
Dominant Shrub Species listed in order of relative abur	ndance.				
a	C				
b	d				
Dominant Tree Species listed in order of relative abundance	dance.				
a	c				
b	d				
Tree and shrub canopy: nil separate, seldom to	touching often touching more or less close				
Mature trees (>12" dbh): yes no					
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).					
3b.2 Dominant Plant Species: Vegetation Zone C					
What % of the polygon does this vegetative zone occu	py?				
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%				
Is there notable layering/stratification in this vegetation	zone?				
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).					
a	d				
b	e				
c	f				
Dominant Shrub Species listed in order of relative abundance.					
a	C				
b	d				
Dominant Tree Species listed in order of relative abundance.					
a	C				
b	d				
Tree and shrub canopy: \square nil \square separate, seldom touching \square often touching \square more or less close					
Mature trees (>12" dbh): yes no					
Other remarks (include personal comments about what wetland site).	t adds to or detracts from the quality of this				

Herbs: non-seed plants horsetail, scouring rush spp. (Equisetum) 2 *ferms: marsh shiled fern spp. (Dryopteris) 7 *cinnamon fern (Osmunda cinnamomea) 9 *royal fern (Osmunda regallis) 8 sensitive fern (Onoclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton or sipsus) 0 *water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other
*ferns: marsh shiled fern spp. (Dryopteris) 7 *cinnamon fern (Osmunda cinnamomea) 9 *royal fern (Osmunda regalils) 8 sensitive fern (Onoclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 Juckies (Potamogeton) 8 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Ceratian) 4 *yellow spatterdock spp. (Sagittaria) 4 *green dragon (Arisaema dracontium) 6 Jack-in-the-pulpit (Arisaema triphyllum) 4 *water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2 #erbs: dicots - Ivs. opposite/whorled *bedgar's tick spp. (Ballium) 6 beggar's tick spp. (Beliann) 6 beggar's tick spp. (Gellium) 6 beggar's tick spp. (Elepatorium perfoliatum) 4 buglewed spp. (Lycopus) 5 clearweed spp. (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trificia) 0 Indian hamp (Apocynum cannahinum) 2 Joe-pye weed spp. (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *frichweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Herbain dracontium) 6 *green dragon (Arisaema dracontum) 6 *water arum (Calla palustris) 10 water plantain (Alisma plantago-aquatica) 2 #bedstraw spp. (Gallium) 6 beggar's tick spp. (Beliens) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mint, mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Hileinthus) 4 nettle (Urtica procera) 1 purple loosestrife (Decodon verticillatus) 8
*cinnamon fern (Osmunda cinnamomea) 9 *royal fern (Osmunda regalilis) 8 sensitive fern (Onclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 ✓ duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 ✓ curlyleaf pondweed (Potamogeton rcispus) 0 *water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-lvs. or +/- leafless monocots *beak rush spp. (Scirpus / Schoenoplectus) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 bulrush spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint,
*royal fern (Osmunda regalils) 8 sensitive fern (Onoclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton orispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint,
sensitive fern (Onoclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 *water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots *beak rush spp. (Rynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint,
*skunk cabbage (Symplocarpus foetidus) 8 marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1
marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent
Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 ✓ duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton crispus) 0 *water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Spraganium) 9 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint,
Herbs: Ivs. floating or submergent *bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 ✓ duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 ✓ curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint,
*bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 ✓ curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 blueflag iris (Iris virginica) 5 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, *bedstraw spp. (Gallium) 6 beggar's tick spp. (Bidens) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 buglewed spp. (Pylea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianoposis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hyleal) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6 *gentian spp. (Eupatorium) 5 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 monekyef flower spp. (Hylea) *Tothweed (Collinsonia canadensis) 8 St. John's wort spp. (Hyleal) *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4
coontail (Ceratophyllum demersum) 1 ✓ duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 ✓ curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 *bulrush spp. (Scirpus / Schoenoplectus) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Eipohorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, beggar's tick spp. (Bidens) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 bugleweed spp. (Lycopus) 5 clearweed spp. (Pilea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4
duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 ✓ curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint,
*pondweed spp. (Potamogeton) 8 ✓ curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Eysimachia) 6 *cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint,
 ✓ curlyleaf pondweed (Potamogeton crispus) 0 _*water lily (Nymphaea tuberosa) 6 _ water shield (Brasenia schreberi) 4 _*yellow spatterdock spp. (Nuphar) 6 _ talse nettle (Boehmeria cylindrica) 3 _ *fen betony (Pedicularis lanceolata) 6 _ *gentian spp. (Gentiana Gentianopsis) 8 _ *gentian spp. (Eupatorium) 5 _ *loosestrife spp. (Lysimachia) 0 _ *loosestrife spp. (Lysimachia) 6 _ *meadow beauty (Rhexia virginica) 5 _ *bulrush spp. (Scirpus / Schoenoplectus) 5 _ *bur reed spp. (Sparganium) 9 _ ✓ cat-tail spp. (Typha) 1 _ *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species _ a. *wild rice (Zizania aquatica) 10 _ b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint,
*water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 *tyellow spatterdock spp. (Nuphar) 6 *ten betony (Pedicularis lanceolata) 6 *tyentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5 *loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4
water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 *yellow spatterdock spp. (Nuphar) 6 *false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 *sundew spp. (Drosera) 10 *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 *cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 *dentation hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4
*yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 *cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, *false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *gentian spp. (Gentiana Gentianopsis) 8 *loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4
*fen betony (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5 Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 *cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, *fen betony (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5 *loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4
*gentian spp. (Gentiana Gentianopsis) 8 *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5 *loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4
*pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-lvs. or +/- leafless monocots _ *beak rush spp (Rhynchospora) 10 _ blueflag iris (Iris virginica) 5 _ bulrush spp. (Scirpus / Schoenoplectus) 5 _ *bur reed spp. (Sparganium) 9 _ *cat-tail spp. (Typha) 1 _ *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species _ a. *wild rice (Zizania aquatica) 10 _ b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5 *loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4
*sundew spp. (Drosera) 10 Herbs: linear-lvs. or +/- leafless monocots _ *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 _ *bur reed spp. (Sparganium) 9
Joe-pye weed spp. (Eupatorium) 5 Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 *cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, Joe-pye weed spp. (Eupatorium) 5 *loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia) 0 moneywort (Lysimachia) 0 moneywort (Lysimachia) 0 moneywort (Lysimachia) 0 moneywort (Lysimachia) 0 moneywort (Lysimachia) 0 moneywort (Lysimachia) 0 *moneywort (Lysimachia) 0 moneywort (Lysimachia) 0 moneywort (Lysimachia) 0 *moneywort (Lysimachia) 0 moneywort (Lysimachia) 0 *moneywort (Lysimachia) 0 moneywort (Lysimachia) 0 *moneywort (Lysimachia) 10 *purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 *swamp loosestrife (Decodon verticillatus) 8 *swamp milkweed (Asclepias incarnata) 4
Herbs: linear-lvs. or +/- leafless monocots *beak rush spp (Rhynchospora) 10 blueflag iris (Iris virginica) 5 bulrush spp. (Scirpus / Schoenoplectus) 5 *bur reed spp. (Sparganium) 9 *cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, **loosestrife spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia) 0 monkey flower spp. (Mimulus) 4 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4
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*cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4
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a. *wild rice (Zizania aquatica) 10 sunflower sp. (Helianthus) 4 b. most natuve perennial grass spp. 4: *swamp loosestrife (Decodon verticillatus) 8 cut-grass, manna-grass, Canada bluepoint, swamp milkweed (Asclepias incarnata) 4
b. most natuve perennial grass spp. 4:
cut-grass, manna-grass, Canada bluepoint, swamp milkweed (Asclepias incarnata) 4
toothoup opp. (Athiniana Rotala) Z
c. introduced grass spp. 0:reed canary *turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtailwater purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa) winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2
*additional = 8 Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3additional = 7other aster spp. (e.g. New England, panicled ast
*spiderlily (Hymenocallis occidentalis) 9*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0cardinal flower (Lobelia cardinalis) 4

*twig rush (Cladium mariscoides) 10dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10garlic mustard (Alliaria petiolata) 0 wild hyacinth (Camassia scilloides) 5golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed,	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10*dwarf birch (Betula pumila) 10*highbush blueberry (Vaccinium corymbosum) 9 _*leatherleaf (Chamaedaphne calyculata) 10meadowsweet and Hardhack spp. (Spiraea) 4*ninebark (Physocarpus opulifoius) 7*shrubby cinquefoil (Potentilla fruticosa) 9spice bush (Lindera benzoin) 5*swamp dewberry (Rubus hispidus) 6 _*swamp holly and winterberry spp. (Ilex) 7swamp rose (Rosa palustris) 5
tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2	Trees - leaves needle shaped*tamarack (Larix laricina) 10 Trees - leaves compound*ash, black (Fraxinus nigra) 7ash, green (Fraxinus pensylvanica) 3 _*ash, pumpkin (Fraxinus tomentosa) 8boxelder (Acer negundo) 1hickory, bitternut (Carya cordiformis) 5hickory, shellbark (Carya laciniosa) 8honey locust (Gleditsia triacanthos) 1*poison sumac (Rhus vernix) 10
*buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6	Trees - leaves simple and opposite red maple (Acer rubrum) 5 ✓ silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 _*oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 _*sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 sycamore, American (Platanus occidentalis) 3 ✓ willow spp. (Salix) 1 sp. = 3
bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwwod, red-osier (Cornus stolonifera) 4 *dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2 elderberry (Sambucus) 2	additional sp. = 7



Wetland Location on 2015 Aerial Photograph

Wetland Location on Bargersville USGS Quadrangle

Basin:White River - North Bluff/Bluff CreQuadrangle:Bargersville14-digit HUC:05120201140030County:JohnsonPhysiographic Region: New Castle Till PlainsTownship:T13N

Ecoregion:Eastern Corn Belt PlainsRange:R3ENatural Region:Tipton Till PlainSection:5Size of wetland complex (acres):Quarter:SW

USACE JurisdictionYesLatitude:39.591471IDEM Jurisdiction:YesLongitude:-86.231129

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted				
		Pond PUB 0.1252 no rating no rating n									Alt C1	0.00	0.0%
							Alt C2	0.02	18.5%				
S6W088A	Pond		no rating	Alt C3	0.00	0.0%							
			Alt C4	0.02	18.3%								
			ı				RPA	0.02	18.4%				



Polygon S6W088A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Bargersville USGS Quadrangle

Basin: Honey Creek -Turkey Pen Creek Quadrangle: Bargersville

Physiographic Region:New Castle Till PlainsTownship:T14NEcoregion:Eastern Corn Belt PlainsRange:R3ENatural Region:Tipton Till PlainSection:32

Size of wetland complex (acres): 0.8390 Quarter: SE

USACE JurisdictionYesLatitude:39.608893IDEM Jurisdiction:YesLongitude:-86.217592

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted															
							Alt C1	0.00	0.0%															
			0.1729		poor		Alt C2	0.00	0.0%															
S6W089A	Wet	PEM		fair poor fa		fair	Alt C3	0.00	0.0%															
	Meadow								Alt C4	0.00	0.0%													
						RPA	0.00	2.0%																
						Alt C1	0.00	0.0%																
		ub-Carr PSS 0.0678 fair poo			Alt C2	0.00	0.0%																	
S6W089B	Scrub-Carr		0.0678	fair	poor	fair	Alt C3	0.00	0.0%															
																						Alt C4	0.00	0.0%
							RPA	0.00	0.0%															
							Alt C1	0.22	37.2%															
						fair	Alt C2	0.01	1.4%															
S6W089C	Shallow	PUB	0.5983	poor	poor		Alt C3	0.01	1.4%															
	Open Water						Alt C4	0.22	37.2%															
							RPA	0.58	96.5%															



Polygon S6W089A



Polygon S6W089A



Polygon S6W089C

In-WRAP Summary Sheet

Date Report Generated: Friday, Septem	ber 15, 2017			
Wetland Site Name: N/A				
Data Reference #: S6W089				
Date of Site Visit: Thursday, July 09, 20	15			
Tier 1 Summary:				
a. Total Wetland Area (acres): 0.839	90			
b. Wetland size and connectivity - co	ontribution to animal h	nabitat:		
	Valuable	More Favorable	Favorable	Neutral
c. Surrounding land use - numerical	rank (max. = 1): 0.4	12		
d. Value surrounding area adds to a	nimal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:		Polyg	on ID	6W089A
a. Indiana Wetland community type	e: Wet Meadow			
b. Standing water - contribution to a	animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: other				
d. Exotic species rating:		Good	Medium	Poor
e. Special Hydrologic Conditions Ob	served: None			
f. Special Community Type: None				
g. Rare-Threatened-Endangered Spe	ecies: None			
h. Polygon Quality Descriptor:		Good	Medium	Poor
Tier 3A SUMMARY:				
a: Dead woody material as indicator	of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numer	ical rank (6 max.):3	Good	Medium	Poor
c. Flood and storm water storage - r	numerical rank (5 ma	1 Good	Medium	Poor
Tier 3B SUMMARY:				
a. Zonation and interspersion as ind	icator of animal habita	at: Valuable	Favorable	Neutral
b. Stratification as indicator of anim		Valuable		Neutral
c. Number of dominant plant taxa o	bserved: 5	Good	Medium	Poor
d. Average coefficient of conservation	sm: 1.2	Good	Medium	Poor
e. Tree canopy as indicator of anima	al habitat:	Valuable		Neutral
f. Mature trees as indicator of anima	al habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:	5	Good	Medium	Poor
h. Number of indicator taxa: 0		Good	Medium	Poor

Tier 2 SUMMARY:	Polygon ID S6W08			
a. Indiana Wetland community type: Shrub-Carr				
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral	
c. Disturbances to site:				
d. Exotic species rating:	Good	Medium	Poor	
e. Special Hydrologic Conditions Observed: None				
f. Special Community Type: None				
g. Rare-Threatened-Endangered Species: None				
h. Polygon Quality Descriptor:	Good	Medium	Poor	
Tier 3A SUMMARY:				
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral	
b. Water quality protection - numerical rank (6 max.):3	Good	Medium	Poor	
c. Flood and storm water storage - numerical rank (5 ma1	Good	Medium	Poor	
Tier 3B SUMMARY:				
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral	
b. Stratification as indicator of animal habitat:	Valuable		Neutral	
c. Number of dominant plant taxa observed:0	Good	Medium	Poor	
d. Average coefficient of conservatism:1.2	Good	Medium	Poor	
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral	
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral	
g. Total hydrophytic taxa observed:5	Good	Medium	Poor	
h. Number of indicator taxa: 0	Good	Medium	Poor	

Tier 2 SUMMARY:	Polyg	S6W089C	
a. Indiana Wetland community type: Deep Marsh/Shallow Ope	en Water		
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: other			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):2	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma1	Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed:0	Good	Medium	Poor
d. Average coefficient of conservatism:0	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:0	Good	Medium	Poor
h. Number of indicator taxa:0	Good	Medium	Poor

0 Residential - single family

0 Commercial or multifamily residential

Tier 1: Assessment Overview 1.1 Site Identification:							
Wetland Site Name: N/A	Wetland Site Name: N/A						
Ownership (if known): N/A							
USGS Topographic Quadran	gle: Bargersville						
USGS Watershed map 14-Di	git HUC: Honey Creek	-Turk	rey Pen Creek				
Identify each NWI Polygon v	vithin the Wetland Site	(Poly	/gon specific data)				
NWI Polygon ID Number	Cowardin Classificat	ion	Polygon Size (acres)				
S6W089A	PEM1		0.1729				
S6W089B	PSS1		0.0678				
S6W089C	PUBHx		0.5983				
1.2 Site Visit							
Team Members: R. Hook/ I	R. Connolly						
Agency: HNTB							
Date assessed: 7/9/2015	Tir	ne as	sessed:				
Weather conditions:							
Note any unusual weahter events that may have influenced the current conditions within this wetland system (e.g. recent heay rains, an unusually dry season, an especially early spring etc.)							
1.3 Wetland Size							
Size of site under assessmer	nt: 0.839						
Size of wetland complex:	0.839						
1.4 Site Setting Degree of isolation from oth	ner wetlands or wetlan	d com	nplexes:				
The site is connect	ed upstream and do	wnsti	ream with other wetlands				
The site is only connected upstrrem with other wetlands							
The site is only connected downstream with other wetlands							
Other wetlands ar	e nearby (within 0.25	5 mile	e) but not connected				
The wetland site is			,				
General assessment of adjacthe wetland site (indicate the			the area within 50 meters of the perimeter or	f			
10 Native Vegetation	ı - woodland	10	Road / highway / railroad bed / parking le	ot			
		40	Industrial				

40 Recreation - green space, mowed

0 Agricultural - tilled

0 Agricultural - pasture

NWI Polygon # S6W089A	Data Reference# S6W089
see table on page one)	
Tier 2: Individual Polygon: Prelimin to be completted on-site for each NWI polygo	
2.1 Wetland Geomorphic Setting and Surface	Water Flow (check one):
✓ Depressional Slope Riverine (within the river/stream ba	FloodplainLacustrine anks)
2 Presence of Standing Water:	
s standing water normally present in the polyg	gon? No
Is standing water is present, is the water	greater than 2 meters n depth? No
s standing water normally present in an adjace	ent polygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom pr	resentArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mi	neralBoth Mineral and Organic Present
2.5 Wetland Community Type for this NWI po Wet Meadow	lygon (see Key to Wetland Communities of Indiana):
2.6 Disturbances of Hydrology (check all that a	apply):
Ditching	Culvert
 Tiles	✓ Other Human Distrubances to
 Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S =	Scattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	F Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions	(i.e. seeps, wet slopes, floating mat):
None	
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Ra	or, Threatened or Endangered Species:
✓ None observed or known to be pres	sen
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see	: Wetland Quality Descriptions and check one):
Good Medium	√ Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 1	Notak	ole Features that influence water quality and hydrology:							
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon 100-75 75-50 50-25 <25							
Es	Estimated woody plant foliar coverage in the polygon100-7575-5050-25 <25									
An	Amount of dead woody material on the soil surfacenilscatteredfrequent									
3а	.2 ۱	Nate	Quality Protection Questions:							
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?							
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?							
3.	If wetland in question is a depressional wetland answer 3a, in not, answer 3b. N 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? Y N 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?									
4.	Y	N								
5.	Y	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?								
6.	6. Y N Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.									
			width of buffer area (in meter0 approximate slope (percen0							
3а	.3 F	Flood	and Stormwater Storage / Attenuation Questions:							
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b							
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?							
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?							
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?							
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?							
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?							
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?							

Tier 3b Individual Polygon: Rapid Vegetation Description 3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 25 - 50% 10 - 25% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Typha latifolia b. Phalaris arundinacea f. Dominant Shrub Species listed in order of relative abundance.

Dominant Tree Species listed in order of relative abundance.

a. Acer saccharinum

c. Platanus occidentalis

b. Salix interior

d. ____ Tree and shrub canopy: nil separate, seldom touching often touching more or less close

Mature trees (>12" dbh): yes ☐ no

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W089A	Data Reference# S6W089								
3b.2 Dominant Plant Species: Vegetation Zone B									
What % of the polygon does this vegetative zone occur	py?								
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%								
Is there notable layering/stratification in this vegetation	zone?								
Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches).									
a	d								
b	e								
C	f								
Dominant Shrub Species listed in order of relative abu									
a	C								
b	d								
Dominant Tree Species listed in order of relative abundance	dance.								
a	c								
b	d								
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close								
Mature trees (>12" dbh): yes no									
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this								
3b.2 Dominant Plant Species: Vegetation Zone C									
What % of the polygon does this vegetative zone occur	py?								
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%								
Is there notable layering/stratification in this vegetation	zone?								
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex									
a	d								
b	e								
C	f								
Dominant Shrub Species listed in order of relative abu									
a	C								
b	d								
Dominant Tree Species listed in order of relative abundance	dance.								
a	c								
b	d								
Tree and shrub canopy: nil separate, seldom touching often touching more or less close									
Mature trees (>12" dbh): yes no									
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).									

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed	plants	Herbs: wide-leafe	d monocots
horsetail, scour	ing rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6
*ferns: marsh s	hiled fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4
*cinnamon fern	(Osmunda cinnamomea) 9	*green dragon ((Arisaema dracontium) 6
*royal fern (Osn	nunda regalils) 8	Jack-in-the-pulp	oit (Arisaema triphyllum) 4
sensitive fern (C	Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species	(if known	*skunk cabbage	e (Symplocarpus foetidus) 8
marsh club mos	ss (Selaginella apoda) 4	*water arum (C	alla palustris) 10
Sphagnum mos	ss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floatin	a or submeraent	Herbs: dicots - lvs	s. opposite/whorled
	pp. (Utricularia) 10	*bedstraw spp.	
	ophyllum demersum) 1	beggar's tick sp	•
duckweed spp.			erbena hastata) 3
	. (Potamogeton) 8		orium perfoliatum) 4
	reed (Potamogeton crispus) 0		·
	phaea tuberosa) 6	clearweed spp.	
	asenia schreberi) 4		nium perfoliatum) 4
	lock spp. (Nuphar) 6		ehmeria cylindrica) 3
yollow spattere	iock spp. (Naphar) o		edicularis lanceolata) 6
Herbs: Ivs. floatin	a or submergent		Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)		(Ambrosia trifida) 0
*sundew spp. ([pocynum cannabinum) 2
Suridew Spp. (L	5103C1a) 10		spp. (Eupatorium) 5
Harbe: linear-lye	or +/- leafless monocots		o. (Lysimachia) 6
	(Rhynchospora) 10		y (Rhexia virginica) 5
blueflag iris (Iris			nedge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
cat-tail spp. (Ty		nettle (Urtica pr	
	op. (Eriophorum) 10		fe (Lythrum salicaria) 0
	amineae) - indicate types and		insonia canadensis) 8
number of species	armileae) - indicate types and		spp. (Hypericum/Triandeum) 8
•	zania aquatica) 10	sunflower sp. (I	
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
	rass spp. 0:reed canary	turtlehead spp. (/	
	reed (Phragmites),		Clematis virginiana) 3
	such as annual foxtail	•	(Ludwigia palustris) 3
	arnyard grass (Echinochloa)		rife (Lythrum alatum) 5
,	pp. (Eleocharis) 1 sp. =2	williged loosesti	ine (Eytindin alatam) 5
*additional	,	Harbs (vines): dice	ots - lvs. alternate or basal and
nutsedge spp. (ower (Campanula americana) 4
	; species (if know	· · · · · · · · · · · · · · · · · · ·	aster (Aser puniceus) 7
rush spp. (Junc	• •		er (Aster umbellatus) 8
sedge spp. (Ca	•		. (e.g. New England, panicled ast
	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
	•		• • •
sweet flag (Aco	•		(Lobelia cardinalis) 4
	Dulichium arundinaceum) 10	cress spp. (Car	· · · · · · · · · · · · · · · · · · ·
	dium mariscoides) 10		mp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		(Alliaria petiolata) 0
	Camassia scilloides) 5	golden ragwort	(Senecio aureus) 4
yellow-eyed gra	ass (Xyris torta) 9		

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp aprimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium mutcum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus pensylvanica) 3 *ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite red maple (Acer rubrum) 5 ✓ silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 cottonwood, eastern (Populus deltoides) 1 cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 ✓ sycamore, American (Platanus occidentalis) 3 ✓ willow spp. (Salix) 1 sp. = 3
 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwwod, red-osier (Cornus stolonifera) 4 *dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2 elderberry (Sambucus) 2 	additional sp. = 7

NWI Polygon # S6W089B	Data Reference# S6W089
see table on page one)	
Fier 2: Individual Polygon: Preliminary to be completted on-site for each NWI polygon p	
2.1 Wetland Geomorphic Setting and Surface Wa	ter Flow (check one):
✓ Depressional Slope Fl Riverine (within the river/stream bank	loodplainLacustrine s)
2.2 Presence of Standing Water:	
s standing water normally present in the polygon	? No
Is standing water is present, is the water great	ater than 2 meters n depth? No
s standing water normally present in an adjacent	polygon? No
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
✓ Saturated (surface water seldom prese	entArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Miner	ralBoth Mineral and Organic Present
2.5 Wetland Community Type for this NWI polygonships Shrub-Carr 2.6 Disturbances of Hydrology (check all that app	on (see Key to Wetland Communities of Indiana):
,	Culvert
Ditching Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Sca	attered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions (i.e	e. seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
BogFen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar, T	hreatened or Endangered Species:
✓ None observed or known to be presen	ı
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: W	etland Quality Descriptions and check one):
Good ✓ Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 I	Notal	ble Features that influence water quality and hydrology:
Es	stima	ated I	nerbaceouis plant cover (percentage) in the polygon100-7575-50 💉 50-25<25
Es	stima	ated v	woody plant foliar coverage in the polygon100-75 <u>√</u> 75-5050-25 <25
Ar	nou	nt of	dead woody material on the soil surfacenilscatteredfrequen
3a	.2 \	Wate	r Quality Protection Questions:
1.	Y) N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	Ϋ́ Υ	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y) N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Υ	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0_
3a	ı.3 l	Flood	d and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y) N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). f. Dominant Shrub Species listed in order of relative abundance. Dominant Tree Species listed in order of relative abundance. C. _____ d. ____ Tree and shrub canopy: nil separate, seldom touching free often touching more or less close

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

Mature trees (>12" dbh): yes

NWI Polygon # S6W089B	Data Referer	nce# S6W089	
3b.2 Dominant Plant Species: Vegetation Zone	В		
What % of the polygon does this vegetative zone or	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 5	0 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	on zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms			f relative
a	d		
b	e		
C	f.		
Dominant Shrub Species listed in order of relative a			
a	C		
b	d.		
Dominant Tree Species listed in order of relative ab			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seldo			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about wetland site).	hat adds to or de	etracts from the qualit	y of this
3b.2 Dominant Plant Species: Vegetation Zone	С		
What % of the polygon does this vegetative zone of	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 5	0 - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetati	on zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms			f relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative a			
a	C.		
b			
Dominant Tree Species listed in order of relative ab			
a			
b			
	d.		
			re or less close
Tree and shrub canopy: nil separate, seldo Mature trees (>12" dbh): yes no			

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osm sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floating *bladderwort sp coontail (Cerato	ng rush spp. (Equisetum) 2 hiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 hunda regalils) 8 Dnoclea sensibilis) 4 (if known is (Selaginella apoda) 4 is spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 phyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (F*skunk cabbage*water arum (Cawater plantain (A) Herbs: dicots - lvs*bedstraw sppbeggar's tick sp	d monocots eltandra virginica) 6 c. (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 c. opposite/whorled (Gallium) 6 p. (Bidens) 3
duckweed spp.	(Lemnaceae) 3 . (Potamogeton) 8		erbena hastata) 3 orium perfoliatum) 4
curlyleaf pondw *water lily (Nym water shield (Br	eed (Potamogeton) 6 eed (Potamogeton crispus) 0 phaea tuberosa) 6 asenia schreberi) 4 ock spp. (Nuphar) 6	bugleweed spp. clearweed spp. cup plant (Silphi false nettle (Boe	(Lycopus) 5 (Pilea) 3 ium perfoliatum) 4 ehmeria cylindrica) 3
*sundew spp. (E	arracenia purpurea (10) Orosera) 10	*gentian spp. (G giant ragweed (A Indian hamp (Ap Joe-pye weed s	dicularis lanceolata) 6 Gentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9	mint spp. e.g. he moneywort (Lys monkey flower s	r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 simachia nummularia) 0 spp. (Mimulus) 4
Grasses (family Granumber of species a. *wild rice (Zizb. most natuve cut-grass, mann foxtail (Alopecruc. introduced grass (Phalaris, annual grasses (Setaria) and ba	zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint,	*richweed (Collii St. John's wort s sunflower sp. (F *swamp loosest swamp milkwee toothcup spp. (F *turtlehead spp. virgin's bower (C water purslane (nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8 Helianthus) 4 trife (Decodon verticillatus) 8 ed (Asclepias incarnata) 4 Ammania Rotala) 2
*additional =nutsedge spp. (*orchid spp. 10;rush spp. (Junctsedge spp. (Cai _*spiderlily (Hymoles)*sweet flag (Acoi _**a-way sedge (E*twig rush (Clad _*umbrella sedgewild hyacinth (C	= 8 Cyperus) 2 species (if know us) 4 rex) 1 sp. = 3additional enocallis occidentalis) 9	American bellflom *asters: bristly a flat-topped aster other aster spp. *black-eyed Sustardinal flower (cress spp. (Cardinal flower) dock spp.: swan garlic mustard (ots - Ivs. alternate or basal and ower (Campanula americana) 4 aster (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4 damine) 4 mp, water, pale (Rumex) 4 Alliaria petiolata) 0 (Senecio aureus) 4

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osm sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floating *bladderwort sp coontail (Cerato	ng rush spp. (Equisetum) 2 hiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 hunda regalils) 8 Dnoclea sensibilis) 4 (if known is (Selaginella apoda) 4 is spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 phyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (F*skunk cabbage*water arum (Cawater plantain (A) Herbs: dicots - lvs*bedstraw sppbeggar's tick sp	d monocots eltandra virginica) 6 c. (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 c. opposite/whorled (Gallium) 6 p. (Bidens) 3
duckweed spp.	(Lemnaceae) 3 . (Potamogeton) 8		erbena hastata) 3 orium perfoliatum) 4
curlyleaf pondw *water lily (Nym water shield (Br	eed (Potamogeton) 6 eed (Potamogeton crispus) 0 phaea tuberosa) 6 asenia schreberi) 4 ock spp. (Nuphar) 6	bugleweed spp. clearweed spp. cup plant (Silphi false nettle (Boe	(Lycopus) 5 (Pilea) 3 ium perfoliatum) 4 ehmeria cylindrica) 3
*sundew spp. (E	arracenia purpurea (10) Orosera) 10	*gentian spp. (G giant ragweed (A Indian hamp (Ap Joe-pye weed s	dicularis lanceolata) 6 Gentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9	mint spp. e.g. he moneywort (Lys monkey flower s	r (Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 simachia nummularia) 0 spp. (Mimulus) 4
Grasses (family Granumber of species a. *wild rice (Zizb. most natuve cut-grass, mann foxtail (Alopecruc. introduced grass (Phalaris, annual grasses (Setaria) and ba	zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint,	*richweed (Collii St. John's wort s sunflower sp. (F *swamp loosest swamp milkwee toothcup spp. (F *turtlehead spp. virgin's bower (C water purslane (nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8 Helianthus) 4 trife (Decodon verticillatus) 8 ed (Asclepias incarnata) 4 Ammania Rotala) 2
*additional =nutsedge spp. (*orchid spp. 10;rush spp. (Junctsedge spp. (Cai _*spiderlily (Hymoles)*sweet flag (Acoi _**a-way sedge (E*twig rush (Clad _*umbrella sedgewild hyacinth (C	= 8 Cyperus) 2 species (if know us) 4 rex) 1 sp. = 3additional enocallis occidentalis) 9	American bellflom *asters: bristly a flat-topped aster other aster spp. *black-eyed Sustardinal flower (cress spp. (Cardinal flower) dock spp.: swan garlic mustard (ots - Ivs. alternate or basal and ower (Campanula americana) 4 aster (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4 damine) 4 mp, water, pale (Rumex) 4 Alliaria petiolata) 0 (Senecio aureus) 4

NWI Polygon # S6W089C	Data Reference# S6W089
(see table on page one)	
Fier 2: Individual Polygon: Preliminary to be completted on-site for each NWI polygon pre	
2.1 Wetland Geomorphic Setting and Surface Water	er Flow (check one):
✓ Depressional Slope Flo Riverine (within the river/stream banks)	oodplainLacustrine)
2 Presence of Standing Water:	
s standing water normally present in the polygon?	Yes
Is standing water is present, is the water great	ter than 2 meters n depth? No
s standing water normally present in an adjacent p	olygon? Yes
.3 Apparent Hydroperiod (check one):	
✓ Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom preser	ntArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.)✓Minera	lBoth Mineral and Organic Present
eep Marsh/Shallow Open Water .6 Disturbances of Hydrology (check all that apply	y):
Ditching	Culvert
Tiles	✓ Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Scat	tered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
 Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.e. one	seeps, wet slopes, floating mat):
O Bussians of Sussial Community Types	
.9 Presence of Special Community Types:	
BogFen	Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar, Th	reatened or Endangered Species:
✓ None observed or known to be presen	
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: We	tland Quality Descriptions and check one):
Good Medium ✓	Poor
	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 I	Notab	ole Features that influence water quality and hydrology:
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25<25
An	noui	nt of o	dead woody material on the soil surface nilscattered frequent
3а	.2 ۱	Nate	r Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Υ	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.	ү ү	N N	 If wetland in question is a depressional wetland answer 3a, in not, answer 3b. 3a. Does the wetland have a shape or flow that allows for the settling out of suspended materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Υ	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter0 approximate slope (percen0
3а	.3 I	Flood	I and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Υ	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Υ	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Υ	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). f. Dominant Shrub Species listed in order of relative abundance. Dominant Tree Species listed in order of relative abundance. C. _____ d. ____ Tree and shrub canopy: nil separate, seldom touching often touching more or less close Mature trees (>12" dbh): yes

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W089C	Data Reference# S6W089
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more the abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

(N = northern Indiana) $SW = southwestern Indiana$	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - lvs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0	
*water lily (Nymphaea tuberosa) 6	clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
your opation door opp. (Naprial) o	*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
candon oppi (21000ia) 10	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2
c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	<u> </u>
*additional = 8	Herbs (vines): dicots - Ivs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3 additional	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	· · · · · · · · · · · · · · · · · · ·
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
- · · · · · · · · · · · · · · · · · · ·	



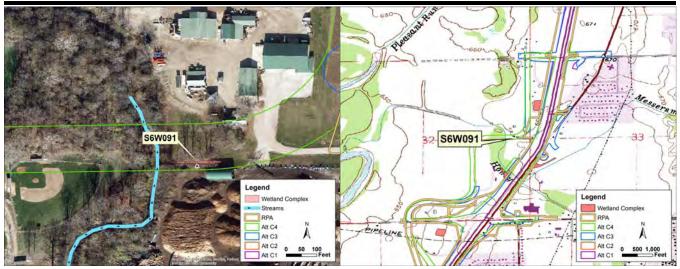
Wetland Location on 2015 Aerial Photograph

Wetland Location on Bargersville USGS Quadrangle

Basin: Honey Creek -Turkey Pen Creek Quadrangle: Bargersville 14-digit HUC: 05120201140010 County: Johnson T14N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains Ecoregion: R3E Range: **Natural Region:** Tipton Till Plain Section: 33 Size of wetland complex (acres): Quarter: SW **USACE Jurisdiction** Yes Latitude: 39.6098

IDEM Jurisdiction: Yes Longitude: -86.214319

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted						
							Alt C1	0.00	0.0%						
							no rating	no rating	no rating					Alt C2	0.04
S6W090A	Pond	PUB	0.7406	0.7406	0.7406	0.7406				no rating no rating	no rating	Alt C3	0.03	4.3%	
													Alt C4	0.00	0.0%
							RPA	0.00	0.1%						



Wetland Location on 2015 Aerial Photograph

Size of wetland complex (acres): 0.0221

Wetland Location on Bargersville USGS Quadrangle

SE

Basin: Honey Creek -Turkey Pen Creek Quadrangle: Bargersville

14-digit HUC:05120201140010County:JohnsonPhysiographic Region:New Castle Till PlainsTownship:T14N

Ecoregion:Eastern Corn Belt PlainsRange:R3ENatural Region:Tipton Till PlainSection:32

USACE JurisdictionYesLatitude:39.612016IDEM Jurisdiction:YesLongitude:-86.217115

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.00	0.0%
							Alt C2	0.02	100.0%
S6W091A	Seasonally	PEM	0.0221	fair	poor	poor	Alt C3	0.00	0.0%
	Flooded						Alt C4	0.02	100.0%
	Basin						RPA	0.00	0.0%

Quarter:



Polygon S6W091A



Polygon S6W091A



Polygon S6W091A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W091			
Date of Site Visit:	Thursday, April 21, 2016			
Tier 1 Summar	y:			
a. Total Wetlar	nd Area (acres): 0.0221			
b. Wetland siz	e and connectivity - contribution to animal habita	at:		
	Valuable Moi	re Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1): 0.50			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	on ID	66W091A
a. Indiana We	tland community type: Seasonally Flooded Basin	1		
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	es to site: ditches tiles			
d. Exotic speci	les rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threat	tened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	ARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quali	ity protection - numerical rank (6 max.): 2	Good	Medium	Poor
c. Flood and s	torm water storage - numerical rank (5 ma1	Good	Medium	Poor
Tier 3B SUMM	ARY:			
a. Zonation an	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratificatio	n as indicator of animal habitat:	Valuable		Neutral
c. Number of	dominant plant taxa observed: 4	Good	Medium	Poor
d. Average co	efficient of conservatism: 0.3	Good	Medium	Poor
e. Tree canopy	y as indicator of animal habitat:	Valuable		Neutral
f. Mature tree	s as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydro	phytic taxa observed:4	Good	Medium	Poor
h. Number of	indicator taxa: 0	Good	Medium	Poor

0 Recreation - green space, mowed

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1.1 Site Identification:	reiview		
Wetland Site Name: N/A			
Ownership (if known): N/A			
USGS Topographic Quadrang	le: Bargersville		
USGS Watershed map 14-Dig	git HUC: Honey Cree	k -Turk	key Pen Creek
Identify each NWI Polygon w			
NWI Polygon ID Number	Cowardin Classifica	tion	Polygon Size (acres)
S6W091A	PEM1		0.0221
1.2 Site Visit			
Team Members: Kate Lucier	r, Allie Gates		
Agency: Lochmueller Group			
Date assessed: 4/21/2016	Т	ime as	sessed: 4:00:00 PM
Weather conditions: Cloudy	y, 55 deg F		
-	•		nced the current conditions withih this wetland an especially early spring etc.)
Precipitation previous 2 days		,	, , , , , ,
1.3 Wetland Size			
Size of site under assessment	t: <u>0.0221</u>		
Size of wetland complex: 0	.0221		
1.4 Site Setting			
Degree of isolation from other	er wetlands or wetlar	nd con	nplexes:
The site is connected	ed upstream and do	ownst	ream with other wetlands
The site is only con	nected upstrrem w	ith ot	her wetlands
The site is only con	nected downstrear	n with	other wetlands
Other wetlands are	nearby (within 0.2	5 mile	e) but not connected
The wetland site is	isolated		
General assessment of adjace the wetland site (indicate the			the area within 50 meters of the perimeter of e):
25 Native Vegetation	- woodland	0	Road / highway / railroad bed / parking lot
0 Native Vegetation	- old field / scrub	0	Industrial
0 Agricultural - tilled	 	25	Residential - single family
0 Agricultural - pastu	ıre	50	Commercial or multifamily residential

	Polygon # S6W091 able on page one)	LA	Data R	Seference# S6W091		
		olygon: Drolimi	nary Accocci	mant		
		Polygon: Prelimi e for each NWI polyg				
.1 W	etland Geomorphi	c Setting and Surfac	e Water Flow (c	heck one):		
✓		Slope n the river/stream I		Lacustrine		
.2 Pr	esence of Standing	g Water:				
star	nding water norma	lly present in the pol	ygon? Yes			
I	s standing water is	present, is the wate	r greater than 2	meters n depth? No		
star	nding water norma	lly present in an adja	cent polygon?	Yes		
.3 Ap	parent Hydroperi	od (check one):				
	Permanently Fl	ooded		Artificially Flooded		
	Seasonally Floo	ded				
✓	Saturated (surf	ace water seldom p	oresent	Artificailly Drained		
4 So	oil Type					
	Organic (i.e. pe	at, etc.) <u>√</u> N	1ineral	_Both Mineral and Organic Present		
.5 W	etland Community	ر Type for this NWI ر	oolygon (see Key	to Wetland Communities of Indiana):		
easo	nally Flooded Basir	ı				
.6 Di	sturbances of Hyd	rology (check all tha	t apply):			
\checkmark	Ditching			Culvert		
\checkmark	Tiles			Other Human Distrubances to		
	Dams			the		
	Road or Railroa	id Embankment				
.7 Pr	esence of Invasive	Exotics (Score as: S	= Scattered, F =	Frequent, or C = Common):		
S	Garlic Mustard			Glossy Buckthorn		
	 Phragmities		9	Reed Canary Grass		
	Purple Loosest	rife		Other (list):		
.8 Pr	esence of Special I	Hydrologic Condition	ns (i.e. seeps, wo	et slopes, floating mat):		
one						
.9 Pr	esence of Special (Community Types:				
	Bog	Fen	Wet Sa	and / Muck Flats or Marl Seeps		
.10 F	Presence of Known	Federal or Indiana I	Rar, Threatened	or Endangered Species:		
√	None observed	or known to be pr	esen			
RTES Present (list):						
.11 V				ality Descriptions and check one):		
	Good	Medium	√ Poor			

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	Notak	ole Features that influence water quality and hydrology:				
Es	Estimated herbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25						
Es	tima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25 <25				
An	nour	nt of o	dead woody material on the soil surfacenilscatteredfrequent				
3а	.2 V	Nate	Quality Protection Questions:				
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?				
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?				
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.				
	Υ	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended				
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?				
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?				
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?				
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.				
			width of buffer area (in meter0 approximate slope (percen0				
3а	.3 F	Flood	and Stormwater Storage / Attenuation Questions:				
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b				
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?				
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?				
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?				
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?				
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?				
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?				

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetland	polygon?1
1b. If only one vegetation zone is evident, which best	describes the site?
Polygon compoosed of amosaic of sma heterogeneous textures across the poly	Il vegetation patches, hummocks, or tussocks, gon.
Polygon composed of a single vegettation the polygon.	on type with more or less uniform texture across
2. If more than one vegetation zone is present in the pol represents the distribuion of these zone?	ygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occupy	/?
10 - 25% <u>25 - 50%</u> 50 - 7	75 - 90%
Is there notable layering/stratification in this vegetation z	one? No
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms exte	
a. Phalaris arundinacea	d
b. Ambrosia trifida	e
c. Alliaria petiolata	f
Dominant Shrub Species listed in order of relative abund	dance.
a	C
b	d
Dominant Tree Species listed in order of relative abunda	ance.
a. Acer negundo	C
b	d
Tree and shrub canopy: nil separate, seldom to	uching often touching more or less close
Mature trees (>12" dbh): yes no	

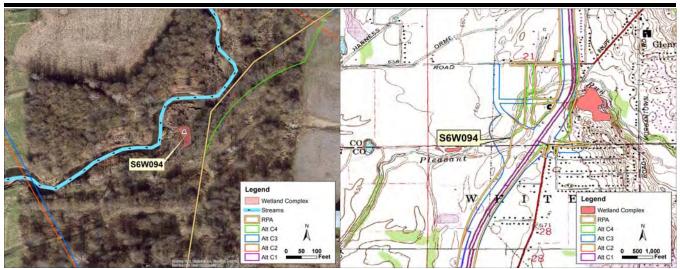
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W091A	Data Reference# S6W091
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
c	f
Dominant Shrub Species listed in order of relative abur	ndance.
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom to	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occu	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abur	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	C
b	d
Tree and shrub canopy: nil separate, seldom t	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed	olants	Herbs: wide-leafe	d monocots
horsetail, scour	ing rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6
*ferns: marsh s	hiled fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4
*cinnamon fern	(Osmunda cinnamomea) 9	*green dragon ((Arisaema dracontium) 6
*royal fern (Osn	nunda regalils) 8	Jack-in-the-pulp	pit (Arisaema triphyllum) 4
sensitive fern (C	Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species	(if known	*skunk cabbage	e (Symplocarpus foetidus) 8
marsh club mos	ss (Selaginella apoda) 4	*water arum (C	alla palustris) 10
Sphagnum mos	ss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floatin	a or submergent	Herbs: dicots - lvs	s. opposite/whorled
	p. (Utricularia) 10	*bedstraw spp.	
	phyllum demersum) 1	beggar's tick sp	,
duckweed spp.			erbena hastata) 3
	. (Potamogeton) 8		torium perfoliatum) 4
	eed (Potamogeton crispus) 0		•
	phaea tuberosa) 6	clearweed spp.	
	asenia schreberi) 4		nium perfoliatum) 4
	lock spp. (Nuphar) 6		ehmeria cylindrica) 3
yollow spattere	iock spp. (Naphar) o		edicularis lanceolata) 6
Herbs: Ivs. floatin	a or submergent		Gentiana Gentianopsis) 8
	Sarracenia purpurea (10)	✓ giant ragweed (
*sundew spp. ([pocynum cannabinum) 2
Suridew Spp. (L	5103C1a) 10		spp. (Eupatorium) 5
Harbe: linear-lye	or +/- leafless monocots		o. (Lysimachia) 6
	(Rhynchospora) 10		y (Rhexia virginica) 5
blueflag iris (Iris			nedge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
cat-tail spp. (Ty		nettle (Urtica pr	
	op. (Eriophorum) 10		ife (Lythrum salicaria) 0
	amineae) - indicate types and		insonia canadensis) 8
number of species	amineae) - indicate types and		spp. (Hypericum/Triandeum) 8
	zania aquatica) 10	sunflower sp. (I	
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
	na-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru			Ammania Rotala) 2
	rass spp. 0:reed canary	turtlehead spp. (/	
	reed (Phragmites),		Clematis virginiana) 3
	such as annual foxtail	•	(Ludwigia palustris) 3
	arnyard grass (Echinochloa)		rife (Lythrum alatum) 5
,	pp. (Eleocharis) 1 sp. =2	williged loosesti	The (Lythiam alatam) 5
*additional		Harbs (vines): dice	ots - Ivs. alternate or basal and
nutsedge spp. (ower (Campanula americana) 4
	species (if know		aster (Aser puniceus) 7
rush spp. (Junc			er (Aster umbellatus) 8
sedge spp. (Ca	,		. (e.g. New England, panicled ast
	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
	•		• • •
sweet flag (Aco	•		(Lobelia cardinalis) 4
	Dulichium arundinaceum) 10	cress spp. (Car	·
	dium mariscoides) 10		mp, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10	garlic mustard (
	Camassia scilloides) 5	golden ragwort	(Senecio aureus) 4
yellow-eyed gra	ass (Xyris torta) 9		

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	✓ boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	· · · · · · · · · · · · · · · · · · ·
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	
- · · · · · · · · · · · · · · · · · · ·	



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

Basin:Pleasant Run Creek - Buffalo CreQuadrangle:Maywood14-digit HUC:05120201130110County:MarionPhysiographic Region: New Castle Till PlainsTownship:T14N

Ecoregion:Eastern Corn Belt PlainsRange:R3ENatural Region:Tipton Till PlainSection:21Size of wetland complex (acres):0.0365Quarter:SW

USACE JurisdictionYesLatitude:39.634925IDEM Jurisdiction:YesLongitude:-86.208004

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Wet Meadow		0.0365 fair	fair	fair poor	fair	Alt C1	0.00	0.0%
							Alt C2	0.04	100.0%
S6W094A							Alt C3	0.04	100.0%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%



Polygon S6W094A



Polygon S6W094A



Polygon S6W094A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W094			
Date of Site Visit: Thursday, May 28, 2015			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.0365			
b. Wetland size and connectivity - contribution to animal ha	abitat:		
Valuable	More Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1): 0.82	2		
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID	S6W094A
a. Indiana Wetland community type: Wet Meadow			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site:			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):5	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma	3 Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat	: Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 5	Good	Medium	Poor
d. Average coefficient of conservatism: 2	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:6	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

0 Residential - single family

Commercial or multifamily residential

Native Vegetation - old field / scrub 0 Industrial

15 Agricultural - tilled

0 Agricultural - pasture

10 Recreation - green space, mowed

NWI Polygon # S6W094A	Data Reference# S6W094
see table on page one)	
Fier 2: Individual Polygon: Preliminar to be completted on-site for each NWI polygon	
.1 Wetland Geomorphic Setting and Surface W	ater Flow (check one):
Depressional Slope F ✓ Riverine (within the river/stream bank	FloodplainLacustrine ks)
.2 Presence of Standing Water:	
standing water normally present in the polygor	n? No
Is standing water is present, is the water gre	eater than 2 meters n depth? No
standing water normally present in an adjacent	t polygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom pres	sentArtificailly Drained
4 Soil Type	
Organic (i.e. peat, etc.) Mine	eralBoth Mineral and Organic Present
Vet Meadow	gon (see Key to Wetland Communities of Indiana):
.6 Disturbances of Hydrology (check all that ap	
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Sc	attered, F = Frequent, or C = Common):
F Garlic Mustard	Glossy Buckthorn
Phragmities	C Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.	.e. seeps, wet slopes, floating mat):
one -	
.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar,	Threatened or Endangered Species:
✓ None observed or known to be present	n
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: V	
Good✓ Medium	Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	Notal	ole Features that influence water quality and hydrology:				
Es	Estimated herbaceouis plant cover (percentage) in the polygon vec-100-75						
Es	stima	ated v	voody plant foliar coverage in the polygon100-7575-5050-25 <25				
Ar	noui	nt of o	dead woody material on the soil surfacenilscatteredfrequent				
3a	ı.2 \	Nate	r Quality Protection Questions:				
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?				
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?				
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.				
	Υ	(N)	3a. Does the wetland have a shape or flow that allows for the settling out of suspended				
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?				
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?				
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?				
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.				
			width of buffer area (in meter50 approximate slope (percen5_				
3a	.3 F	Flood	I and Stormwater Storage / Attenuation Questions:				
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b				
٠.	Υ	(N)	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub)				
	Y	N	that will slow overland flow into the wetland? 1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?				
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?				
3.	Υ	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?				
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?				
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?				

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:	
1. How may vegetation zones are evident in this wetlan	d polygon?1
1b. If only one vegetation zone is evident, which bes	st describes the site?
Polygon composed of amosaic of sma heterogeneous textures across the poly	all vegetation patches, hummocks, or tussocks, ygon.
Polygon composed of a single vegettat the polygon.	ion type with more or less uniform texture across
2. If more than one vegetation zone is present in the porepresents the distribuion of these zone?	olygon, which intersperision diagram most closely
Type One Interspersion	Type Two Interspersion
3b.2 Dominant Plant Species: Vegetation Zone A	
What % of the polygon does this vegetative zone occup	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - ·	75%
Is there notable layering/stratification in this vegetation	zone? No
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms extended)	
a. <i>Phalaris arundinacea</i>	d. Rumex altissimus
b. <i>Barbarea vulgaris</i>	e
c. Solidago gigantea	f
Dominant Shrub Species listed in order of relative abun	dance
a	C
b	d
Dominant Tree Species listed in order of relative abund	ance.
a. Salix nigra	C
b	d
Tree and shrub canopy: nil separate, seldom to	
Mature trees (>12" dbh): yes no	

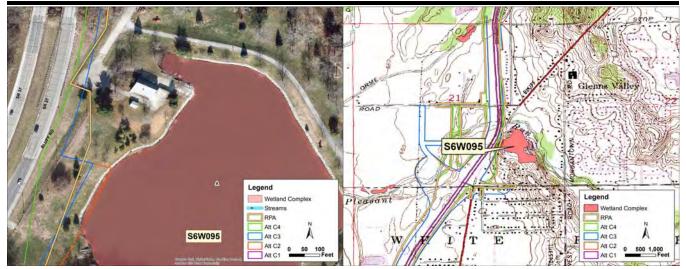
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W094A	Data Reference# S6W094
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana) $SW = southwestern Indiana$	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants	Herbs: wide-leafed monocots
horsetail, scouring rush spp. (Equisetum) 2	*arrow arum (Peltandra virginica) 6
*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if known	*skunk cabbage (Symplocarpus foetidus) 8
marsh club moss (Selaginella apoda) 4	*water arum (Calla palustris) 10
Sphagnum moss spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating or submergent	Herbs: dicots - lvs. opposite/whorled
*bladderwort spp. (Utricularia) 10	*bedstraw spp. (Gallium) 6
coontail (Ceratophyllum demersum) 1	beggar's tick spp. (Bidens) 3
duckweed spp. (Lemnaceae) 3	blue vervain (Berbena hastata) 3
*pondweed spp. (Potamogeton) 8	boneset (Eupatorium perfoliatum) 4
curlyleaf pondweed (Potamogeton crispus) 0	bugleweed spp. (Lycopus) 5
*water lily (Nymphaea tuberosa) 6	clearweed spp. (Pilea) 3
water shield (Brasenia schreberi) 4	cup plant (Silphium perfoliatum) 4
*yellow spatterdock spp. (Nuphar) 6	false nettle (Boehmeria cylindrica) 3
	*fen betony (Pedicularis lanceolata) 6
Herbs: Ivs. floating or submergent	*gentian spp. (Gentiana Gentianopsis) 8
*pitcher plant (Sarracenia purpurea (10)	giant ragweed (Ambrosia trifida) 0
*sundew spp. (Drosera) 10	Indian hamp (Apocynum cannabinum) 2
,	Joe-pye weed spp. (Eupatorium) 5
Herbs: linear-lvs. or +/- leafless monocots	*loosestrife spp. (Lysimachia) 6
*beak rush spp (Rhynchospora) 10	meadow beauty (Rhexia virginica) 5
blueflag iris (Iris virginica) 5	mint spp. e.g. hedge nettle, mtn. mint, skullcap 5
bulrush spp. (Scirpus / Schoenoplectus) 5	moneywort (Lysimachia nummularia) 0
*bur reed spp. (Sparganium) 9	monkey flower spp. (Mimulus) 4
cat-tail spp. (Typha) 1	nettle (Urtica procera) 1
*cotton grass spp. (Eriophorum) 10	purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and	*richweed (Collinsonia canadensis) 8
number of species	St. John's wort spp. (Hypericum/Triandeum) 8
a. *wild rice (Zizania aquatica) 10	sunflower sp. (Helianthus) 4
b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2
✓ c. introduced grass spp. 0:reed canary	*turtlehead spp. (Chelone) 8
grass (Phalaris, reed (Phragmites),	virgin's bower (Clematis virginiana) 3
annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa)	winged loosestrife (Lythrum alatum) 5
needle sedge spp. (Eleocharis) 1 sp. =2	god 100000 (_yd dd) 0
*additional = 8	Herbs (vines): dicots - lvs. alternate or basal and
nutsedge spp. (Cyperus) 2	American bellflower (Campanula americana) 4
*orchid spp. 10; species (if know	*asters: bristly aster (Aser puniceus) 7
rush spp. (Juncus) 4	flat-topped aster (Aster umbellatus) 8
sedge spp. (Carex) 1 sp. = 3 additional =	
*spiderlily (Hymenocallis occidentalis) 9	*black-eyed Susan (Rudbeckia fulgida) 8
sweet flag (Acorus calamus) 0	cardinal flower (Lobelia cardinalis) 4
*3-way sedge (Dulichium arundinaceum) 10	✓ cress spp. (Cardamine) 4
*twig rush (Cladium mariscoides) 10	✓ dock spp.: (Statathine) 4 ✓ dock spp.: swamp, water, pale (Rumex) 4
*umbrella sedge (Fuirena squarrosa) 10	garlic mustard (Alliaria petiolata) 0
wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
*yellow-eyed grass (Xyris torta) 9	

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) ✓ *goldenrod spp. (Solidago ohioensis, S. patula,	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10*dwarf birch (Betula pumila) 10*highbush blueberry (Vaccinium corymbosum) 9*leatherleaf (Chamaedaphne calyculata) 10meadowsweet and Hardhack spp. (Spiraea) 4*ninebark (Physocarpus opulifoius) 7*shrubby cinquefoil (Potentilla fruticosa) 9spice bush (Lindera benzoin) 5*swamp dewberry (Rubus hispidus) 6*swamp holly and winterberry spp. (Ilex) 7swamp rose (Rosa palustris) 5 Trees - leaves needle shaped*tamarack (Larix laricina) 10
sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwwod, red-osier (Cornus stolonifera) 4 *dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2	Trees - leaves compound _*ash, black (Fraxinus nigra) 7 _ash, green (Fraxinus pensylvanica) 3 _*ash, pumpkin (Fraxinus tomentosa) 8 _boxelder (Acer negundo) 1 _hickory, bitternut (Carya cordiformis) 5 _hickory, shellbark (Carya laciniosa) 8 _honey locust (Gleditsia triacanthos) 1 _*poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite _red maple (Acer rubrum) 5 _silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate _*alder, speckled (Alnus rugosa) 9 _river birch (Betula nigra) 2 _black, gum (Nyssa sylvatica) 5 _cottonwood, eastern (Populus deltoides) 1 _cottonwood, swamp (Populus heterophylla) 8 _elm, American (Ulmus americana) 3 _hackberry (Celtis occidentalis) 3 _ironwood (Carpinus caroliniana) 5 _oak, pin or white (Quercus) 4 _*oak, Shumard's, swamp chestnut, swamp white _*pawpaw (Asimina triloba) 6 _*sugarberry (Celtis laevigata) 7 _sweet gum (Liquidambar styraciflua) 4 _sycamore, American (Platanus occidentalis) 3villow spp. (Salix) 1 sp. = 3additional sp. = 7



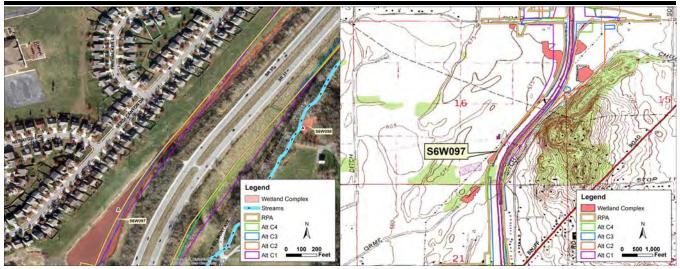
Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

Pleasant Run Creek - Buffalo Cre Quadrangle: Maywood Basin: 14-digit HUC: 05120201130110 County: Marion T14N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 21 Size of wetland complex (acres): Quarter: SE

USACE JurisdictionYesLatitude:39.637911IDEM Jurisdiction:YesLongitude:-86.20056

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
		PUB	10.9101	no rating	no rating	no rating	Alt C1	0.00	0.0%
							Alt C2	0.05	0.4%
S6W095A	Pond						Alt C3	0.00	0.0%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

Basin:White River - Mann Creek/HarnesQuadrangle:Maywood14-digit HUC:05120201130100County:MarionPhysiographic Region: New Castle Till PlainsTownship:T14N

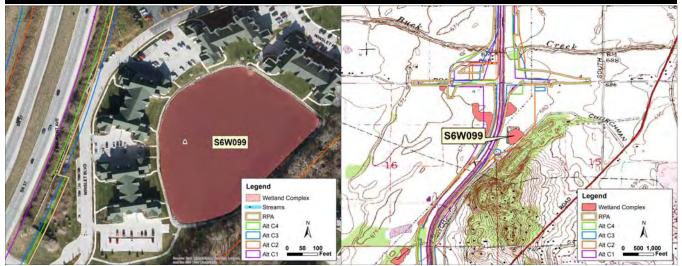
Ecoregion: Eastern Corn Belt Plains Range: R3E

Natural Region: Tipton Till Plain Section: 16

Size of wetland complex (acres): Quarter: SE

USACE JurisdictionYesLatitude:39.651885IDEM Jurisdiction:YesLongitude:-86.202716

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
		ond PUB	2.0533	no rating	no rating	no rating	Alt C1	0.37	17.9%
							Alt C2	0.34	16.6%
S6W097A	Pond						Alt C3	0.48	23.1%
							Alt C4	0.83	40.3%
							RPA	0.89	43.2%



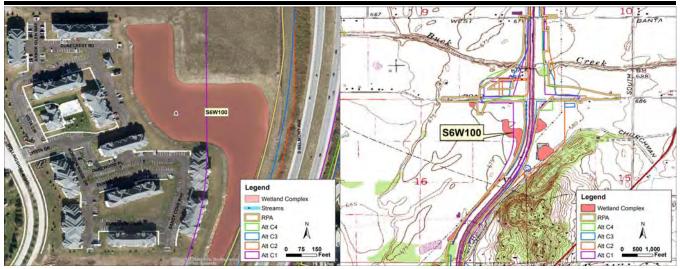
Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

Basin: White River - Mann Creek/Harnes Quadrangle: Maywood 14-digit HUC: 05120201130100 County: Marion T14N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 15 Size of wetland complex (acres): Quarter: NW

USACE JurisdictionYesLatitude:39.658831IDEM Jurisdiction:YesLongitude:-86.195001

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
		ond PUB	3.1156	no rating	no rating	no rating	Alt C1	0.00	0.0%
	Pond						Alt C2	3.12	100.0%
S6W099A							Alt C3	0.00	0.0%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

Basin: White River - Mann Creek/Harnes Quadrangle: Maywood 14-digit HUC: 05120201130100 County: Marion T14N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 16 Size of wetland complex (acres): Quarter: NE

USACE JurisdictionYesLatitude:39.660472IDEM Jurisdiction:YesLongitude:-86.197826

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
		d PUB	5.2788	no rating	no rating	no rating	Alt C1	2.78	52.7%
							Alt C2	0.00	0.0%
S6W100A	Pond						Alt C3	0.00	0.0%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%



Polygon S6W100A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

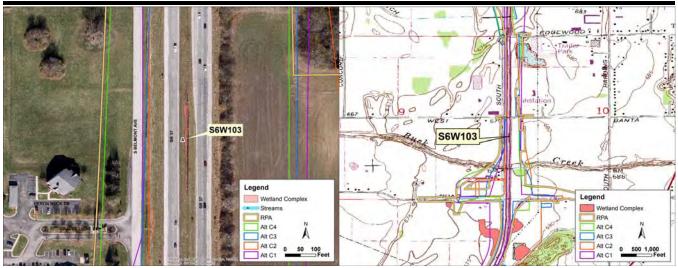
Basin: White River - Mann Creek/Harnes Quadrangle: Maywood 14-digit HUC: 05120201130100 County: Marion T14N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 15 Size of wetland complex (acres): Quarter: NW

USACE JurisdictionYesLatitude:39.661215IDEM Jurisdiction:YesLongitude:-86.195371

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Pond	ond PUB	1.8221	no rating	no rating	no rating	Alt C1	0.00	0.0%
							Alt C2	1.82	100.0%
S6W101A							Alt C3	0.00	0.0%
							Alt C4	0.00	0.1%
							RPA	0.00	0.1%



Polygon S6W101A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

Basin: Little Buck Creek (Southport) Quadrangle: Maywood 14-digit HUC: 05120201130090 County: Marion T14N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 10

Size of wetland complex (acres): 0.0403 Quarter: SW

USACE JurisdictionYesLatitude:39.669324IDEM Jurisdiction:YesLongitude:-86.19609

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Wet	PEM	0.0403	poor	poor	fair	Alt C1	0.04	100.0%
							Alt C2	0.04	100.0%
S6W103A							Alt C3	0.04	100.0%
	Meadow						Alt C4	0.04	100.0%
							RPA	0.04	100.0%



Polygon S6W103A



Polygon S6W103A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W103			
Date of Site Visit:	Tuesday, September 08, 2015			
Tier 1 Summaı	ry:			
a. Total Wetla	nd Area (acres): 0.0403			
b. Wetland siz	e and connectivity - contribution to animal habit	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1): 0.09			
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	gon ID S	66W103A
a. Indiana We	tland community type: Wet Meadow			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	es to site: ditches road/railroad			
d. Exotic spec	ies rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threa	tened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	IARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water qual	ity protection - numerical rank (6 max.): 2	Good	Medium	Poor
c. Flood and s	torm water storage - numerical rank (5 ma2	Good	Medium	Poor
Tier 3B SUMM	IARY:			
a. Zonation ar	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
	on as indicator of animal habitat:	Valuable		Neutral
	dominant plant taxa observed: 2	Good	Medium	Poor
	efficient of conservatism: 0	Good	Medium	Poor
_	y as indicator of animal habitat:	Valuable		Neutral
·	es as indicator of animal habitat:	Valuable	Favorable	Neutral
	phytic taxa observed: 2	Good	Medium	Poor
-	indicator taxa: 0	Good	Medium	Poor

✓ The wetland site is isolated

General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type):

Native Vegetation - woodland
 Native Vegetation - old field / scrub
 Industrial

10 Agricultural - tilled 0 Residential - single family

0 Agricultural - pasture 0 Commercial or multifamily residential

10 Recreation - green space, mowed

	olygon # S6W103/ able on page one)	Α	Data R	Reference# S6W103
	2: Individual Po			
2.1 W	etland Geomorphic	Setting and Surfac	ce Water Flow (c	heck one):
✓	Depressional Riverine (within	Slope the river/stream	Floodplain banks)	Lacustrine
2.2 Pr	esence of Standing	Water:		
s stan	ding water normall	y present in the po	lygon? Yes	
l:	s standing water is p	present, is the wate	er greater than 2	meters n depth? No
s stan	ding water normall	y present in an adja	acent polygon?	Yes
2.3 Ap	parent Hydroperio	d (check one):		
	Permanently Flo	ooded		Artificially Flooded
✓	Seasonally Flood	ded		
	Saturated (surfa	ce water seldom	present	Artificailly Drained
2.4 So	il Type			
	_Organic (i.e. pea	ıt, etc.) <u>√</u> [Mineral	_Both Mineral and Organic Present
Vet N	1eadow sturbances of Hydro			y to Wetland Communities of Indiana):
√	Ditching			Culvert
	Tiles			Other Human Distrubances to
	 Dams			the
\checkmark	Road or Railroad	d Embankment		
.7 Pr	esence of Invasive I	Exotics (Score as: S	= Scattered, F =	Frequent, or C = Common):
	Garlic Mustard			Glossy Buckthorn
	 Phragmities			Reed Canary Grass
	Purple Loosestri	fe		Other (list):
2. 8 Pr o	esence of Special H	ydrologic Conditio	ns (i.e. seeps, w	et slopes, floating mat):
9 Pr	esence of Special Co	ommunity Types:		
	Bog	Fen	Wet Sa	and / Muck Flats or Marl Seeps
.10 P	resence of Known I	Federal or Indiana	Rar, Threatened	or Endangered Species:
\checkmark	None observed	or known to be p	resen	
	RTES Present (lis	st):		
2.11 V	Vetland Polygon Qเ	uality Descriptor (s	ee: Wetland Qua	ality Descriptions and check one):
	Good	Medium	✓ Poor	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a.1 Nota	ble Features that influence water quality and hydrology:					
Estimated	herbaceouis plant cover (percentage) in the polygon100-75 🗹 75-5050-25<25					
Estimated	woody plant foliar coverage in the polygon100-7575-5050-25<25					
Amount of	dead woody material on the soil surface nilscatteredfrequen					
3a.2 Wate	r Quality Protection Questions:					
1. Y N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?					
2. Y N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?					
3.	If wetland in question is a depressional wetland answer 3a, in not, answer 3b.					
Ϋ́N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended					
Y (N)	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?					
4. Y N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?					
5. Y N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?					
6. Y N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.					
	width of buffer area (in meter0 approximate slope (percen0					
3a.3 Floor	d and Stormwater Storage / Attenuation Questions:					
1.	If wetland in question is a depressional wetland answer 1a, in not, answer 1b					
Y (N)	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?					
Y (N)	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?					
2. Y N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?					
3. Y N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?					
4. Y N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?					
5. Y N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?					

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:						
1. How may vegetation zones are evident in this wetland	d polygon?1					
1b. If only one vegetation zone is evident, which bes	1b. If only one vegetation zone is evident, which best describes the site?					
Polygon compoosed of amosaic of sma heterogeneous textures across the poly	all vegetation patches, hummocks, or tussocks, ygon.					
Polygon composed of a single vegettati the polygon.	ion type with more or less uniform texture across					
2. If more than one vegetation zone is present in the po represents the distribuion of these zone?	lygon, which intersperision diagram most closely					
Type One Interspersion	Type Two Interspersion					
3b.2 Dominant Plant Species: Vegetation Zone A						
What % of the polygon does this vegetative zone occup	y?					
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 7	75%					
Is there notable layering/stratification in this vegetation a	zone? No					
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms extended)	n 10% of the area) listed in order of relative ensive monocultural patches).					
a. <i>Phalaris arundinacea</i>	d					
b. Cyperus esculentus	e					
C	f					
Dominant Shrub Species listed in order of relative abune	dance.					
a	C					
b	d					
Dominant Tree Species listed in order of relative abundance	ance.					
a	c					
b	d					
Tree and shrub canopy: nil separate, seldom to						
Mature trees (>12" dbh): yes no						

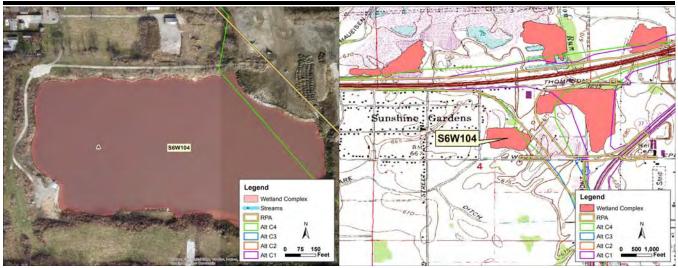
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W103A	Data Reference# S6W103				
3b.2 Dominant Plant Species: Vegetation Zone B					
What % of the polygon does this vegetative zone occur	py?				
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%				
Is there notable layering/stratification in this vegetation	zone?				
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex					
a	d				
b	e				
C	f				
Dominant Shrub Species listed in order of relative abu					
a	C				
b	d				
Dominant Tree Species listed in order of relative abundance	dance.				
a	c				
b	d				
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close				
Mature trees (>12" dbh): yes no					
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this				
3b.2 Dominant Plant Species: Vegetation Zone C					
What % of the polygon does this vegetative zone occur	py?				
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%				
Is there notable layering/stratification in this vegetation	zone?				
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex					
a	d				
b	e				
C	f				
Dominant Shrub Species listed in order of relative abu					
a	c				
b	d				
Dominant Tree Species listed in order of relative abundance	dance.				
a	C				
b	d				
Tree and shrub canopy: nil separate, seldom					
Mature trees (>12" dbh):					
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this				

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed particles in the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the con	ng rush spp. (Equisetum) 2 niled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 nunda regalils) 8 Dnoclea sensibilis) 4 (if known as (Selaginella apoda) 4 as spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10 aphyllum demersum) 1	Herbs: wide-leafed *arrow arum (Pearrow-head spp*green dragon (Jack-in-the-pulppickerel weed (File _*skunk cabbage _*water arum (Cail _water plantain (Ail _*bedstraw sppbeggar's tick sp	d monocots eltandra virginica) 6 . (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 s. opposite/whorled (Gallium) 6 p. (Bidens) 3
	(Lemnaceae) 3 . (Potamogeton) 8 eed (Potamogeton crispus) 0	boneset (Eupate	erbena hastata) 3 orium perfoliatum) 4 (Lyconus) 5
*water lily (Nym water shield (Br	eed (Potamogeton crispus) o phaea tuberosa) 6 asenia schreberi) 4 ock spp. (Nuphar) 6	clearweed spp. cup plant (Silphi false nettle (Boo	
*sundew spp. ([Sarracenia purpurea (10) Orosera) 10	*gentian spp. (G giant ragweed (A Indian hamp (Ap Joe-pye weed s	Sentiana Gentianopsis) 8 Ambrosia trifida) 0 pocynum cannabinum) 2 pp. (Eupatorium) 5
*beak rush spp blueflag iris (Iris bulrush spp. (So *bur reed spp. (cat-tail spp. (Ty	cirpus / Schoenoplectus) 5 Sparganium) 9	mint spp. e.g. homology moneywort (Lys monkey flower sure nettle (Urtica pro	(Rhexia virginica) 5 edge nettle, mtn. mint, skullcap 5 imachia nummularia) 0 spp. (Mimulus) 4
Grasses (family Granumber of speciesa. *wild rice (Zizeb. most natuve cut-grass, mann foxtail (Alopecru	nmineae) - indicate types and zania aquatica) 10 perennial grass spp. 4: na-grass, Canada bluepoint,	*richweed (Colli St. John's wort s sunflower sp. (F *swamp loosest swamp milkwee	nsonia canadensis) 8 spp. (Hypericum/Triandeum) 8 Helianthus) 4 trife (Decodon verticillatus) 8 Ed (Asclepias incarnata) 4 Ammania Rotala) 2
annual grasses (Setaria) and ba	reed (Phragmites), such as annual foxtail arnyard grass (Echinochloa) op. (Eleocharis) 1 sp. =2 = 8	water purslane (winged loosestr	Clematis virginiana) 3 (Ludwigia palustris) 3 ife (Lythrum alatum) 5 ots - Ivs. alternate or basal and
nutsedge spp. (*orchid spp. 10; rush spp. (Junc sedge spp. (Cai *spiderlily (Hym sweet flag (Aco *3-way sedge (I *twig rush (Clad *umbrella sedge wild hyacinth (C	Cyperus) 2 species (if know us) 4 rex) 1 sp. = 3additional enocallis occidentalis) 9	American bellflom *asters: bristly a flat-topped aste other aster spp. *black-eyed Sus cardinal flower (cress spp. (Cardinal flower) dock spp.: swar garlic mustard (ower (Campanula americana) 4 lister (Aser puniceus) 7 r (Aster umbellatus) 8 (e.g. New England, panicled ast san (Rudbeckia fulgida) 8 (Lobelia cardinalis) 4

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) *goldenrod spp. (Solidago ohioensis, S. patula,*grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 _*dwarf birch (Betula pumila) 10 _*highbush blueberry (Vaccinium corymbosum) 9 _*leatherleaf (Chamaedaphne calyculata) 10 _meadowsweet and Hardhack spp. (Spiraea) 4 _*ninebark (Physocarpus opulifoius) 7 _*shrubby cinquefoil (Potentilla fruticosa) 9 _spice bush (Lindera benzoin) 5 _*swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 	Trees - leaves needle shaped*tamarack (Larix laricina) 10 Trees - leaves compound
sneezeweed (Helenium autumnale) 3stinging nettle (Laportea canadensis) 2*swamp saxifrage (Saxifraga pennsylvanica) 10*Virginia bluebells (Mertensia virginica) 6waterhemp (Amaranthus tuberculatus) 1wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed	Trees - leaves compound *ash, black (Fraxinus nigra) 7ash, green (Fraxinus pensylvanica) 3*ash, pumpkin (Fraxinus tomentosa) 8boxelder (Acer negundo) 1hickory, bitternut (Carya cordiformis) 5hickory, shellbark (Carya laciniosa) 8honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4	Trees - leaves simple and opposite red maple (Acer rubrum) 5silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate*alder, speckled (Alnus rugosa) 9river birch (Betula nigra) 2black, gum (Nyssa sylvatica) 5cottonwood, eastern (Populus deltoides) 1cottonwood, swamp (Populus heterophylla) 8elm, American (Ulmus americana) 3hackberry (Celtis occidentalis) 3ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5	 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwwod, red-osier (Cornus stolonifera) 4 *dogwood, blue-fruited or silky (Cornus obliqua) dogwood, gray (Cornus racemosa) 2 elderberry (Sambucus) 2	sycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3 additional sp. = 7



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

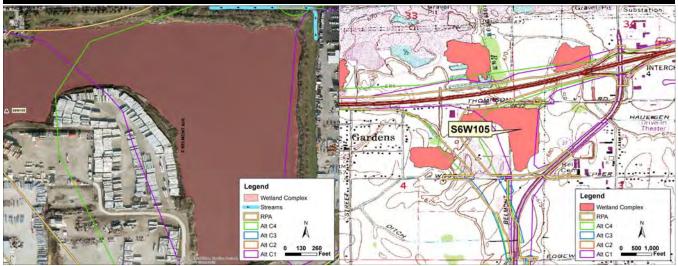
White River - Hide Creek Quadrangle: Maywood Basin: 14-digit HUC: 05120201130080 County: Marion T14N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 4 Size of wetland complex (acres): Quarter: NE

USACE JurisdictionYesLatitude:39.687413IDEM Jurisdiction:YesLongitude:-86.203643

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
S6W104A P			14.9733	no rating	no rating	no rating	Alt C1	0.00	0.0%
							Alt C2	1.13	7.6%
	Pond	PUB					Alt C3	1.13	7.6%
							Alt C4	1.13	7.6%
							RPA	0.00	0.0%



Polygon S6W104A



Wetland Location on 2015 Aerial Photograph

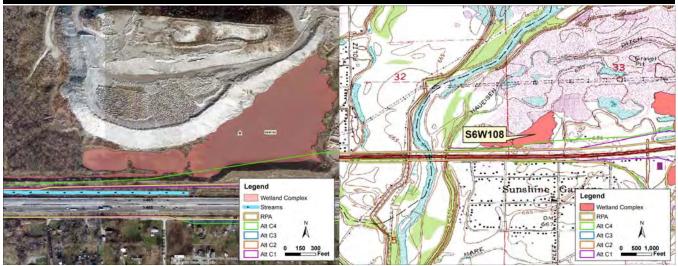
Wetland Location on Maywood USGS Quadrangle

White River - Hide Creek Quadrangle: Maywood Basin: 14-digit HUC: 05120201130080 County: Marion T14N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 3 and 4 Size of wetland complex (acres): Quarter: NW and NE 39.689938 **USACE Jurisdiction** Yes Latitude: IDEM Jurisdiction: Yes -86.19661 Longitude:

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
S6W105A	Pond	L1U	46.8198	no rating	no rating	no rating	Alt C1	37.91	81.0%
							Alt C2	8.68	18.5%
							Alt C3	8.68	18.5%
							Alt C4	8.68	18.5%
							RPA	0.16	0.3%



Polygon S6W105A



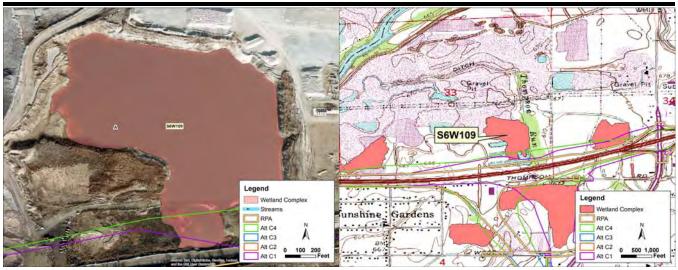
Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

Basin:White River - Hide CreekQuadrangle:Maywood14-digit HUC:05120201130080County:MarionPhysiographic Region:New Castle Till PlainsTownship:T15NEcoregion:Eastern Corn Belt PlainsRange:R3E

Natural Region:Tipton Till PlainSection:32 and 33Size of wetland complex (acres):Quarter:SE and SWUSACE JurisdictionYesLatitude:39.694121IDEM Jurisdiction:YesLongitude:-86.213618

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
		Pond L1UB	19.7797	no rating	no rating	no rating	Alt C1	0.00	0.0%
							Alt C2	0.67	3.4%
S6W108A	Pond						Alt C3	0.67	3.4%
							Alt C4	0.67	3.4%
							RPA	0.00	0.0%



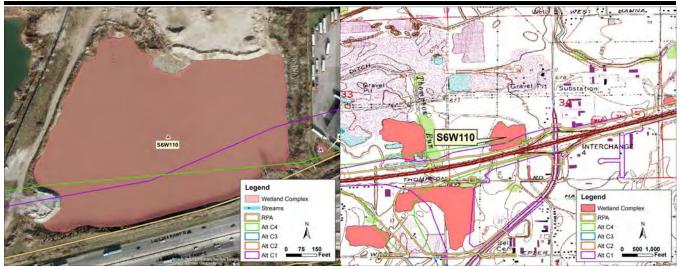
Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

Maywood White River - Hide Creek Quadrangle: Basin: 14-digit HUC: 05120201130080 County: Marion T15N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 33 Size of wetland complex (acres): Quarter: SE

USACE JurisdictionYesLatitude:39.696316IDEM Jurisdiction:YesLongitude:-86.200189

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
		Pond PUB	22.9958	no rating	no rating	no rating	Alt C1	0.20	0.9%
							Alt C2	1.64	7.1%
S6W109A	Pond						Alt C3	1.64	7.1%
							Alt C4	1.64	7.1%
							RPA	0.00	0.0%



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

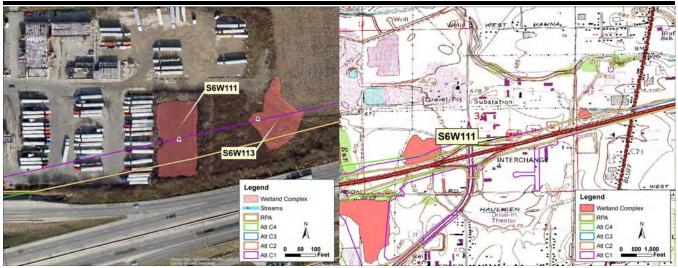
Basin: White River - Hide Creek Quadrangle: Maywood 14-digit HUC: 05120201130080 County: Marion T15N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 34 Size of wetland complex (acres): Quarter: SW

USACE JurisdictionYesLatitude:39.696372IDEM Jurisdiction:YesLongitude:-86.191112

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
		ond PUB	15.0215	no rating	no rating	no rating	Alt C1	4.22	28.1%
							Alt C2	3.51	23.3%
S6W110A	Pond						Alt C3	3.51	23.3%
							Alt C4	3.51	23.3%
							RPA	0.00	0.0%



Polygon S6W110A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

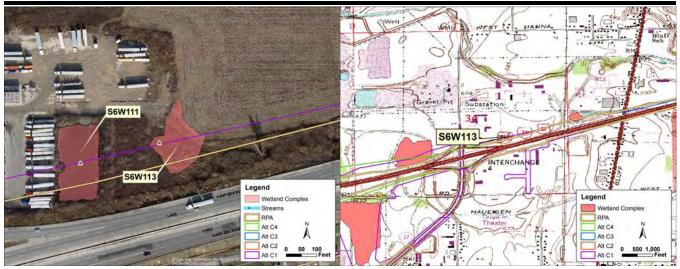
White River - Hide Creek Quadrangle: Maywood Basin: 14-digit HUC: 05120201130080 County: Marion T15N Physiographic Region: New Castle Till Plains Township: Ecoregion: Eastern Corn Belt Plains R3E Range: **Natural Region:** Tipton Till Plain Section: 34 Size of wetland complex (acres): Quarter: SE

USACE JurisdictionYesLatitude:39.697555IDEM Jurisdiction:YesLongitude:-86.183383

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
		nd PUB	0.5480	no rating	no rating	no rating	Alt C1	0.27	49.7%
							Alt C2	0.10	18.6%
S6W111A	Pond						Alt C3	0.10	18.6%
							Alt C4	0.10	18.6%
							RPA	0.10	18.6%



Polygon S6W119A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

White River - Hide Creek Quadrangle: Maywood Basin: 14-digit HUC: 05120201130080 County: Marion T15N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 34 Size of wetland complex (acres): 0.1035 Quarter: SE

USACE JurisdictionNoLatitude:39.697714IDEM Jurisdiction:YesLongitude:-86.182527

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
		PSS C		poor	poor	fair	Alt C1	0.22	56.3%
			0.3874				Alt C2	0.05	12.0%
S6W113A	Scrub-Carr						Alt C3	0.05	12.0%
							Alt C4	0.05	12.0%
							RPA	0.05	12.0%



Polygon S6W113A



Polygon S6W113A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W113			
Date of Site Visit: Thursday, January 21, 2016			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.1035			
b. Wetland size and connectivity - contribution to animal ha	abitat:		
Valuable	More Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1): 0.40	ס		
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID	66W113A
a. Indiana Wetland community type: Shrub-Carr			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: other			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: None			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.):3	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma	3 Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat	:: Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 3	Good	Medium	Poor
d. Average coefficient of conservatism: 3.7	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed: 5	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

Recreation - green space, mowed

Tier 1: Assessment Overview 1.1 Site Identification: Wetland Site Name: N/A Ownership (if known): N/A USGS Topographic Quadrangle: Maywood USGS Watershed map 14-Digit HUC: White River - Hide Creek Identify each NWI Polygon within the Wetland Site (Polygon specific data) NWI Polygon ID Number **Cowardin Classification** Polygon Size (acres) S6W113A PSS1 0.3874 1.2 Site Visit Team Members: R. Hook, C. Meador (Originally JFNew) Agency: HNTB Date assessed: 1/21/2016 Time assessed: Weather conditions: Note any unusual weahter events that may have influenced the current conditions within this wetland system (e.g. recent heav rains, an unusually dry season, an especially early spring etc.) 1.3 Wetland Size Size of site under assessment: 0.3874 Size of wetland complex: 0.1035 1.4 Site Setting Degree of isolation from other wetlands or wetland complexes: The site is connected upstream and downstream with other wetlands The site is only connected upstrrem with other wetlands The site is only connected downstream with other wetlands ✓ Other wetlands are nearby (within 0.25 mile) but not connected The wetland site is isolated General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type): 10 Road / highway / railroad bed / parking lot 0 Native Vegetation - woodland 0 Industrial 30 Native Vegetation - old field / scrub 20 Agricultural - tilled 0 Residential - single family 0 Agricultural - pasture 40 Commercial or multifamily residential

NWI Polygon # S6W113A	Data Reference# S6W113
see table on page one)	
Fier 2: Individual Polygon: Prelimina to be completted on-site for each NWI polygon	
2.1 Wetland Geomorphic Setting and Surface W	ater Flow (check one):
✓ Depressional Slope Riverine (within the river/stream ban	· ———
2.2 Presence of Standing Water:	
Is standing water normally present in the polygo	n? No
Is standing water is present, is the water gr	eater than 2 meters n depth? No
ls standing water normally present in an adjacen	t polygon? No
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom pres	sentArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mine	eralBoth Mineral and Organic Present
Shrub-Carr 2.6 Disturbances of Hydrology (check all that ap	gon (see Key to Wetland Communities of Indiana):
Ditching	Culvert
Tiles	✓ Other Human Distrubances to
Dams	the
Road or Railroad Embankment	····e
2.7 Presence of Invasive Exotics (Score as: S = So	cattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	S Other (list):
2.8 Presence of Special Hydrologic Conditions (i	.e. seeps, wet slopes, floating mat):
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar,	Threatened or Endangered Species:
✓ None observed or known to be prese	n
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: \	Wetland Quality Descriptions and check one):
Good Medium	√ Poor
	<u>:</u>

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 I	Notak	ole Features that influence water quality and hydrology:						
Es	Estimated herbaceouis plant cover (percentage) in the polygon100-7575-5050-25<25								
Es	Estimated woody plant foliar coverage in the polygon								
An	noui	nt of o	dead woody material on the soil surfacenilscatteredfrequent						
3а	.2 ۱	Nate	r Quality Protection Questions:						
1.	Y) N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?						
2.	Y) N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?						
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.						
	Υ	(N)	3a. Does the wetland have a shape or flow that allows for the settling out of suspended						
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?						
4.	Υ	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?						
5.	Y) N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?						
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.						
			width of buffer area (in meter approximate slope (percen						
3а	.3 I	Flood	I and Stormwater Storage / Attenuation Questions:						
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b						
	Y) N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?						
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?						
2.	Y) N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?						
3.	Υ	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?						
4.	Υ	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?						
5.	Y) N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?						

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:					
1. How may vegetation zones are evident in this wetland	polygon?1				
1b. If only one vegetation zone is evident, which best describes the site?					
Polygon compoosed of amosaic of smal heterogeneous textures across the polygon	I vegetation patches, hummocks, or tussocks, gon.				
Polygon composed of a single vegettation the polygon.	on type with more or less uniform texture across				
2. If more than one vegetation zone is present in the poly represents the distribuion of these zone?	gon, which intersperision diagram most closely				
Type One Interspersion	Type Two Interspersion				
3b.2 Dominant Plant Species: Vegetation Zone A					
What % of the polygon does this vegetative zone occupy	?				
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 75	5% 75 - 90% >90%				
Is there notable layering/stratification in this vegetation zo	one? Yes				
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms exte					
a	d				
b	e				
c	f				
Dominant Shrub Species listed in order of relative abund	ance.				
a. Lonicera X bella	C				
b	d				
Dominant Tree Species listed in order of relative abunda	nce.				
a. Salix interior	C				
b. <u>Cornus amomum</u>	d				
Tree and shrub canopy: nil separate, seldom to					
Mature trees (>12" dbh): yes no					

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

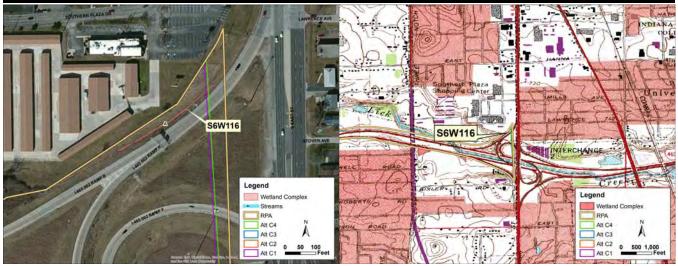
NWI Polygon # S6W113A	Data Reference	Se# S6W113	
3b.2 Dominant Plant Species: Vegetation Zone B			
What % of the polygon does this vegetative zone occur	іру?		
□ 10 - 25% □ 25 - 50% □ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	zone?		
Dominant Herbaceous Species (i.e., covering more thabundance. (Mark with an * any species that forms ex			elative
a	d		
b	e		
c	f.		
Dominant Shrub Species listed in order of relative abu			
a	C		
b	d.		
Dominant Tree Species listed in order of relative abur			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seldom	_		
Mature trees (>12" dbh): ☐ yes ☐ no			
Other remarks (include personal comments about who wetland site).	at adds to or det	racts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone C			
What % of the polygon does this vegetative zone occu	іру?		
☐ 10 - 25% ☐ 25 - 50% ☐ 50	- 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	zone?		
Dominant Herbaceous Species (i.e., covering more thabundance. (Mark with an * any species that forms ex	an 10% of the a	rea) listed in order of r ıltural patches).	elative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative abu			
a			
b			
Dominant Tree Species listed in order of relative abur			
a			
b		en touching more	
··· — — <u>-</u>	todorning [] On	.c.i todolilig [] Illole	01 1033 01036
Mature trees (>12" dbh): yes no Other remarks (include personal comments about who	at adds to or det	racts from the quality	of this

wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed pl	ants	Herbs: wide-leafe	d monocots
horsetail, scourin	g rush spp. (Equisetum) 2	*arrow arum (P	eltandra virginica) 6
*ferns: marsh shi	led fern spp. (Dryopteris) 7	arrow-head spp	o. (Sagittaria) 4
*cinnamon fern (Osmunda cinnamomea) 9	*green dragon ((Arisaema dracontium) 6
*royal fern (Osmu	unda regalils) 8	Jack-in-the-pul	oit (Arisaema triphyllum) 4
sensitive fern (Or	noclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
*other: species (if	f known	*skunk cabbage	e (Symplocarpus foetidus) 8
marsh club moss	(Selaginella apoda) 4	*water arum (C	alla palustris) 10
Sphagnum moss	spp. (Sphagnum) 10	water plantain (Alisma plantago-aquatica) 2
Herbs: Ivs. floating	or submergent	Herbs: dicots - lvs	s. opposite/whorled
*bladderwort spp		*bedstraw spp.	
	hyllum demersum) 1	beggar's tick sp	•
duckweed spp. (I	-		erbena hastata) 3
*pondweed spp.	•		orium perfoliatum) 4
	ed (Potamogeton crispus) 0		
*water lily (Nymp	` ,	clearweed spp.	` , ,
	senia schreberi) 4		ium perfoliatum) 4
	ck spp. (Nuphar) 6		ehmeria cylindrica) 3
/			edicularis lanceolata) 6
Herbs: Ivs. floating	or submergent		Gentiana Gentianopsis) 8
	arracenia purpurea (10)		(Ambrosia trifida) 0
*sundew spp. (Dr	,		pocynum cannabinum) 2
			spp. (Eupatorium) 5
Herbs: linear-lys. o	r +/- leafless monocots		. (Lysimachia) 6
	Rhynchospora) 10		(Rhexia virginica) 5
blueflag iris (Iris \			edge nettle, mtn. mint, skullcap 5
	rpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (S			spp. (Mimulus) 4
cat-tail spp. (Typl		nettle (Urtica pr	
	o. (Eriophorum) 10		fe (Lythrum salicaria) 0
	nineae) - indicate types and		insonia canadensis) 8
number of species	,		spp. (Hypericum/Triandeum) 8
a. *wild rice (Ziza	ania aquatica) 10	sunflower sp. (I	
	perennial grass spp. 4:		trife (Decodon verticillatus) 8
cut-grass, manna	a-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecrus	s); other	toothcup spp. (Ammania Rotala) 2
c. introduced gra	ass spp. 0:reed canary	*turtlehead spp	
grass (Phalaris, r	eed (Phragmites),	virgin's bower (Clematis virginiana) 3
	uch as annual foxtail	water purslane	(Ludwigia palustris) 3
(Setaria) and bar	nyard grass (Echinochloa)	winged loosesti	rife (Lythrum alatum) 5
needle sedge spr	o. (Eleocharis) 1 sp. =2		
*additional =	8	Herbs (vines): dice	ots - Ivs. alternate or basal and
nutsedge spp. (C	yperus) 2	American bellflo	ower (Campanula americana) 4
*orchid spp. 10; s	species (if know	*asters: bristly a	aster (Aser puniceus) 7
rush spp. (Juncus	s) 4	flat-topped aste	er (Aster umbellatus) 8
sedge spp. (Care	ex) 1 sp. = 3additional	= 7other aster spp	. (e.g. New England, panicled ast
*spiderlily (Hyme	nocallis occidentalis) 9	*black-eyed Su	san (Rudbeckia fulgida) 8
sweet flag (Acoru	ıs calamus) 0	cardinal flower	(Lobelia cardinalis) 4
*3-way sedge (Du	ulichium arundinaceum) 10	cress spp. (Car	damine) 4
*twig rush (Cladiu	um mariscoides) 10	dock spp.: swa	mp, water, pale (Rumex) 4
*umbrella sedge	(Fuirena squarrosa) 10	garlic mustard ((Alliaria petiolata) 0
	massia scilloides) 5	golden ragwort	(Senecio aureus) 4
*yellow-eyed gras	ss (Xyris torta) 9	-	

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (Ilex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
✓ poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	✓ willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R. frangula) 0	additional sp. = 7
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
✓ elderberry (Sambucus) 2	



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

Lick Creek - Beech Creek Quadrangle: Maywood Basin: 14-digit HUC: 05120201130060 County: Marion T15N Physiographic Region: New Castle Till Plains Township: Ecoregion: Eastern Corn Belt Plains R3E Range: **Natural Region:** Tipton Till Plain Section: 36 Size of wetland complex (acres): 0.0396 Quarter: NW

USACE JurisdictionYesLatitude:39.701589IDEM Jurisdiction:YesLongitude:-86.149888

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Wet Meadow	PEM	0.0396	poor	poor	poor	Alt C1	0.04	90.7%
							Alt C2	0.04	93.4%
S6W116A							Alt C3	0.04	93.4%
							Alt C4	0.04	93.4%
							RPA	0.04	100.0%



Polygon S6W116A



Polygon S6W116A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017			
Wetland Site Name	e: N/A			
Data Reference #:	S6W116			
Date of Site Visit:	Sunday, June 05, 2016			
Tier 1 Summaı	ry:			
a. Total Wetla	nd Area (acres): 0.0396			
b. Wetland siz	e and connectivity - contribution to animal habit	at:		
	Valuable Mo	re Favorable	Favorable	Neutral
c. Surrounding	g land use - numerical rank (max. = 1): 0.15			
d. Value surro	ounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	IRY:	Polyg	gon ID S	6W116A
a. Indiana We	etland community type: Wet Meadow			
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbance	es to site: road/railroad			
d. Exotic spec	ies rating:	Good	Medium	Poor
e. Special Hyd	rologic Conditions Observed: None			
f. Special Com	munity Type: None			
g. Rare-Threa	tened-Endangered Species: None			
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor
Tier 3A SUMM	IARY:			
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water qual	ity protection - numerical rank (6 max.): 0	Good	Medium	Poor
c. Flood and s	torm water storage - numerical rank (5 ma3	Good	Medium	Poor
Tier 3B SUMM	IARY:			
	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
	on as indicator of animal habitat:	Valuable		Neutral
	dominant plant taxa observed: 3	Good	Medium	Poor
	efficient of conservatism: 1.7	Good	Medium	Poor
_	y as indicator of animal habitat:	Valuable	- 3	Neutral
·	es as indicator of animal habitat:	Valuable	Favorable	Neutral
	phytic taxa observed: 7	Good	Medium	Poor
-	indicator taxa: 0	Good	Medium	Poor

0 Agricultural - pasture

Recreation - green space, mowed

Tier 1: Assessment Overview 1.1 Site Identification: Wetland Site Name: N/A Ownership (if known): N/A USGS Topographic Quadrangle: Maywood USGS Watershed map 14-Digit HUC: Lick Creek - Beech Creek Identify each NWI Polygon within the Wetland Site (Polygon specific data) NWI Polygon ID Number **Cowardin Classification** Polygon Size (acres) S6W116A PFM1 0.0396 1.2 Site Visit Team Members: Rusty Yeager Agency: Lochmueller Group Date assessed: 6/5/2016 Time assessed: Weather conditions: sunny Note any unusual weahter events that may have influenced the current conditions within this wetland system (e.g. recent heav rains, an unusually dry season, an especially early spring etc.) 1.3 Wetland Size Size of site under assessment: 0.0396 Size of wetland complex: 0.0396 1.4 Site Setting Degree of isolation from other wetlands or wetland complexes: The site is connected upstream and downstream with other wetlands The site is only connected upstrrem with other wetlands The site is only connected downstream with other wetlands Other wetlands are nearby (within 0.25 mile) but not connected ✓ The wetland site is isolated General assessment of adjacent land use / land cover in the area within 50 meters of the perimeter of the wetland site (indicate the % abundance of each type): 50 Road / highway / railroad bed / parking lot 0 Native Vegetation - woodland O Native Vegetation - old field / scrub 0 Industrial 0 Agricultural - tilled 0 Residential - single family

50

Commercial or multifamily residential

NWI Polygon # S6W116A	Data Reference# S6W116
see table on page one)	
ier 2: Individual Polygon: Preliminal to be completted on-site for each NWI polygon	
.1 Wetland Geomorphic Setting and Surface W	ater Flow (check one):
✓ Depressional Slope Fiverine (within the river/stream banks)	FloodplainLacustrine ks)
.2 Presence of Standing Water:	
standing water normally present in the polygon	n? Yes
Is standing water is present, is the water gre	eater than 2 meters n depth? No
standing water normally present in an adjacent	t polygon? Yes
3 Apparent Hydroperiod (check one):	
Permanently Flooded	✓ Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom pres	sentArtificailly Drained
.4 Soil Type	
Organic (i.e. peat, etc.) Mine	eralBoth Mineral and Organic Present
.5 Wetland Community Type for this NWI poly៖ Vet Meadow	gon (see Key to Wetland Communities of Indiana):
6 Disturbances of Hydrology (check all that ap	ply):
Ditching	Culvert
 Tiles	Other Human Distrubances to
 Dams	the
Road or Railroad Embankment	
.7 Presence of Invasive Exotics (Score as: S = Sc	cattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
.8 Presence of Special Hydrologic Conditions (i.	.e. seeps, wet slopes, floating mat):
None	
.9 Presence of Special Community Types:	
BogFen	Wet Sand / Muck Flats or Marl Seeps
.10 Presence of Known Federal or Indiana Rar,	Threatened or Endangered Species:
✓ None observed or known to be prese	n
RTES Present (list):	
.11 Wetland Polygon Quality Descriptor (see: V	Wetland Quality Descriptions and check one):
Good Medium	√ Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a.	.1 N	lotak	ole Features that influence water quality and hydrology:											
Es	tima	ited h	nerbaceouis plant cover (percentage) in the polygon 100-75 75-50 50-25 <25											
Es	tima	ited v	voody plant foliar coverage in the polygon100-7575-5050-25 <25											
An	nour	nt of o	dead woody material on the soil surface nilscatteredfrequent											
3a.	.2 V	Vate	Quality Protection Questions:											
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?											
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?											
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.											
	Υ	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended											
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?											
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?											
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?											
6.	Υ	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.											
			width of buffer area (in meter0 approximate slope (percen0											
3a.	.3 F	lood	and Stormwater Storage / Attenuation Questions:											
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b											
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?											
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?											
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?											
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?											
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?											
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?											

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion:									
1. How may vegetation zones are evident in this wetland	l polygon?1								
1b. If only one vegetation zone is evident, which best	describes the site?								
Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon.									
Polygon composed of a single vegettation the polygon.	on type with more or less uniform texture across								
2. If more than one vegetation zone is present in the pol represents the distribuion of these zone?	ygon, which intersperision diagram most closely								
Type One Interspersion	Type Two Interspersion								
3b.2 Dominant Plant Species: Vegetation Zone A									
What % of the polygon does this vegetative zone occupy	?								
☐ 10 - 25% ☐ 25 - 50% ☐ 50 - 7	5%								
Is there notable layering/stratification in this vegetation z	one? No								
Dominant Herbaceous Species (i.e., covering more than abundance. (Mark with an * any species that forms exte									
a. Schedonorus pratensis	d								
b. Schoenoplectus tabernaemontani	e								
c. Echinochloa muricata	f								
Dominant Shrub Species listed in order of relative abund	dance.								
a	c								
b	d								
Dominant Tree Species listed in order of relative abunda									
a	C								
b	d								
Tree and shrub canopy: nil separate, seldom to									
Mature trees (>12" dbh): ☐ yes ■ no									

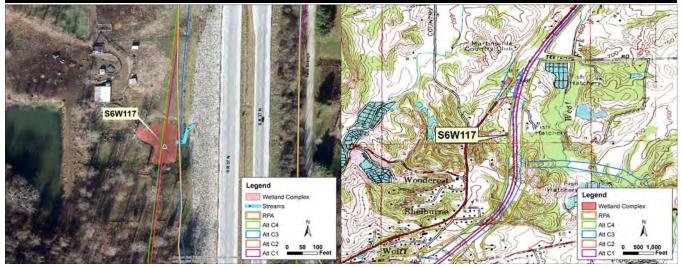
Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W116A	Data Reference# S6W116
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	c
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p horsetail, scouri *ferns: marsh sl *cinnamon fern *royal fern (Osm sensitive fern (C *other: species marsh club mos Sphagnum mos Herbs: Ivs. floating *bladderwort sp	blants ing rush spp. (Equisetum) 2 hiled fern spp. (Dryopteris) 7 (Osmunda cinnamomea) 9 hunda regalils) 8 Dnoclea sensibilis) 4 (if known is (Selaginella apoda) 4 is spp. (Sphagnum) 10 g or submergent p. (Utricularia) 10	Herbs: wide-leafed *arrow arum (Petarrow-head spp) *green dragon (Jack-in-the-pulp pickerel weed (I) *skunk cabbage *water arum (Ca) water plantain (A) Herbs: dicots - lvs *bedstraw spp.	d monocots eltandra virginica) 6 . (Sagittaria) 4 Arisaema dracontium) 6 bit (Arisaema triphyllum) 4 Pontederia cordata) 5 e (Symplocarpus foetidus) 8 alla palustris) 10 Alisma plantago-aquatica) 2 s. opposite/whorled (Gallium) 6
coontail (Cerato	phyllum demersum) 1	beggar's tick sp	p. (Bidens) 3
duckweed spp.	,		erbena hastata) 3
	. (Potamogeton) 8	` .	orium perfoliatum) 4
	eed (Potamogeton crispus) 0	•	
	phaea tuberosa) 6	clearweed spp.	` '
	asenia schreberi) 4		ium perfoliatum) 4
*yellow spatterd	ock spp. (Nuphar) 6	`	ehmeria cylindrica) 3
			dicularis lanceolata) 6
Herbs: Ivs. floating			Sentiana Gentianopsis) 8
	Sarracenia purpurea (10)		Ambrosia trifida) 0
*sundew spp. (D	Drosera) 10		pocynum cannabinum) 2
			pp. (Eupatorium) 5
	or +/- leafless monocots	*loosestrife spp	· •
	(Rhynchospora) 10		(Rhexia virginica) 5
blueflag iris (Iris			edge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		imachia nummularia) 0
*bur reed spp. (spp. (Mimulus) 4
✓ cat-tail spp. (Typ		nettle (Urtica pr	•
	pp. (Eriophorum) 10		fe (Lythrum salicaria) 0
	amineae) - indicate types and	`	nsonia canadensis) 8
number of species	-onic counties) 10		spp. (Hypericum/Triandeum) 8
	zania aquatica) 10	sunflower sp. (F	•
	perennial grass spp. 4: na-grass, Canada bluepoint,		rife (Decodon verticillatus) 8
	· · · · · · · · · · · · · · · · · · ·		ed (Asclepias incarnata) 4
foxtail (Alopecru	rass spp. 0:reed canary	turtlehead spp. (***********************************	Ammania Rotala) 2
	reed (Phragmites),		Clematis virginiana) 3
	such as annual foxtail		(Ludwigia palustris) 3
	arnyard grass (Echinochloa)		ife (Lythrum alatum) 5
,	op. (Eleocharis) 1 sp. =2	wiiliged loosesti	ile (Lytinain alatain) 5
*additional		Harhs (vinas): dice	ots - Ivs. alternate or basal and
✓ nutsedge spp. (•	ower (Campanula americana) 4
	species (if know		ster (Aser puniceus) 7
✓ rush spp. (Junc			r (Aster umbellatus) 8
sedge spp. (Car	•		(e.g. New England, panicled ast
• · · ·	enocallis occidentalis) 9		san (Rudbeckia fulgida) 8
sweet flag (Aco	•		Lobelia cardinalis) 4
	Oulichium arundinaceum) 10	cress spp. (Car	·
	lium mariscoides) 10		np, water, pale (Rumex) 4
	e (Fuirena squarrosa) 10		Alliaria petiolata) 0
	amassia scilloides) 5	`	(Senecio aureus) 4
	ass (Xyris torta) 9		,

Herbs (vines): dicots - lvs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	tamaraon (Lank lanema) To
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
wingstern (Actinomens alterniola) 5	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
•	poison sumac (Khus Vernix) 10
aven spp.: round, white (Geum) 2	Trace leaves simple and appeals
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	Trees leaves simple and alternate
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
elderberry (Sambucus) 2	



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin: Clear Creek - East/West/Grassy Quadrangle: Martinsville

14-digit HUC:05120201140140County:MorganPhysiographic Region:New Castle Till PlainsTownship:T12N

Ecoregion: Rew Castle Fili Flains Fownship. F12N

Ecoregion: Eastern Corn Belt Plains Range: R1E

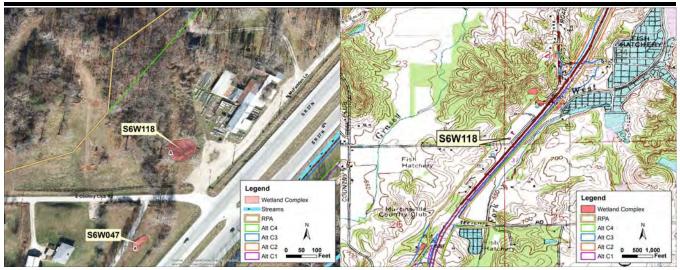
Natural Region: Tipton Till Plain Section: 26

Size of wetland complex (acres):Quarter:SEUSACE JurisdictionYesLatitude:39.442671IDEM Jurisdiction:YesLongitude:-86.38823

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Pond	PUB	0.2349	no rating	no rating	no rating	Alt C1	0.10	42.2%
							Alt C2	0.10	41.9%
S6W117A							Alt C3	0.00	0.0%
							Alt C4	0.12	50.1%
							RPA	0.00	0.0%



Polygon S6W117A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Martinsville USGS Quadrangle

Basin:Clear Creek - East/West/GrassyQuadrangle:Martinsville14-digit HUC:05120201140140County:MorganPhysiographic Region: New Castle Till PlainsTownship:T12N

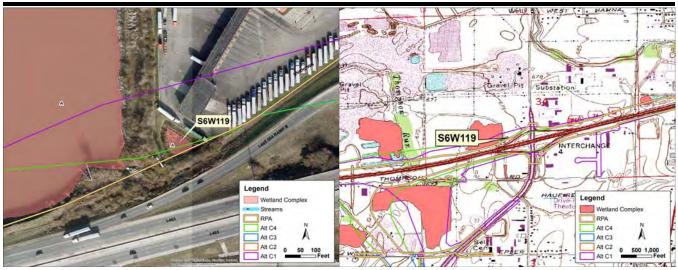
Ecoregion:Eastern Corn Belt PlainsRange:R1ENatural Region:Tipton Till PlainSection:24Size of wetland complex (acres):Quarter:SW

USACE JurisdictionYesLatitude:39.457221IDEM Jurisdiction:YesLongitude:-86.380433

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Pond	PUB	0.0950	no rating	no rating	no rating	Alt C1	0.10	100.0%
							Alt C2	0.10	100.0%
S6W118A							Alt C3	0.10	100.0%
							Alt C4	0.10	100.0%
							RPA	0.10	100.0%



Polygon S6W118A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

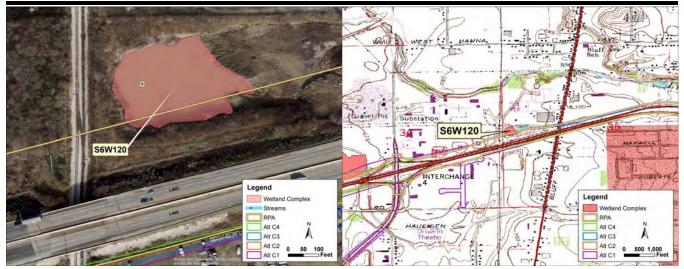
White River - Hide Creek Quadrangle: Maywood Basin: 14-digit HUC: 05120201130080 County: Marion T15N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 34 Size of wetland complex (acres): Quarter: SW

USACE JurisdictionYesLatitude:39.696155IDEM Jurisdiction:YesLongitude:-86.188907

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Pond	PUB	0.0833	no rating	no rating	no rating	Alt C1	0.08	100.0%
							Alt C2	0.03	34.8%
S6W119A							Alt C3	0.03	34.8%
							Alt C4	0.03	34.8%
							RPA	0.00	4.7%



Polygon S6W119A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

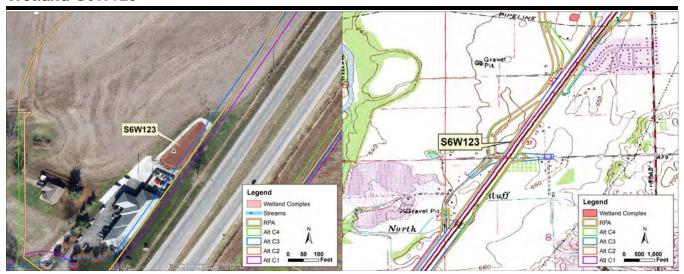
Basin: Lick Creek - Beech Creek Quadrangle: Maywood 14-digit HUC: 05120201130060 County: Marion T15N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 35 Size of wetland complex (acres): Quarter: SW

USACE JurisdictionYesLatitude:39.699539IDEM Jurisdiction:YesLongitude:-86.176518

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Pond	PUB	1.6422	no rating	no rating	no rating	Alt C1	0.26	15.8%
							Alt C2	0.26	15.8%
S6W120A							Alt C3	0.26	15.8%
							Alt C4	0.26	15.8%
							RPA	0.26	15.8%



Polygon S6W120A



Wetland Location on 2015 Aerial Photograph

Wetland Location on Bargersville USGS Quadrangle

Basin:White River - North Bluff/Bluff CreQuadrangle:Bargersville14-digit HUC:05120201140030County:JohnsonPhysiographic Region: New Castle Till PlainsTownship:T13N

Ecoregion: Eastern Corn Belt Plains Range: R3E

Natural Region: Tipton Till Plain Section: 5

Size of wetland complex (acres): Quarter: SW

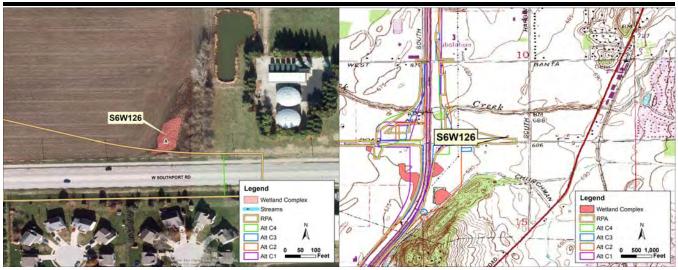
USACE JurisdictionYesLatitude:39.592442IDEM Jurisdiction:YesLongitude:-86.229054

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
S6W123A	Pond	PUB	0.1643	no rating	no rating	no rating	Alt C1	0.00	0.0%
							Alt C2	0.00	0.0%
							Alt C3	0.03	15.8%
							Alt C4	0.00	0.0%
							RPA	0.00	0.0%



Polygon S6W123A

Wetland S6W126



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

Basin:Little Buck Creek (Southport)Quadrangle:Maywood14-digit HUC:05120201130090County:Marion

Physiographic Region:New Castle Till PlainsTownship:T14NEcoregion:Eastern Corn Belt PlainsRange:R3ENatural Region:Tipton Till PlainSection:10Size of wetland complex (acres):0.1186Quarter:SW

USACE JurisdictionNoLatitude:39.664117IDEM Jurisdiction:YesLongitude:-86.189099

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.00	0.0%
							Alt C2	0.00	0.0%
S6W126A	Seasonally	PEM	0.1186	poor	poor	fair	Alt C3	0.00	0.0%
	Flooded						Alt C4	0.01	5.5%
	Basin						RPA	0.01	5.6%



Polygon S6W126A

In-WRAP Summary Sheet

Date Report Genera	eted: Friday, September 15, 2017			
Wetland Site Name	: <u>N</u> /A			
Data Reference #:	S6W126			
Date of Site Visit:	Wednesday, July 26, 2017			
Tier 1 Summary	y:			
a. Total Wetlan	d Area (acres): 0.1186			
b. Wetland size	e and connectivity - contribution to animal habita	t:		
	Valuable Mor	e Favorable	Favorable	Neutral
c. Surrounding	land use - numerical rank (max. = 1): 0.42			
d. Value surrou	inding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMA	RY:	Polyg	on ID	6W126A
a. Indiana Wet	land community type: Seasonally Flooded Basin			
b. Standing wa	ter - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances	s to site:			
d. Exotic specie	es rating:	Good	Medium	Poor
e. Special Hydr	ologic Conditions Observed: None			
f. Special Comr	nunity Type: None			
g. Rare-Threate	ened-Endangered Species: None			
h. Polygon Qua	lity Descriptor:	Good	Medium	Poor
Tier 3A SUMMA	ARY:			
a: Dead woody	material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water qualit	y protection - numerical rank (6 max.):1_	Good	Medium	Poor
c. Flood and sto	orm water storage - numerical rank (5 ma <u>3</u>	Good	Medium	Poor
Tier 3B SUMMA	ARY:			
a. Zonation and	d interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification	n as indicator of animal habitat:	Valuable		Neutral
c. Number of d	ominant plant taxa observed: 3	Good	Medium	Poor
d. Average coe	fficient of conservatism: 2.3	Good	Medium	Poor
e. Tree canopy	as indicator of animal habitat:	Valuable		Neutral
	as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrop	phytic taxa observed: 14	Good	Medium	Poor
h. Number of in	ndicator taxa: 0	Good	Medium	Poor

____0 __ Commercial or multifamily residential

	L: Assessment O e Identification:	verview		
Wetlar	nd Site Name: N/A			
Owner	ship (if known): N/A			
USGS T	opographic Quadran	gle: Maywood		
USGS V	Watershed map 14-Di	git HUC: Little Buck (Creek (Southport)
Identif	y each NWI Polygon v	within the Wetland Sit	e (Poly	gon specific data)
NWI	Polygon ID Number	Cowardin Classifica	ition	Polygon Size (acres)
	S6W126A	PEM1		0.1186
1.2 Site	e Visit Members: Rusty Yea	ger		
Agency	y: Lochmueller Group	0		
Date as	ssessed: <u>7/26/2017</u>		ime as	sessed:
Weath	er conditions: sunn	у		
				iced the current conditions withih this wetland an especially early spring etc.)
1.3 We	etland Size			
Size of	site under assessmer	nt: 0.1186		
Size of	wetland complex:	0.1186		
	e Setting e of isolation from oth	ner wetlands or wetla	nd con	nplexes:
	_The site is connect	ted upstream and de	ownst	ream with other wetlands
	The site is only cor	nnected upstrrem w	ith ot	her wetlands
	The site is only cor	nnected downstrear	n with	other wetlands
	_Other wetlands ar	e nearby (within 0.2	25 mile	e) but not connected
\checkmark	The wetland site is	sisolated		
	· · · · · · · · · · · · · · · · · · ·	cent land use / land cone % abundance of each		the area within 50 meters of the perimeter of e):
0	_ Native Vegetation	n - woodland	10	Road / highway / railroad bed / parking lot
40	Native Vegetation	n - old field / scrub_	0	Industrial
50	_ Agricultural - tille	d _	0	Residential - single family

0 Recreation - green space, mowed

0 Agricultural - pasture

NWI Polygon # S6W126A	Data Reference# S6W126
see table on page one)	
ier 2: Individual Polygon: Preliminar to be completted on-site for each NWI polygon p	
.1 Wetland Geomorphic Setting and Surface Wa	ater Flow (check one):
✓ Depressional Slope F Riverine (within the river/stream bank	FloodplainLacustrine ks)
.2 Presence of Standing Water:	
s standing water normally present in the polygon	n? No
Is standing water is present, is the water gre	eater than 2 meters n depth? No
s standing water normally present in an adjacent	t polygon? No
2.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
✓ Seasonally Flooded	
Saturated (surface water seldom pres	entArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Mine	ralBoth Mineral and Organic Present
Seasonally Flooded Basin 2.6 Disturbances of Hydrology (check all that app	ply):
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = Sc	attered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	SOther (list):
2.8 Presence of Special Hydrologic Conditions (i.	e. seeps, wet slopes, floating mat):
None	
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar,	Threatened or Endangered Species:
✓ None observed or known to be preser	n
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see: W	Vetland Quality Descriptions and check one):
Good Medium v	/ Poor
	

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 N	Notak	ole Features that influence water quality and hydrology:						
Es	Estimated herbaceouis plant cover (percentage) in the polygon <u>75-50</u> 50-25 25								
Es	Estimated woody plant foliar coverage in the polygon100-7575-5050-25 <25								
An	nour	nt of o	dead woody material on the soil surface nilscatteredfrequent						
3а	.2 V	Vate	Quality Protection Questions:						
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?						
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?						
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.						
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended						
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?						
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?						
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?						
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.						
			width of buffer area (in meter0 approximate slope (percen0						
3а	.3 F	lood	and Stormwater Storage / Attenuation Questions:						
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b						
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?						
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?						
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?						
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?						
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?						
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?						

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Typha latifolia b. Asclepias incarnata c. Apocynum cannibinum f. Dominant Shrub Species listed in order of relative abundance. Dominant Tree Species listed in order of relative abundance. d. ____ Tree and shrub canopy: nil separate, seldom touching often touching more or less close Mature trees (>12" dbh): yes

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W126A	Data Reference	# S6W126	
3b.2 Dominant Plant Species: Vegetation Zone	3		
What % of the polygon does this vegetative zone oc	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 56) - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	on zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms			relative
a	d		
b	e		
C	f		
Dominant Shrub Species listed in order of relative ab			
a	C		
b	d		
Dominant Tree Species listed in order of relative abo			
a	C		
b	d		
Tree and shrub canopy: nil separate, seldor			
Mature trees (>12" dbh): yes no			
Other remarks (include personal comments about w wetland site).	nat adds to or detra	acts from the quality	of this
3b.2 Dominant Plant Species: Vegetation Zone			
What % of the polygon does this vegetative zone oc	cupy?		
☐ 10 - 25% ☐ 25 - 50% ☐ 56) - 75%	75 - 90%	Section >90%
Is there notable layering/stratification in this vegetation	on zone?		
Dominant Herbaceous Species (i.e., covering more abundance. (Mark with an * any species that forms			relative
a	d		
b			
C			
Dominant Shrub Species listed in order of relative at			
a	C		
b	d.		
Dominant Tree Species listed in order of relative abu			
a	C		
b	d.		
Tree and shrub canopy: nil separate, seldor			
Mature trees (>12" dbh): yes no	5 <u>—</u> - 110	о <u> </u>	-
Other remarks (include personal comments about w	nat adds to or detra	acts from the quality	of this

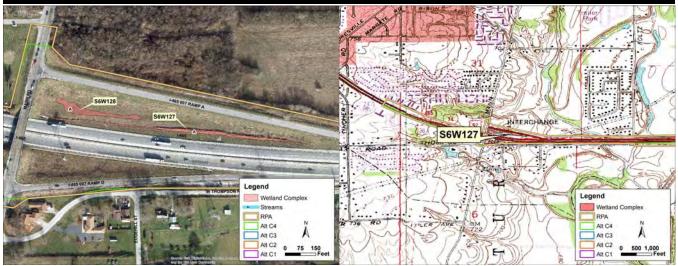
wetland site).

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana SW = southwestern Indiana)	numbers = C-coefficents *= species with high conservatism)
Herbs: non-seed plants horsetail, scouring rush spp. (Equisetum) 2*ferns: marsh shiled fern spp. (Dryopteris) 7*cinnamon fern (Osmunda cinnamomea) 9 _*royal fern (Osmunda regalils) 8sensitive fern (Onoclea sensibilis) 4 _*other: species (if knownmarsh club moss (Selaginella apoda) 4 _Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent _*bladderwort spp. (Utricularia) 10coontail (Ceratophyllum demersum) 1 _duckweed spp. (Lemnaceae) 3	Herbs: wide-leafed monocots*arrow arum (Peltandra virginica) 6
*pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6	boneset (Eupatorium perfoliatum) 4
Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots	*gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Eupatorium) 5 *loosestrife spp. (Lysimachia) 6
<pre>*beak rush spp (Rhynchospora) 10blueflag iris (Iris virginica) 5bulrush spp. (Scirpus / Schoenoplectus) 5*bur reed spp. (Sparganium) 9cat-tail spp. (Typha) 1*cotton grass spp. (Eriophorum) 10</pre>	meadow beauty (Rhexia virginica) 5 mint spp. e.g. hedge nettle, mtn. mint, skullcap 5 moneywort (Lysimachia nummularia) 0 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0
Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail	tichweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp loosestrife (Decodon verticillatus) 8 wamp milkweed (Asclepias incarnata) 4 toothcup spp. (Ammania Rotala) 2 *turtlehead spp. (Chelone) 8 virgin's bower (Clematis virginiana) 3 water purslane (Ludwigia palustris) 3
(Setaria) and barnyard grass (Echinochloa) needle sedge spp. (Eleocharis) 1 sp. =2*additional = 8nutsedge spp. (Cyperus) 2*orchid spp. 10; species (if know rush spp. (Juncus) 4 ✓ sedge spp. (Carex) 1 sp. = 3additionally spiderlily (Hymenocallis occidentalis) 9*spiderlily (Hymenocallis occidentalis) 9*sweet flag (Acorus calamus) 0*3-way sedge (Dulichium arundinaceum) 10*twig rush (Cladium mariscoides) 10*twig rush (Cladium mariscoides) 10*umbrella sedge (Fuirena squarrosa) 10wild hyacinth (Camassia scilloides) 5 _*yellow-eyed grass (Xyris torta) 9	winged loosestrife (Lythrum alatum) 5 Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4 *asters: bristly aster (Aser puniceus) 7 flat-topped aster (Aster umbellatus) 8 other aster spp. (e.g. New England, panicled ast *black-eyed Susan (Rudbeckia fulgida) 8 cardinal flower (Lobelia cardinalis) 4

Herbs (vines): dicots - ivs. alternate or basal and	
simple (continued)	Shrubs - leaves alternate
*goldenrod spp. (Solidago ohioensis, S. patula,	*cranberry spp. (Vaccinium) 10
*grass of Parnassus (Parnassia glauca) 10	*dwarf birch (Betula pumila) 10
*Indian plantain (Cacalia plantaginea) 10	*highbush blueberry (Vaccinium corymbosum) 9
ironweed spp. (Vernonia) 4	*leatherleaf (Chamaedaphne calyculata) 10
jewelweed, touch-me-not spp. (Impatiens) 3	meadowsweet and Hardhack spp. (Spiraea) 4
lizard's tail (Saururus cernuus) 4	*ninebark (Physocarpus opulifoius) 7
lobelia spp. (Lobelia) 4	*shrubby cinquefoil (Potentilla fruticosa) 9
*marsh marigold (Caltha palustris) 7	spice bush (Lindera benzoin) 5
*moonseed (Menispermum canadense) 6	*swamp dewberry (Rubus hispidus) 6
primrose-willow spp. (Epilobium Ludwigia) 3	*swamp holly and winterberry spp. (llex) 7
rose mallow spp. (Hibiscus) 4	swamp rose (Rosa palustris) 5
✓ smartweed spp.: jumpseed, pinkweed,	
tearthumb, water-pepper, waters smartweed	Trees - leaves needle shaped
(Polygonum)	*tamarack (Larix laricina) 10
halbredleaf tearthumb (Polygonum arifolium) 10	
sneezeweed (Helenium autumnale) 3	Trees - leaves compound
stinging nettle (Laportea canadensis) 2	*ash, black (Fraxinus nigra) 7
*swamp saxifrage (Saxifraga pennsylvanica) 10	ash, green (Fraxinus pensylvanica) 3
*Virginia bluebells (Mertensia virginica) 6	*ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1	boxelder (Acer negundo) 1
wingstem (Actinomeris alternifolia) 3	hickory, bitternut (Carya cordiformis) 5
	hickory, shellbark (Carya laciniosa) 8
Herbs: dicots - lvs. basal or alternate and	honey locust (Gleditsia triacanthos) 1
compound or deeply lobed	*poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2	
*buttercup spp.: cursed b., hooked b., swamp	Trees - leaves simple and opposite
b.(Ranunculus) 6	red maple (Acer rubrum) 5
chervil (Chaerophyllum procumbens) 3	silver maple (Acer saccharinum) 1
*cowbane (Oxypolis rigidior) 7	
*great angelica (Angelica atropurpurea) 6	Trees - leaves simple and alternate
hog peanut / ground nut (Amphicarpaea and	*alder, speckled (Alnus rugosa) 9
Apios) 5	river birch (Betula nigra) 2
honewort (Cryptotaenia canadensis) 3	black, gum (Nyssa sylvatica) 5
meadow rue spp. (Thalictrum) 5	cottonwood, eastern (Populus deltoides) 1
poison ivy (Rhus radicans) 1	cottonwood, swamp (Populus heterophylla) 8
*queen-of-the prairie (Filipendula rubra) 9	elm, American (Ulmus americana) 3
senna spp. (Cassia) 4	hackberry (Celtis occidentalis) 3
swamp agrimony (Agrimonia parviflora) 4	ironwood (Carpinus caroliniana) 5
*swamp thistle (Cirsium muticum) 8	oak, pin or white (Quercus) 4
tall coneflower (Rudbeckia laciniata) 3	*oak, Shumard's, swamp chestnut, swamp white
*water hemlock spp. (Cicuta) 7	*pawpaw (Asimina triloba) 6
water parsnips (Sium suave) 5	*sugarberry (Celtis laevigata) 7
	sweet gum (Liquidambar styraciflua) 4
Shrubs - leaves opposite or whorled	sycamore, American (Platanus occidentalis) 3
bladdernut (Staphylea trifolia) 5	willow spp. (Salix) 1 sp. = 3
buckthorn spp. (Rhamnus cathartica, R.	additional sp. = 7
frangula) 0	
buttonbush (Cephalanthus occidentalis) 5	
dogwwod, red-osier (Cornus stolonifera) 4	
*dogwood, blue-fruited or silky (Cornus obliqua)	
dogwood, gray (Cornus racemosa) 2	
✓ elderberry (Sambucus) 2	
	

Wetland S6W127



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

State Ditch Quadrangle: Maywood Basin: **14-digit HUC:** 05120201130070 County: Marion T15N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 32 Size of wetland complex (acres): 0.2069 Quarter: SE

USACE JurisdictionYesLatitude:39.692634IDEM Jurisdiction:YesLongitude:-86.240691

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
							Alt C1	0.00	0.0%
							Alt C2	0.21 0.21	100.0%
S6W127A	Scrub-Carr	PSS	0.2069	poor	poor	fair	Alt C3		100.0%
							Alt C4	0.21	100.0%
							RPA	0.21	100.0%



Polygon S6W127A

In-WRAP Summary Sheet

Date Report Gener	rated: Friday, September 15, 2017						
Wetland Site Name	e: <u>N/A</u>						
Data Reference #:	S6W127						
Date of Site Visit:	ate of Site Visit: Wednesday, July 26, 2017						
Tier 1 Summar	y:						
a. Total Wetlar	nd Area (acres): 0.2069						
b. Wetland siz	e and connectivity - contribution to animal habita	at:					
	Valuable Mor	re Favorable	Favorable	Neutral			
c. Surrounding	g land use - numerical rank (max. = 1): 0.00						
d. Value surro	unding area adds to animal habitat:	Valuable	Favorable	Low			
Tier 2 SUMMA	RY:	Polyg	gon ID	66W127A			
a. Indiana We	tland community type: Seasonally Flooded Basin	1					
b. Standing wa	ater - contribution to animal habitat:	Valuable	Favorable	Neutral			
c. Disturbance	es to site: ditches						
d. Exotic speci	es rating:	Good	Medium	Poor			
e. Special Hyd	rologic Conditions Observed: none						
f. Special Com	munity Type: None						
g. Rare-Threat	tened-Endangered Species: None						
h. Polygon Qu	ality Descriptor:	Good	Medium	Poor			
Tier 3A SUMM	ARY:						
a: Dead wood	y material as indicator of animal habitat:	Valuable	Favorable	Neutral			
b. Water quali	ity protection - numerical rank (6 max.): 2	Good	Medium	Poor			
c. Flood and s	torm water storage - numerical rank (5 ma3	Good	Medium	Poor			
Tier 3B SUMM	ARY:						
	nd interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral			
	n as indicator of animal habitat:	Valuable		Neutral			
c. Number of	dominant plant taxa observed: 2	Good	Medium	Poor			
	efficient of conservatism: 1	Good	Medium	Poor			
	y as indicator of animal habitat:	Valuable		Neutral			
•	s as indicator of animal habitat:	Valuable	Favorable	Neutral			
g. Total hydro	phytic taxa observed: 11	Good	Medium	Poor			
h. Number of	indicator taxa: 1	Good	Medium	Poor			

0 Residential - single family

Commercial or multifamily residential

0 Agricultural - tilled

0 Agricultural - pasture

Recreation - green space, mowed

	olygon # S6W127 able on page one)	A	Data F	Reference# S6W127
		olygon: Prelim	inary Assess	ment
(to be	completted on-site	e for each NWI poly	gon present in th	ne wetland)
2.1 W	etland Geomorphic	Setting and Surface	ce Water Flow (d	:heck one):
✓	_Depressional _ Riverine (within	Slopesthe river/stream	Floodplain banks)	Lacustrine
2.2 Pro	esence of Standing	Water:		
s stan	ding water normall	ly present in the po	lygon? Yes	
ls	s standing water is	present, is the wat	er greater than 2	meters n depth? No
s stan	ding water normall	ly present in an adj	acent polygon?	Yes
.3 Ap	parent Hydroperio	od (check one):		
	Permanently Flo	ooded		Artificially Flooded
√	Seasonally Floor	ded		
	Saturated (surfa	ace water seldom	present	Artificailly Drained
2.4 So	il Type			
	_Organic (i.e. pea	at, etc.)I	Mineral	_Both Mineral and Organic Present
2.5 W	etland Community	Type for this NWI	polygon (see Ke	y to Wetland Communities of Indiana):
	nally Flooded Basin	• •	. , , , ,	
2.6 Dis	sturbances of Hydr Ditching	ology (check all tha	at apply):	Culvert
V	Ditering Tiles			Other Human Distrubances to
	nes Dams			the
	Road or Railroad	d Embankment		the
7 Pr	esence of Invasive	Exotics (Score as: S	S = Scattered F =	Frequent, or C = Common):
	Garlic Mustard			Glossy Buckthorn
	Phragmities			Reed Canary Grass
	Prinagrifices Purple Loosestri	ife		Other (list):
2.8 Pro none	esence of Special H	lydrologic Conditio	ns (i.e. seeps, w	et slopes, floating mat):
IOIIE				
2.9 Pro	esence of Special C	ommunity Types:		
	Bog	Fen	Wet Sa	and / Muck Flats or Marl Seeps
.10 P	resence of Known	Federal or Indiana	Rar, Threatened	or Endangered Species:
\checkmark	None observed	or known to be p	resen	
	RTES Present (li	st):		
2.11 V	Vetland Polygon Qu	uality Descriptor (s	ee: Wetland Qu	ality Descriptions and check one):
	Good	Medium	✓ Poor	,

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3а	.1 I	Notak	ole Features that influence water quality and hydrology:						
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon <u>√</u> 100-7575-5050-25<25						
Es	Estimated woody plant foliar coverage in the polygon100-7575-5050-25<25								
Ar	nou	nt of o	dead woody material on the soil surfacenilscatteredfrequent						
3а	.2 \	Wate	Quality Protection Questions:						
1.	Y) N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?						
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?						
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.						
	Y	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended						
	Y	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface body of water down gradient?						
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?						
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?						
6.	Y) N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.						
			width of buffer area (in meter15 approximate slope (percen6						
3а	.3 I	Flood	and Stormwater Storage / Attenuation Questions:						
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b						
	Y) N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?						
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?						
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?						
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?						
4.	Y) N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?						
5.	Y) N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?						

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Typha latifolia f. Dominant Shrub Species listed in order of relative abundance. a. Salix interior Dominant Tree Species listed in order of relative abundance. C. _____ d. _____ Tree and shrub canopy: nil separate, seldom touching often touching more or less close Mature trees (>12" dbh): yes

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W127A	Data Reference# S6W127
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

(N = northern Indiana	SW = southwestern Indiana	numbers = C-coefficents	* = species with high conservatism)
Herbs: non-seed p	olants	Herbs: wide-leafe	ed monocots
horsetail, scouri	ng rush spp. (Equisetum) 2	*arrow arum (F	Peltandra virginica) 6
*ferns: marsh sh	niled fern spp. (Dryopteris) 7		p. (Sagittaria) 4
	(Osmunda cinnamomea) 9		(Arisaema dracontium) 6
*royal fern (Osm			pit (Arisaema triphyllum) 4
	noclea sensibilis) 4		(Pontederia cordata) 5
*other: species (•		e (Symplocarpus foetidus) 8
	s (Selaginella apoda) 4		Calla palustris) 10
Sphagnum mos	s spp. (Sphagnum) 10	water plantain	(Alisma plantago-aquatica) 2
Herbs: Ivs. floating	g or submergent	Herbs: dicots - Iv	s. opposite/whorled
	p. (Utricularia) 10	*bedstraw spp.	·
	phyllum demersum) 1	beggar's tick s	
duckweed spp.	•		Serbena hastata) 3
	(Potamogeton) 8		torium perfoliatum) 4
	eed (Potamogeton crispus) 0		,
	ohaea tuberosa) 6	clearweed spp.	
	asenia schreberi) 4		nium perfoliatum) 4
^yellow spatterd	ock spp. (Nuphar) 6		pehmeria cylindrica) 3
Harba bas Osada			edicularis lanceolata) 6
Herbs: Ivs. floating		• • • • • •	Gentiana Gentianopsis) 8
	arracenia purpurea (10)		(Ambrosia trifida) 0
*sundew spp. (D	nosera) io		Apocynum cannabinum) 2
Harbar linear lys	or +/- leafless monocots		spp. (Eupatorium) 5 p. (Lysimachia) 6
	(Rhynchospora) 10		y (Rhexia virginica) 5
blueflag iris (Iris			nedge nettle, mtn. mint, skullcap 5
	cirpus / Schoenoplectus) 5		simachia nummularia) 0
*bur reed spp. (\$			spp. (Mimulus) 4
✓ cat-tail spp. (Typ		nettle (Urtica p	,
	p. (Eriophorum) 10		ife (Lythrum salicaria) 0
	mineae) - indicate types and		linsonia canadensis) 8
number of species			spp. (Hypericum/Triandeum) 8
•	zania aquatica) 10	sunflower sp. (
	perennial grass spp. 4:		strife (Decodon verticillatus) 8
	ia-grass, Canada bluepoint,		ed (Asclepias incarnata) 4
foxtail (Alopecru	s); other	toothcup spp. (Ammania Rotala) 2
✓ c. introduced gr	ass spp. 0:reed canary	*turtlehead spp	o. (Chelone) 8
grass (Phalaris,	reed (Phragmites),	virgin's bower ((Clematis virginiana) 3
	such as annual foxtail	water purslane	(Ludwigia palustris) 3
(Setaria) and ba	rnyard grass (Echinochloa)	winged loosest	rife (Lythrum alatum) 5
	pp. (Eleocharis) 1 sp. =2		
*additional =			ots - lvs. alternate or basal and
nutsedge spp. (0	,		ower (Campanula americana) 4
	species (if know		aster (Aser puniceus) 7
rush spp. (Juncu	•		er (Aster umbellatus) 8
sedge spp. (Car			o. (e.g. New England, panicled ast
	enocallis occidentalis) 9		ısan (Rudbeckia fulgida) 8
sweet flag (Acor			(Lobelia cardinalis) 4
	Oulichium arundinaceum) 10	cress spp. (Ca	· · · · · · · · · · · · · · · · · · ·
	ium mariscoides) 10		imp, water, pale (Rumex) 4
	(Fuirena squarrosa) 10		(Alliaria petiolata) 0
	amassia scilloides) 5	golden ragwort	(Senecio aureus) 4
^yellow-eyed gra	ass (Xyris torta) 9		

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) *goldenrod spp. (Solidago ohioensis, S. patula, *grass of Parnassus (Parnassia glauca) 10 *Indian plantain (Cacalia plantaginea) 10 ironweed spp. (Vernonia) 4 jewelweed, touch-me-not spp. (Impatiens) 3 lizard's tail (Saururus cernuus) 4 lobelia spp. (Lobelia) 4 *marsh marigold (Caltha palustris) 7 *moonseed (Menispermum canadense) 6 primrose-willow spp. (Epilobium Ludwigia) 3 rose mallow spp. (Hibiscus) 4 smartweed spp.: jumpseed, pinkweed, tearthumb, water-pepper, waters smartweed (Polygonum) halbredleaf tearthumb (Polygonum arifolium) 10 sneezeweed (Helenium autumnale) 3 stinging nettle (Laportea canadensis) 2 *swamp saxifrage (Saxifraga pennsylvanica) 10 *Virginia bluebells (Mertensia virginica) 6 waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Ciciuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus nigra) 7 ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8 boxelder (Acer negundo) 1 hickory, bitternut (Carya cordiformis) 5 hickory, shellbark (Carya laciniosa) 8 honey locust (Gleditisa triacanthos) 1 *poison sumac (Rhus vernix) 10 Trees - leaves simple and opposite / red maple (Acer rubrum) 5 silver maple (Acer rubrum) 5 silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate *alder, speckled (Alnus rugosa) 9 river birch (Betula nigra) 2 black, gum (Nyssa sylvatica) 5 / cottonwood, eastern (Populus deltoides) 1 cottonwood, swamp (Populus heterophylla) 8 elm, American (Ulmus americana) 3 hackberry (Celtis occidentalis) 3 ironwood (Carpinus caroliniana) 5 oak, pin or white (Quercus) 4 *oak, Shumard's, swamp chestnut, swamp white *pawpaw (Asimina triloba) 6 *sugarberry (Celtis laevigata) 7 sweet gum (Liquidambar styraciflua) 4 sycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3 additional sp. = 7
bladdernut (Staphylea trifolia) 5	sycamore, American (Platanus occidentalis) 3 willow spp. (Salix) 1 sp. = 3

Wetland S6W128



Wetland Location on 2015 Aerial Photograph

Wetland Location on Maywood USGS Quadrangle

State Ditch Quadrangle: Maywood Basin: 14-digit HUC: 05120201130070 County: Marion T15N Physiographic Region: New Castle Till Plains Township: Eastern Corn Belt Plains R3E **Ecoregion:** Range: **Natural Region:** Tipton Till Plain Section: 31 Size of wetland complex (acres): 0.1751 Quarter: SE

USACE JurisdictionYesLatitude:39.692909IDEM Jurisdiction:YesLongitude:-86.242036

Polygon ID	Community Type	Cowardin Class	Polygon Area (acres)	Animal Habitat Measure	Botanical Measure	Hydrology Measure	Alternative	Area Impacted (acres)	Percent Polygon Impacted
	Wet Meadow				poor poor	fair	Alt C1	0.00	0.0%
				poor			Alt C2	0.18	100.0%
S6W128A			0.1751				Alt C3	0.18	100.0%
							Alt C4	0.18	100.0%
							RPA	0.18	100.0%



Polygon S6W128A

In-WRAP Summary Sheet

Date Report Generated: Friday, September 15, 2017			
Wetland Site Name: N/A			
Data Reference #: S6W128			
Date of Site Visit: Wednesday, July 26, 2017			
Tier 1 Summary:			
a. Total Wetland Area (acres): 0.1751			
b. Wetland size and connectivity - contribution to animal ha	bitat:		
Valuable 1	More Favorable	Favorable	Neutral
c. Surrounding land use - numerical rank (max. = 1):0.00	 		
d. Value surrounding area adds to animal habitat:	Valuable	Favorable	Low
Tier 2 SUMMARY:	Polyg	on ID	S6W128A
a. Indiana Wetland community type: Wet Meadow			
b. Standing water - contribution to animal habitat:	Valuable	Favorable	Neutral
c. Disturbances to site: road/railroad			
d. Exotic species rating:	Good	Medium	Poor
e. Special Hydrologic Conditions Observed: none			
f. Special Community Type: None			
g. Rare-Threatened-Endangered Species: None			
h. Polygon Quality Descriptor:	Good	Medium	Poor
Tier 3A SUMMARY:			
a: Dead woody material as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Water quality protection - numerical rank (6 max.): 2	Good	Medium	Poor
c. Flood and storm water storage - numerical rank (5 ma	2 Good	Medium	Poor
Tier 3B SUMMARY:			
a. Zonation and interspersion as indicator of animal habitat:	Valuable	Favorable	Neutral
b. Stratification as indicator of animal habitat:	Valuable		Neutral
c. Number of dominant plant taxa observed: 1	Good	Medium	Poor
d. Average coefficient of conservatism:3.3	Good	Medium	Poor
e. Tree canopy as indicator of animal habitat:	Valuable		Neutral
f. Mature trees as indicator of animal habitat:	Valuable	Favorable	Neutral
g. Total hydrophytic taxa observed:4	Good	Medium	Poor
h. Number of indicator taxa: 0	Good	Medium	Poor

0	Native Vegetation - woodland	100	Road / highway / railroad bed / parking lot
0	Native Vegetation - old field / scrub	0	Industrial
0	Agricultural - tilled	0	Residential - single family
0	Agricultural - pasture	0	Commercial or multifamily residential
0	Recreation - green space, mowed		

NWI Polygon # S6W128A	Data Reference# S6W128
see table on page one)	
Tier 2: Individual Polygon: Prelimina to be completted on-site for each NWI polygon	
2.1 Wetland Geomorphic Setting and Surface V	Nater Flow (check one):
✓ Depressional Slope Riverine (within the river/stream bar	_FloodplainLacustrine nks)
2 Presence of Standing Water:	
s standing water normally present in the polygo	on? No
Is standing water is present, is the water g	reater than 2 meters n depth? No
s standing water normally present in an adjace	nt polygon? No
.3 Apparent Hydroperiod (check one):	
Permanently Flooded	Artificially Flooded
Seasonally Flooded	
Saturated (surface water seldom pre	esentArtificailly Drained
2.4 Soil Type	
Organic (i.e. peat, etc.) Min	neralBoth Mineral and Organic Present
2.5 Wetland Community Type for this NWI poly Wet Meadow	ygon (see Key to Wetland Communities of Indiana):
2.6 Disturbances of Hydrology (check all that a	pply):
Ditching	Culvert
Tiles	Other Human Distrubances to
Dams	the
✓ Road or Railroad Embankment	
2.7 Presence of Invasive Exotics (Score as: S = S	Scattered, F = Frequent, or C = Common):
Garlic Mustard	Glossy Buckthorn
Phragmities	Reed Canary Grass
Purple Loosestrife	Other (list):
2.8 Presence of Special Hydrologic Conditions ((i.e. seeps, wet slopes, floating mat):
none	
2.9 Presence of Special Community Types:	
Bog Fen	Wet Sand / Muck Flats or Marl Seeps
2.10 Presence of Known Federal or Indiana Rar	, Threatened or Endangered Species:
✓ None observed or known to be prese	en
RTES Present (list):	
2.11 Wetland Polygon Quality Descriptor (see:	Wetland Quality Descriptions and check one):
Good Medium	√ Poor

Tier 3a: Individual Polygon: Rapid Hydrology Indicators

3a	.1 N	Notak	ble Features that influence water quality and hydrology:
Es	tima	ated h	nerbaceouis plant cover (percentage) in the polygon √ 100-75 75-50 50-25 <25
Es	tima	ated v	voody plant foliar coverage in the polygon 100-75 75-50 50-25 ✓ <25
An	nour	nt of o	dead woody material on the soil surface $\sqrt{}$ nil scattered frequent
3a	.2 V	Vate	r Quality Protection Questions:
1.	Y	N	Does the wetland have a significant amount of vegetative (specifically herbaceous and woody plant) density to potentially uptake dissolved nutients?
2.	Y	N	Managed water (e.g. municipal or road stromwater drainage, agricultural drainage outlet, industrial or municipal wastewater) is not discharged into the wetland polygon?
3.			If wetland in question is a depressional wetland answer 3a, in not, answer 3b.
	Υ	N	3a. Does the wetland have a shape or flow that allows for the settling out of suspended
	\bigcirc	N	materials before teh water reaches the center of the wetland? 3b. Is the position of the wetland in the landscape such that run-off is held or filtered before
	Ū		entering a surface body of water down gradient?
4.	Y	N	Does the wetland lack steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within 100 meters of its border?
5.	Y	N	Are there recreational lakes, fishable or navigable watercourses, or water supply sources down gradient in the local watershed?
6.	Y	N	Is a vegetative buffer area or another wetland polygon (areas where overland flow could be filtered) located upland and adjacent to the wetland polygon? If yes, describe buffer area width and slope.
			width of buffer area (in meter15 approximate slope (percen12
3a	.3 F	lood	I and Stormwater Storage / Attenuation Questions:
1.			If wetland in question is a depressional wetland answer 1a, in not, answer 1b
	Y	N	1a. Around the wetland is there a buffer strip of natural vegetation (forested, old field, scrub) that will slow overland flow into the wetland?
	Y	N	1b. Is there a significant amount of microtopography or vegetative density within the wetland to reduce the veolocity of the water leaving the wetland?
2.	Y	N	Does the wetland lack man-made structure that would speed the flow of water from the wetland (tiles, culverts, ditches)?
3.	Y	N	Is the flood potential high in the local watershed in which the wetland is located (history of flood damages)?
4.	Y	N	Is the wetland located in a watershed where the majority f the upland soils are claye and impermeable, or is bedrock within two feet of the top of the soil profile?
5.	Y	N	Is the wetland located in a local watershed which has highly modified runoff conditions due to existing development?

Tier 3b Individual Polygon: Rapid Vegetation Description

3b.1 Zonation and Interspersion: How may vegetation zones are evident in this wetland polygon? 1b. If only one vegetation zone is evident, which best describes the site? Polygon composed of amosaic of small vegetation patches, hummocks, or tussocks, heterogeneous textures across the polygon. Polygon composed of a single vegettation type with more or less uniform texture across the polygon. 2. If more than one vegetation zone is present in the polygon, which intersperision diagram most closely represents the distribuion of these zone? **Type Two Interspersion** Type One Interspersion 3b.2 Dominant Plant Species: Vegetation Zone A What % of the polygon does this vegetative zone occupy? 10 - 25% 25 - 50% 50 - 75% 75 - 90% >90% Is there notable layering/stratification in this vegetation zone? No Dominant Herbaceous Species (i.e., covering more than 10% of the area) listed in order of relative abundance. (Mark with an * any species that forms extensive monocultural patches). a. Juncus torreyi f. Dominant Shrub Species listed in order of relative abundance. Dominant Tree Species listed in order of relative abundance. C. _____ d. _____ Tree and shrub canopy: nil separate, seldom touching often touching more or less close Mature trees (>12" dbh): yes

Other remarks (include personal comments about what adds to or detracts from the quality of this wetland site).

NWI Polygon # S6W128A	Data Reference# S6W128
3b.2 Dominant Plant Species: Vegetation Zone B	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	touching often touching more or less close
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	t adds to or detracts from the quality of this
3b.2 Dominant Plant Species: Vegetation Zone C	
What % of the polygon does this vegetative zone occur	py?
☐ 10 - 25% ☐ 25 - 50% ☐ 50 -	75%
Is there notable layering/stratification in this vegetation	zone?
Dominant Herbaceous Species (i.e., covering more that abundance. (Mark with an * any species that forms ex	
a	d
b	e
C	f
Dominant Shrub Species listed in order of relative abu	
a	C
b	d
Dominant Tree Species listed in order of relative abundance	dance.
a	c
b	d
Tree and shrub canopy: nil separate, seldom	
Mature trees (>12" dbh): yes no	
Other remarks (include personal comments about what wetland site).	at adds to or detracts from the quality of this

3b.4 Species richness and indicator speceis. Check all species observed within the polygon. Important: if multiple species from one genus or family (marked with spp.) are seen, indicate the number of species.

Herbs: non-seed plants horsetail, scouring rush spp. (Equisetum) 2 'Terms: marsh shiled fern spp. (Dryopteris) 7 'Cinnamon fern (Osmunda cinnamomea) 9 'royal fern (Osmunda ceinnamomea) 9 'royal fern (Calla palustris) 10 contail (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 contail (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 contail (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 contail (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 'royal fern (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 'royal fern (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 'royal fern (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 'royal fern (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 'royal fern (Ustricularia) 10 'royal fern (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 'royal fern (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 'royal fern (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 10 'royal fern (Ceratophyllum demersum) 1 duckweed spp. (Ustricularia) 2 'royal fern dragon (Arisaema dracontium) 8 'water arum (Calla palustris) 10 'bedstraw spp. (Galium) 6 'bedstraw spp. (Galium) 6 'bedstraw spp. (Galium) 6 'beggar's tick spp. (Bidens) 3 bule vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 -dalse nettle (Boehmeria cylindrica) 3 'fen betory (Pedicularia lanceolata) 6 'gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Ceratopalia) 10 -rotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and unber of spp. (Ustricularia) 10 -rotton	(N = northern Indiana SW = southwestern Indiana	numbers = C-coefficents *= species with high conservatism)
r'cinnamon fern (Osmunda cinnamomea) 9 *royal fern (Osmunda regalitis) 8 sensitive fern (Onoclea sensibilis) 4 *o'ther: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent *bladdenwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton rispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent *plickerel plantin (Alisma plantago-aquatica) 2 Herbs: lvs. floating or submergent *plickerel plantin (Alisma plantago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorled *bedstraw spp. (Gallium) 6 beggar's tick spp. (Bidens) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 buglewed spp. (Lycopus) 5 clearweed spp. (Lycopus) 5 clearweed spp. (Pilea) 3 *fen betony (Pedicularis lanceolata) 6 *genta ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Centiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Centiana Gentianopsis) 8 madaw beauty (Rhexia virginica) 5 *moneywort (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 moneywort (Lysimachia) 0 monkey flower spp. (Mirnulus) 4 nettle (Urica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 sunflower sp. (Helianthus) 4 *swamp mikweed (Asclepias incarnata) 4 toothcup a proceed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual toxali (Setaria) and barnyard grass (Echinochioa) needle sedge spp. (Elecoharis) 1 sp. =2 *additional = 8 nutsedge spp. (Cyperus) 2 *orchid spp. 10; species (if know ✓rush spp. (Juncus) 4 *sedge spp. (Cileodaria) 1 sp. =2 *additional = 8 nutsedge spp. (Cileodaria) 1 sp. =2 *additional = 8 nutsedge spp. (Cyperus) 2 *orchid spp. 10; species (if know ✓rush spp. (Juncus) 4 *sedge s		
r'royal fern (Osmunda regalils) 8 sensitive fern (Onoclea sensibilis) 4	*ferns: marsh shiled fern spp. (Dryopteris) 7	arrow-head spp. (Sagittaria) 4
sensitive fern (Onoclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 *Berbs: Ivs. floating or submergent bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Lemogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 *Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 *bulrush spp. (Scirpus) / Sohoenoplectus) 5 *bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. (acut-grass, ganna-grass, ganaad-grass, ganad-grass, ganaad-grass, ganaad-grass, ganaad-grass, ganaad-grass, ganaad-grass, ganaad-grass, ganaad-grass, ganaad-grass, gana	*cinnamon fern (Osmunda cinnamomea) 9	*green dragon (Arisaema dracontium) 6
sensitive fern (Onoclea sensibilis) 4 *other: species (if known marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 *Berbs: Ivs. floating or submergent bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Lemogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 *water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 *Herbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 *bulrush spp. (Scirpus) / Sohoenoplectus) 5 *bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. (acut-grass, ganna-grass, ganaad-grass, ganad-grass, ganaad-grass, ganaad-grass, ganaad-grass, ganaad-grass, ganaad-grass, ganaad-grass, ganaad-grass, ganaad-grass, gana	*royal fern (Osmunda regalils) 8	Jack-in-the-pulpit (Arisaema triphyllum) 4
"skunk cabbage (Symplocarpus foetidus) 8 marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent "bladdenwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemanceae) 3 "pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 "water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 "yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent "pilcher plant (Sarracenia purpurea (10) "sundew spp. (Drosera) 10 Herbs: linear-Ivs. or +/- leafless monocots "beak rush spp. (Rhynchospora) 10 blueflag iris (Iris virginica) 5 "bulrush spp. (Scirpus / Schoenoplectus) 5 "bur reed spp. (Sparganium) 9 val-tail spp. (Typha) 1 "cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. (Teleocharis) 1 sp. =2 "additional = 8 nutsedge spp. (Clepocharis) 1 sp. =2 "additional = 8 nutsedge spp. (Carex) 1 sp. = 3 additional = 7 "spiderilly (Hymenocallis occidentalis) 9 sweet flag (Acorus calamus) 0 "3-way sedge (Dulichium arundinaceum) 10 "twig rush (Cladium mariscoides) 10 "umbrella sedge (Fymiena squarrosa) 10 "shappo, (Gerliana palatago-aquatica) 2 Herbs: dicots - Ivs. opposite/whorled "bedstraw spp. (Gallium) 6 beggar's tick spp. (Bedsins) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 "fen betony (Pedicularis lanceolata) 6 "gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Urica procera) 1 purple loosestrife (Lythrum salicaria) 0 monkey flower spp. (Mimulus) 4 rest spiderilly (Hymenocallis occidentalis) 9 virgin's bower (Clematis	sensitive fern (Onoclea sensibilis) 4	pickerel weed (Pontederia cordata) 5
Marsh club moss (Selaginella apoda) 4 Sphagnum moss spp. (Sphagnum) 10 Herbs: Ivs. floating or submergent 'bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 'pondweed spp. (Letamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 "water lily (Nymphaea tuberosa) 6 water shield (Brasenia schreberi) 4 'yellow spatterdock spp. (Nuphar) 6 Herbs: Ivs. floating or submergent 'pitcher plant (Sarracenia purpurea (10) 'sundew spp. (Droseria) 10 bluellag iris (Iris virginica) 5 'bur reed spp. (Sparganium) 9 ✓ cat-tail spp. (Typha) 1 'cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. "wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. 0:reed canary grass (Phalaris, reed (Phragmites), annual grasses such as annual foxtail (Setaria) and barnyard grass (Echionchola) needle sedge spp. (Carex) 1 sp. = 2 _ "additional = 8 nutsedge spp. (Cyperus) 2 'rorchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 'rorchid spp. 10; species (if know ✓ rush spp. (Juncus) 4 sedge spp. (Careax) 1 sp. = 3 sweet flag (Acorus calamus) 0 '*a-way sedge (Dulichium arundinaceum) 10 '*twigr ush (Cladium mariscoides) 10 '*umbrella sedge (Fuirena squarrosa) 10		
water plantain (Alisma plantago-aquatica) 2 Herbs: Ivs. floating or submergent	 ;	
*bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 *water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 *water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 *therbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 blueflag iris (Iris virginica) 5 *burr need spp. (Sparganium) 9 *cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. (Teleocharis) 1 sp. =2 *additional = 8 nutsedge spp. (Cyperus) 2 *orchid spp. 10; species (if know *rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 *orchid spp. 10; species (if know *rush spp. (Juncus) 4 sedge spp. (Callium) 4 be beggar's tick spp. (Bidens) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 bugleweed spp. (Lycopus) 5 clearweed spp. ((Plea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 moneywort (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 swamp milkweed (Asclepias incarnata) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 *swamp loosestrife (Lythrum alatum) 5 Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4 *asters: bristly aster (Aser puniceus) 7 falt-topped aster (Aster umbellatus) 8 other aster s		
*bladderwort spp. (Utricularia) 10 coontail (Ceratophyllum demersum) 1 duckweed spp. (Lemnaceae) 3 *pondweed spp. (Potamogeton) 8 curlyleaf pondweed (Potamogeton crispus) 0 *water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 *water shield (Brasenia schreberi) 4 *yellow spatterdock spp. (Nuphar) 6 *therbs: Ivs. floating or submergent *pitcher plant (Sarracenia purpurea (10) *sundew spp. (Drosera) 10 blueflag iris (Iris virginica) 5 *burr need spp. (Sparganium) 9 *cat-tail spp. (Typha) 1 *cotton grass spp. (Eriophorum) 10 Grasses (family Gramineae) - indicate types and number of species a. *wild rice (Zizania aquatica) 10 b. most natuve perennial grass spp. 4: cut-grass, manna-grass, Canada bluepoint, foxtail (Alopecrus); other c. introduced grass spp. (Teleocharis) 1 sp. =2 *additional = 8 nutsedge spp. (Cyperus) 2 *orchid spp. 10; species (if know *rush spp. (Juncus) 4 sedge spp. (Cyperus) 2 *orchid spp. 10; species (if know *rush spp. (Juncus) 4 sedge spp. (Callium) 4 be beggar's tick spp. (Bidens) 3 blue vervain (Berbena hastata) 3 boneset (Eupatorium perfoliatum) 4 bugleweed spp. (Lycopus) 5 clearweed spp. ((Plea) 3 cup plant (Silphium perfoliatum) 4 false nettle (Boehmeria cylindrica) 3 *fen betony (Pedicularis lanceolata) 6 *gentian spp. (Gentiana Gentianopsis) 8 giant ragweed (Ambrosia trifida) 0 Indian hamp (Apocynum cannabinum) 2 Joe-pye weed spp. (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 moneywort (Lysimachia) 6 meadow beauty (Rhexia virginica) 5 monkey flower spp. (Mimulus) 4 nettle (Urtica procera) 1 purple loosestrife (Lythrum salicaria) 0 *richweed (Collinsonia canadensis) 8 St. John's wort spp. (Hypericum/Triandeum) 8 swamp milkweed (Asclepias incarnata) 4 *swamp loosestrife (Decodon verticillatus) 8 swamp milkweed (Asclepias incarnata) 4 *swamp loosestrife (Lythrum alatum) 5 Herbs (vines): dicots - Ivs. alternate or basal and American bellflower (Campanula americana) 4 *asters: bristly aster (Aser puniceus) 7 falt-topped aster (Aster umbellatus) 8 other aster s	Harbar has floating or submargant	Harbor disets the appeaits/uperlad
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foxtail (Alopecrus); other	b. most natuve perennial grass spp. 4:	*swamp loosestrife (Decodon verticillatus) 8
	cut-grass, manna-grass, Canada bluepoint,	swamp milkweed (Asclepias incarnata) 4
	foxtail (Alopecrus); other	toothcup spp. (Ammania Rotala) 2
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(Setaria) and barnyard grass (Echinochloa)	annual grasses such as annual foxtail	water purslane (Ludwigia palustris) 3
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sweet flag (Acorus calamus) 0		
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*umbrella sedge (Fuirena squarrosa) 10 garlic mustard (Alliaria petiolata) 0		
wiid nyacinin (Camassia sciiloides) 5 — — — — — — — — — — — — — — — — — —	wild hyacinth (Camassia scilloides) 5	golden ragwort (Senecio aureus) 4
	*yellow-eyed grass (Xyris torta) 9	

Herbs (vines): dicots - Ivs. alternate or basal and simple (continued) *goldenrod spp. (Solidago ohioensis, S. patula,	Shrubs - leaves alternate *cranberry spp. (Vaccinium) 10 *dwarf birch (Betula pumila) 10 *highbush blueberry (Vaccinium corymbosum) 9 *leatherleaf (Chamaedaphne calyculata) 10 meadowsweet and Hardhack spp. (Spiraea) 4 *ninebark (Physocarpus opulifoius) 7 *shrubby cinquefoil (Potentilla fruticosa) 9 spice bush (Lindera benzoin) 5 *swamp dewberry (Rubus hispidus) 6 *swamp holly and winterberry spp. (Ilex) 7 swamp rose (Rosa palustris) 5 Trees - leaves needle shaped *tamarack (Larix laricina) 10 Trees - leaves compound *ash, black (Fraxinus nigra) 7 ash, green (Fraxinus pensylvanica) 3 *ash, pumpkin (Fraxinus tomentosa) 8
waterhemp (Amaranthus tuberculatus) 1 wingstem (Actinomeris alternifolia) 3 Herbs: dicots - Ivs. basal or alternate and compound or deeply lobed	ash, pumpkin (Fraxinus tornentosa) 8boxelder (Acer negundo) 1hickory, bitternut (Carya cordiformis) 5hickory, shellbark (Carya laciniosa) 8honey locust (Gleditsia triacanthos) 1 *poison sumac (Rhus vernix) 10
aven spp.: round, white (Geum) 2 *buttercup spp.: cursed b., hooked b., swamp b.(Ranunculus) 6 chervil (Chaerophyllum procumbens) 3 *cowbane (Oxypolis rigidior) 7 *great angelica (Angelica atropurpurea) 6 hog peanut / ground nut (Amphicarpaea and Apios) 5 honewort (Cryptotaenia canadensis) 3 meadow rue spp. (Thalictrum) 5 poison ivy (Rhus radicans) 1 *queen-of-the prairie (Filipendula rubra) 9 senna spp. (Cassia) 4 swamp agrimony (Agrimonia parviflora) 4 *swamp thistle (Cirsium muticum) 8 tall coneflower (Rudbeckia laciniata) 3 *water hemlock spp. (Cicuta) 7 water parsnips (Sium suave) 5 Shrubs - leaves opposite or whorled bladdernut (Staphylea trifolia) 5 buckthorn spp. (Rhamnus cathartica, R. frangula) 0 buttonbush (Cephalanthus occidentalis) 5 dogwood, red-osier (Cornus stolonifera) 4 *dogwood, gray (Cornus racemosa) 2 elderberry (Sambucus) 2	Trees - leaves simple and opposite red maple (Acer rubrum) 5silver maple (Acer saccharinum) 1 Trees - leaves simple and alternate*alder, speckled (Alnus rugosa) 9river birch (Betula nigra) 2black, gum (Nyssa sylvatica) 5cottonwood, eastern (Populus deltoides) 1cottonwood, swamp (Populus heterophylla) 8elm, American (Ulmus americana) 3hackberry (Celtis occidentalis) 3ironwood (Carpinus caroliniana) 5oak, pin or white (Quercus) 4*oak, Shumard's, swamp chestnut, swamp white*pawpaw (Asimina triloba) 6*sugarberry (Celtis laevigata) 7sweet gum (Liquidambar styraciflua) 4sycamore, American (Platanus occidentalis) 3inditional sp. = 7

I-69 EVANSVILLE TO INDIANAPOLIS TIER 2 STUDIES

Section 6—Final Environmental Impact Statement

APPENDIX C

I-69 Wetland Quality Assessment Profile Sheets

I-69 Wetland Quality Assessment Profile

rated: 9/5/2017	S6W001	S6W001	10/21/15	a: 0.3087 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Fotal wetland area:

4 POOM 100	SewootA	0.31	SFB		z	z	z		8	8	_	2	-	_	8	8	11	fair	nity type)	2	2	8	_	2	10	fair		2	4	23	fair
Polygon information	Polygon ID	Polygon Size (acres)	Wetland Community Type	Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score (min = 5, max = 15)	Botanical Measure Rating	Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	Site/Hydrology Score (min = 11, max = 33)	Site/Hydrology Rating

I-69 Wetland Quality Assessment Profile

Date Report Generated: 9/5/2017

Data reference # S6W002

Wetland Site S6W002

Date of site visit: 05/12/15

Total wetland area: 0.2079 acres

Polygon Information			
	S6W002A S6W002B	6W002E	
Polygon Size (acres)	0.17	0.04	
Wetland Community Type	Ħ	SFB	
Red Flag (Special) Indicators			
Special Hydrologic Conditions	z	z	
Special Community Type	z	z	
Rare-Threatened-Endangered Species	z	z	
Animal Habitat Measures			
Wetland size and connectivity	-		
Surrounding land use	8	(,)	
Standing water	-		
Dead woody material	2	.,	
Zonation and interspersion	_		
Stratification	-		
Tree canopy	2	•	
Mature trees	က		
Animal Habitat Measure Score (min = 8, max = 24)	14	11	
Animal Habitat Measure Rating	fair	poor	
Botanical Measures (all except exotics dependent upon community type)			
Number of dominant plant taxa observed	က		
Conservatism rating	-	.,	
Total hydrophytic taxa observed	8	•	
Number of indicator taxa	-	•	
Exotic species rating	ဇ	(,)	3
Botanical Measure Score ($min = 5$, $max = 15$)	11	8	8
Botanical Measure Rating	fair	poor	
Hydrology Measures			
Water quality protection (= no. of yes answers)	4	7	4
Flood and storm water storage (= no. of yes answers)	ဇ	(,)	3
Site/Hydrology Score (min = 11, max = 33)	25	25	9
Site/Hydrology Rating	fair	fair	

I-69 Wetland Quality Assessment Profile

4: 9/5/2017	S6W003	SeW003	05/12/15	0.1408 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Intormation		
Polygon ID	S6W003A	
Polygon Size (acres)	0.14	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	8	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	-	
Stratification	_	
Tree canopy	_	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	11	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	-	
Exotic species rating	3	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	25	
Site/Hydrology Rating	fair	

9/5/2017 S6W004	S6W004	05/12/15	0.3455 acres
Date Report Generated: Data reference #	Wetland Site	Date of site visit:	Total wetland area:

	S6W004A	0.35	SFB		z	z	z		_	က	_	_	_	က	_	_	12	poor	(be)	_	2	_	_	က	80	poor		4	က	25	fair
Polygon Information	Polygon ID	Polygon Size (acres)	Wetland Community Type	Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score (min = 5, max = 15)	Botanical Measure Rating	Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	Site/Hydrology Score (min = 11, max = 33)	Site/Hydrology Rating

d: 9/5/2017	S6W005	S6W005	05/14/15	0.1109 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

an except exortes department upon community type) Iant taxa observed Observed 3	Ka 2
Duranted intersules fall except excuts dependent upon community type) Number of dominant plant taxa observed	Conservatism rating Total hydrophytic taxa observed Number of indicator taxa 2 Pritic snepries rating

	V OOC W	
	S6WU06A	
Polygon Size (acres)	0.01	
Wetland Community Type	FF	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	_	
Surrounding land use	8	
Standing water	2	
Dead woody material	_	
Zonation and interspersion	2	
Stratification	_	
Tree canopy	2	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	13	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	-	
Total hydrophytic taxa observed	2	
Number of indicator taxa	-	
Exotic species rating	2	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	2	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	27	
Site/Hydrology Rating	poob	

Date Report Generated: 9/5/2017	Data reference # S6W007	te S6W007	Date of site visit: 05/12/15	Total wetland area: 0.1721 acres
Repo	refere	Wetland Site	of sit	wetla

Polygon Intormation		
Jolygon ID	S6W007A	
Polygon Size (acres)	0.17	
Wetland Community Type	FF	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	2	
Dead woody material	ဇ	
Zonation and interspersion	-	
Stratification	-	
Free canopy	က	
Mature trees	8	
Animal Habitat Measure Score (min = 8, max = 24)	17	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	2	
Sonservatism rating	-	
Total hydrophytic taxa observed	2	
Number of indicator taxa	-	
Exotic species rating	8	
Sotanical Measure Score (min = 5 , max = 15)	6	
Botanical Measure Rating	fair	
Hydrology Measures		
Water quality protection (= no. of yes answers)	က	
Flood and storm water storage (= no. of yes answers)	4	
Site/Hydrology Score (min = 11, max = 33)	25	
Site/Hydrology Rating	fair	

Date Report Generated: 9/5/2017

Data reference # S6W008

Wetland Site Site of site visit: 05/12/15

Total wetland area: 7.6507 acres

Polygon Information				
Polygon ID	S6W008A	S6W008A S6W008B S6W008C	6W008C	
Polygon Size (acres)	0.18	7.65	0.31	
Wetland Community Type	Ħ	SOW	出	
Red Flag (Special) Indicators				
Special Hydrologic Conditions	z	z	z	
Special Community Type	z	z	z	
Rare-Threatened-Endangered Species	z	z	z	
Animal Habitat Measures				
Wetland size and connectivity	ဇ	3	က	
Surrounding land use	3	3	က	
Standing water	2	3	2	
Dead woody material	2	-	2	
Zonation and interspersion	_	-	_	
Stratification	_	-	_	
Tree canopy	2	-	2	
Mature trees	2	-	_	
Animal Habitat Measure Score (min = 8, max = 24)	16	14	15	
Animal Habitat Measure Rating	fair	fair	fair	
Botanical Measures (all except exotics dependent upon community type)				
Number of dominant plant taxa observed	3	~	_	
Conservatism rating	_	-	2	
Total hydrophytic taxa observed	ဇ	-	_	
Number of indicator taxa	_	-	_	
Exotic species rating	2	3	က	
Botanical Measure Score ($min = 5$, $max = 15$)	10	7	8	
Botanical Measure Rating	fair	poor	poor	
Hydrology Measures				
Water quality protection (= no. of yes answers)	2	2	2	
Flood and storm water storage (= no. of yes answers)	4	4	3	
Site/Hydrology Score (min = 11, max = 33)	29	29	27	
Site/Hydrology Rating	boob	boob	boob	
	,	•	•	

9/5/2017	800W9S	86W009	05/12/15	0.0301 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Information		
Polygon ID	S6W009A	
Polygon Size (acres)	0.03	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	z	
Animal Habitat Measures		
Wetland size and connectivity	_	
Surrounding land use	က	
Standing water	-	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	2	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	11	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	2	
Conservatism rating	-	
Total hydrophytic taxa observed	2	
Number of indicator taxa	-	
Exotic species rating	_	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
Flood and storm water storage (= no. of yes answers)	4	
Site/Hydrology Score ($min = 11$, $max = 33$)	27	
Site/Hydrology Rating	poob	

Date Report Generated: 9/5/2017	Data reference # S6W010	Wetland Site Sewo10	i
ă	efer	Wetland Site	vet.

ormation		
	S6W010A	
Polygon Size (acres)	0.01	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8 , max = 24)	10	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Sonservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	2	
Botanical Measure Score (min = 5, max = 15)	9	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	_	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score (min = 11, max = 33)	17	
Site/Hydrology Rating	poor	

9/5/2017 S6W011 S6W011 05/13/15 0.3718 acres

	S6W011A	
Polygon Size (acres)	0.37	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	1	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	10	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	_	
Botanical Measure Score (min = 5, max = 15)	5	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	_	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score ($min = 11$, $max = 33$)	17	
Site/Hydrology Rating	poor	

9/5/2017	S6W012	S6W012	05/14/15	0.1744 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

ormation		
	S6W012A	
Polygon Size (acres)	0.17	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	_	
Standing water	_	
Dead woody material		
Zonation and interspersion		
Stratification		
Free canopy		
Mature trees		
Animal Habitat Measure Score (min = 8, max = 24)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Sonservatism rating	2	
Total hydrophytic taxa observed	_	
Number of indicator taxa		
Exotic species rating	3	
Botanical Measure Score (min = 5, max = 15)	8	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	_	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score (min = 11, max = 33)	15	
Site/Hydrology Rating	poor	

Polygon Information		
	S6W013A	
Polygon Size (acres)	0.31	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	-	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score ($min = 8$, $max = 24$)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	-	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	8	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	_	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score ($min = 11$, $max = 33$)	15	
Site/Hydrology Rating	poor	

Date Report Generated: 9/5/2017	Data reference # S6W014	ite S6W014	Date of site visit: 05/14/15	Total wetland area: 0.0367 acres
ode	fere	Wetland Site	fsite	/etla

	S6W014A	
Polygon Size (acres)	0.04	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	_	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	-	
Total hydrophytic taxa observed	-	
Number of indicator taxa	-	
Exotic species rating	8	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	-	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score (min = 11, max = 33)	15	
Site/Hydrology Rating	poor	

9/5/2017	S6W015	S6W015	05/14/15	0.0632 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Information		
	S6W015A	
Polygon Size (acres)	90.0	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	-	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	-	
Stratification	_	
Tree canopy	-	
Mature trees	-	
Animal Habitat Measure Score ($min = 8$, $max = 24$)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	-	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	8	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	-	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score ($min = 11$, $max = 33$)	15	
Site/Hydrology Rating	poor	

0, 1	\$60016 \$60016	05/14/15	0.1396 acres
Date Report Generated:	Data reference # Wetland Site	Date of site visit:	Total wetland area:

	S6W016A	
Polygon Size (acres)	0.14	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	_	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	_	
Mature trees	1	
Animal Habitat Measure Score (min = 8, max = 24)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	3	
Botanical Measure Score ($min = 5$, $max = 15$)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	_	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score ($min = 11$, $max = 33$)	15	
Site/Hydrology Rating	poor	

	S6W017A	
Polygon Size (acres)	0.26	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	_	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	3	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	_	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score (min = 11, max = 33)	15	
Site/Hydrology Rating	poor	

Date Report Generated: 9/5/2017	ice# SeW018	S6W018	visit: 05/14/15	d area: 0.4289 acres
Report	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Information		
Polygon ID	S6W018A	
Polygon Size (acres)	0.43	
Wetland Community Type	#	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	_	
Standing water	-	
Dead woody material	3	
Zonation and interspersion	-	
Stratification	-	
Tree canopy	3	
Mature trees	3	
Animal Habitat Measure Score (min = 8, max = 24)	15	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	2	
Conservatism rating	_	
Total hydrophytic taxa observed	8	
Number of indicator taxa	_	
Exotic species rating	င	
Botanical Measure Score (min = 5 , max = 15)	10	
Botanical Measure Rating	fair	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score ($min = 11$, $max = 33$)	23	
Site/Hydrology Rating	fair	

9/5/2017 S6W019	S6W019	05/14/15	1.4814 acres
Date Report Generated: Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Information		
Polygon ID	S6W019A	
Polygon Size (acres)	1.48	
Wetland Community Type	11	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	2	
Dead woody material	က	
Zonation and interspersion	2	
Stratification	_	
Tree canopy	2	
Mature trees	3	
Animal Habitat Measure Score (min = 8, max = 24)	17	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	2	
Conservatism rating	_	
Total hydrophytic taxa observed	ဇ	
Number of indicator taxa	_	
Exotic species rating	2	
Botanical Measure Score (min = 5, max = 15)	6	
Botanical Measure Rating	fair	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score ($min = 11$, $max = 33$)	23	
Site/Hydrology Rating	fair	

4: 9/5/2017	S6W020	S6W020	05/15/15	0.093 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

ormation		
	S6W020A	
Polygon Size (acres)	60.0	
Wetland Community Type	SHM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	-	
Surrounding land use	-	
Standing water	2	
Dead woody material	_	
Zonation and interspersion	-	
Stratification	_	
Free canopy	-	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Sonservatism rating	-	
Total hydrophytic taxa observed	_	
Number of indicator taxa	-	
Exotic species rating	3	
Sotanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	_	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score (min = 11, max = 33)	15	
Site/Hydrology Rating	poor	

Date Report Generated: 9/5/2017

Data reference # S6W021

Wetland Site Site of site visit: 05/14/15

Total wetland area: 0.2086 acres

ormation		
	S6W021A	
Polygon Size (acres)	0.21	
Wetland Community Type	SC	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use		
Standing water		
Dead woody material		
Zonation and interspersion		
Stratification		
Tree canopy	3	
Mature trees		
Animal Habitat Measure Score (min = 8, max = 24)	11	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed		
Conservatism rating		
Total hydrophytic taxa observed	3	
Number of indicator taxa		
Exotic species rating	က	
Botanical Measure Score (min = 5 , max = 15)	6	
Botanical Measure Rating	fair	
Hydrology Measures		
Water quality protection (= no. of yes answers)	വ	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score (min = 11, max = 33)	23	
Site/Hydrology Rating	tair	

Date Report Generated: 9/5/2017

Data reference # S6W022

Wetland Site Site of site visit: 05/14/15

Total wetland area: 0.0368 acres

Polygon Information Polygon ID Polygon Size (acres) Wetland Community Type Red Flag (Special) Indicators Special Hydrologic Conditions Special Community Type Rare-Threatened-Endangered Species N Rare-Threatened-Endangered Species N Animal Habitat Measures Wetland size and connectivity Surrounding land use	
Mgg	
Animal Habitat Measures Wetland size and connectivity Surrounding land use	
Wetland size and connectivity Surrounding land use	
Surrounding land use	
Standing water	
Dead woody material	
Zonation and interspersion	
Stratification	
Tree canopy 1	
Mature trees	
Animal Habitat Measure Score (min = 8, max = 24) 8	
Animal Habitat Measure Rating poor	
Sotanical Measures (all except exotics dependent upon community type)	
Number of dominant plant taxa observed	
Conservatism rating 2	
otal hydrophytic taxa observed	
Number of indicator taxa	
Exotic species rating 3	
Botanical Measure Score (min = 5, max = 15)	
Botanical Measure Rating poor	
Hydrology Measures	
Nater quality protection (= no. of yes answers)	
Flood and storm water storage (= no. of yes answers)	
Site/Hydrology Score (min = 11, max = 33)	
Site/Hydrology Rating poor	

Date Report Generated: 9/5/2017

Data reference # SeW023

Wetland Site Site of site visit: 0.501 acres

iormation	
	S6W023A
Polygon Size (acres)	0.50
Wetland Community Type	pood
Red Flag (Special) Indicators	
Special Hydrologic Conditions	
Special Community Type	
Rare-Threatened-Endangered Species	
Animal Habitat Measures	
Wetland size and connectivity	
Surrounding land use	-
Standing water	
Dead woody material	
Zonation and interspersion	
Stratification	
Tree canopy	
Mature trees	
Animal Habitat Measure Score (min = 8, max = 24)	-
Animal Habitat Measure Rating	#N/A
Botanical Measures (all except exotics dependent upon community type)	
Number of dominant plant taxa observed	-
Conservatism rating	
Total hydrophytic taxa observed	LL
Number of indicator taxa	-
Exotic species rating	
Botanical Measure Score (min = 5, max = 15)	2
Botanical Measure Rating	#/N#
Hydrology Measures	
Water quality protection (= no. of yes answers)	
Flood and storm water storage (= no. of yes answers)	
Site/Hydrology Score (min = 11, max = 33)	
Sterry would hatting	

9/5/2017	S6W024 S6W024	10/21/15	0.0228 acres
Date Report Generated:	Data reference # Wetland Site	Date of site visit:	Total wetland area:

Polygon Information		
Polygon ID	S6W024A	
Polygon Size (acres)	0.02	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	_	
Surrounding land use	2	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	က	
Botanical Measure Score (min = 5 , max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	_	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score ($min = 11$, $max = 33$)	15	
Site/Hydrology Rating	poor	

Date Report Generated: 9/5/2017	Data reference # S6W025	Wetland Site S6W025	Date of site visit: 05/15/15	Total wetland area: 0.4435 acres
₽	=	٠,	·is	ŧ

	025B	0.38	SOW		Z	Z	Z		3	2	3	_	_	_	_	_	13	poor		_	_	3	-	3	6	fair		4	2	23	
	S6W	90.0			z	z	z		လ	2	2	_	_	-	က	_	14	fair	(ә	_	_	-	-	-	2	poor		4	2	23	
Polygon Intormation	Polygon ID	Polygon Size (acres)	Wetland Community Type	Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8 , max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score (min = 5, max = 15)	Botanical Measure Rating	Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	Site/Hydrology Score (min = 11, max = 33)	

9/5/2017	S6W026	S6W026	05/15/15	1.9653 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Information		
Polygon ID	S6W026A	
Polygon Size (acres)	1.97	
Wetland Community Type	SHM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	က	
Surrounding land use	2	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	က	
Stratification	_	
Tree canopy	2	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	14	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	2	
Conservatism rating	_	
Total hydrophytic taxa observed	က	
Number of indicator taxa	_	
Exotic species rating	က	
Botanical Measure Score ($min = 5$, $max = 15$)	10	
Botanical Measure Rating	fair	
Hydrology Measures		
Water quality protection (= no. of yes answers)	က	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score (min = 11, max = 33)	21	
Site/Hydrology Rating	fair	

enerated: 9/5/2017	# S6W028	S6W028	it: 10/21/15	1rea: 0.0411 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

	S6W028A	
Polygon Size (acres)	0.04	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	3	
Surrounding land use	_	
Standing water	2	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	-	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	11	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	3	
Botanical Measure Score ($min = 5$, $max = 15$)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)		
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score ($min = 11$, $max = 33$)	15	
Site/Hydrology Rating	poor	

Date Report Generated: 9/5/2017 Data reference # S6W029	S6W029 10/21/15	0.0607 acres
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Polygon Information		
	S6W029A	
Polygon Size (acres)	0.06	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	_	
Standing water	2	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score ($min = 8$, $max = 24$)	10	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	r	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)		
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score (min = 11, $max = 33$)	15	
Site/Hydrology Rating	poor	

Date Report Generated: Data reference # Wetland Site	9/5/2017 S6W030 S6W030
Date of site visit:	05/15/15
Total wetland area:	0.5678 acres

Polygon ID	S6W030A S6W030B	3W030B	
Polygon Size (acres)	0.03	0.54	
Wetland Community Type	SHM	SOW	
Red Flag (Special) Indicators			
Special Hydrologic Conditions	z	z	
nity Type	z	z	
J-Endangered Species	z	Z	
Measures			
Wetland size and connectivity	~	_	
Surrounding land use	2	2	
	2	3	
Dead woody material	_	_	
Zonation and interspersion	~	_	
	_	_	
	~	_	
	~	_	
Animal Habitat Measure Score (min = 8, max = 24)	10	11	
Animal Habitat Measure Rating	poor	poor	
Botanical Measures (all except exotics dependent upon community type)			
nant plant taxa observed	_	_	
Conservatism rating	~	2	
Fotal hydrophytic taxa observed	~	_	
Number of indicator taxa	~	_	
ating	3	3	
Botanical Measure Score (min = 5, max = 15)	7	8	
	poor	poor	
Hydrology Measures			
Water quality protection (= no. of yes answers)	3	က	
Flood and storm water storage (= no. of yes answers)	3	3	
Score (min = 11, max = 33)	23	23	
Site/Hydrology Rating	fair	fair	

9/5/2017	S6W031	S6W031	10/28/15	0.0058 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

olygon Size (acres)	0.01	
Polygon Size (acres) Wetland Community Type	SFB	
Red Flag (Special) Indicators		
cial Hydrologic Conditions	Z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
nal Habitat Measures		
and size and connectivity	_	
Surrounding land use	7	
ding water	2	
Dead woody material	-	
Zonation and interspersion	_	
Stratification	-	
Free canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	10	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)	y type)	
ber of dominant plant taxa observed	-	
ervatism rating	7	
Total hydrophytic taxa observed	_	
ber of indicator taxa	-	
Exotic species rating	е	
Botanical Measure Score (min = 5, max = 15)	8	
Botanical Measure Rating	poor	
ology Measures		
Water quality protection (= no. of yes answers)	က	
d and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score ($min = 11$, $max = 33$)	19	
Site/Hydrology Rating	fair	

9/5/2017	S6W032	S6W032	10/28/15	0.0019 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Size (acres) 0.00 Wetland Community Type SFB Red Flag (Special) Indicators Special Hydrologic Conditions Special Community Type N Rare-Threatened-Endangered Species N Animal Habitat Measures N Wetland size and connectivity 2 Surrounding land use 2 Standing water 2 Dead woody material 1 Conation and interspersion 1 Stratification 1 Mature trees 1 Animal Habitat Measure Score (min = 8, max = 24) 11 Animal Habitat Measures (all except exotics dependent upon community type) 1 Number of dominant plant taxa observed 1 Number of dominant plant taxa observed 1	
Species re (min = 8, max = 24) rg re xotics dependent upon community type)	
Species Species re (min = 8, max = 24) ing is exotics dependent upon community type)	
Species Species re (min = 8, max = 24) ring t exotics dependent upon community type)	
Species re (min = 8, max = 24) ring ratics dependent upon community type)	
Species re (min = 8, max = 24) ing t exotics dependent upon community type)	
Species re (min = 8, max = 24) ing t exotics dependent upon community type)	
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re (min = 8, max = 24) ing rectics dependent upon community type)	
re (min = 8, max = 24) ing rectics dependent upon community type)	
ical Measures (all except exotics dependent upon community type) 1910 of dominant plant taxa observed	
er of dominant plant taxa observed	
rvatism rating	
Total hydrophytic taxa observed	
er of indicator taxa	
Exotic species rating 3	
ical Measure Score ($min = 5$, $max = 15$)	
Botanical Measure Rating poor	
logy Measures	
Water quality protection (= no. of yes answers)	
Flood and storm water storage (= no. of yes answers)	
Site/Hydrology Score ($min = 11$, $max = 33$)	
Site/Hydrology Rating fair	

erated: 9/5/2017	S6W034	S6W034	10/19/15	a: 0.1539 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon information		
Polygon ID	S6W034A	
Polygon Size (acres)	0.15	
Wetland Community Type	WP	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	2	
Stratification	-	
Tree canopy	_	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	11	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	-	
Conservatism rating	-	
Total hydrophytic taxa observed	-	
Number of indicator taxa	-	
Exotic species rating	8	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
Flood and storm water storage (= no. of yes answers)	4	
Site/Hydrology Score (min = 11, max = 33)	27	
Site/Hydrology Rating	poob	

Date Report Generated: 9/5/2017	Data reference # S6W035	Site SeW035	Date of site visit: 10/19/15	Total wetland area: 0.0216 acres
te Rep	ta refe	Wetland Site	te of s	tal we

Polygon information	SRW035A	
	YCCO.	
Polygon Size (acres)	0.02	
Wetland Community Type	SC	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	_	
Dead woody material	2	
Zonation and interspersion	_	
Stratification	ဇ	
Tree canopy	2	
Mature trees	2	
Animal Habitat Measure Score (min = 8, max = 24)	15	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	2	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	က	
Botanical Measure Score (min = 5, max = 15)	8	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	က	
Flood and storm water storage (= no. of yes answers)	4	
Site/Hydrology Score ($min = 11$, $max = 33$)	25	
Site/Hydrology Rating	fair	

Polygon Information		
Polygon ID	S6W036A	
Polygon Size (acres)	0.07	
Wetland Community Type	WM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	z	
Rare-Threatened-Endangered Species	z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	2	
Dead woody material	2	
Zonation and interspersion	2	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	13	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	2	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	ĸ	
Botanical Measure Score ($min = 5$, $max = 15$)	8	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	က	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score ($min = 11$, $max = 33$)	23	
Site/Hydrology Rating	fair	

ed: 9/5/2017	S6W037	S6W037	10/01/15	0.0603 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

CRIMINATA		0000	MA		z	Z	z		m		_		-		_		x = 24) 10	poor	ıt upon community type)	_	_		_	Ф.	2) 2	1000					7 7
Polygon ID	Dolygon Disto (notice)	Motor Operation Community Time	welland Community Type	Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score (min = 5, max = 15)	Botanical Measure Rating	Hydrology Measures	Hydrology Measures Water quality protection (= no. of yes answers)	Hydrology Measures Water quality protection (= no. of yes answers) Flood and storm water storage (= no. of yes answers)	Hydrology Measures Water quality protection (= no. of yes answers) Flood and storm water storage (= no. of yes answers) SiteHydrology Score (min = 11, max = 33)	Hydrology Measures Water quality protection (= no. of yes answers) Flood and storm water storage (= no. of yes answers) SiteHydrology Score (min = 11, max = 33) SiteHydrology Rating

Date Report Generated: 9/5/2017

Data reference # SeW038

Wetland Site Site of site visit: 10/01/15

Total wetland area: 0.0385 acres

Polygon Information		
	S6W038A	
Polygon Size (acres)	0.04	
Vetland Community Type	WP	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	_	
Dead woody material	2	
Zonation and interspersion	2	
Stratification	-	
ree canopy	_	
Aature trees	-	
4nimal Habitat Measure Score (min = 8, max = 24)	12	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	-	
Sonservatism rating	2	
otal hydrophytic taxa observed	-	
Number of indicator taxa	_	
Exotic species rating	က	
Botanical Measure Score (min = 5, max = 15)	8	
Botanical Measure Rating	poor	
ydrology Measures		
Vater quality protection (= no. of yes answers)	4	
=lood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score (min = 11, max = 33)	23	
Site/Hydrology Rating	fair	

d: 9/5/2017	S6W039	S6W039	10/01/15	0.611 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

ormation		
	S6W039A	
Polygon Size (acres)	0.61	
Wetland Community Type	SHM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	3	
Surrounding land use	2	
Standing water	2	
Dead woody material	က	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	2	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	15	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	က	
Botanical Measure Score ($min = 5$, $max = 15$)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	2	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score (min = 11, max = 33)	19	
Site/Hydrology Rating	fair	

t : 9/5/2017	S6W040	S6W040	10/01/15	0.0396 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon information	SEMONON	
	CO+0 000	
Polygon Size (acres)	0.04	
Wetland Community Type	WM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	z	
Animal Habitat Measures		
Wetland size and connectivity	က	
Surrounding land use	2	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	2	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	12	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	2	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	က	
Botanical Measure Score ($min = 5$, $max = 15$)	80	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	က	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, $max = 33$)	23	
Site/Hydrology Rating	fair	

Date Report Generated: 9/5/2017	Data reference # S6W041	te S6W041	Date of site visit: 10/01/15	Total wetland area: 0.1449 acres
ō	ere.	Wetland Site	site	etla

Polygon Size (acres)	Polygon information	SEWOM1 A	
0.1. 9.1. 1. max = 24) poonndent upon community type) = 15) poonnders) 13) faa	Zi lingki	40000	
. max = 24) poo ndent upon community type) = 15) poo poo poo poo poo poo poo poo poo po	ygon Size (acres)	0.14	
. max = 24) poondent upon community type) = 15) poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens poondens	tland Community Type	SM	
max = 24) poon ndent upon community type) = 15) poon poon poon poon poon poon poon poo	d Flag (Special) Indicators		
max = 24) poon ndent upon community type) = 15) poon poon poon poon poon poon poon poo	ecial Hydrologic Conditions	z	
. max = 24) poor indent upon community type) = 15) poor indent upon community type) poor indent upon community type) poor indent upon community type) poor indent upon community type) poor indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upon community type) indent upo	ecial Community Type	z	
. max = 24) poondent upon community type) = 15) poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders poonders	e-Threatened-Endangered Species	Z	
max = 24) poondent upon community type) = 15) poonders ers) 13 poonders) 14	mal Habitat Measures		
a (min = 8, max = 24) g xotics dependent upon community type) bbserved i = 5, max = 15) poor f yes answers) = no. of yes answers) 1, max = 33) f a	land size and connectivity	2	
g g xotics dependent upon community type) bbserved i = 5, max = 15) f yes answers) = no. of yes answers) 1, max = 33) f a	ounding land use	2	
9 (min = 8, max = 24) poo y xotics dependent upon community type) bbserved 1 = 5, max = 15) poo f yes answers) = no. of yes answers) 1, max = 33) faa	iding water	_	
g g g xxetics dependent upon community type) bbserved 1 = 5, max = 15) f yes answers) 1 = no. of yes answers) 1 , max = 33) f a	d woody material	_	
poo poo table	ation and interspersion	-	
poo	tification	_	
p p p p p p p p p p p p p p p p p p p	canopy	_	
poo poo	ure trees	-	
poo poo	nal Habitat Measure Score (min = 8, max = 24)	10	
poo	nal Habitat Measure Rating	poor	
poor	Inical Measures (all except exotics dependent upon community type)		
pod	lber of dominant plant taxa observed	_	
poor (wers)	servatism rating	-	
poor wers) 1	l hydrophytic taxa observed	-	
pod wers)	ber of indicator taxa	-	
poor (wers)	ic species rating	8	
wers) poor	nnical Measure Score (min = 5 , max = 15)	7	
wers)	nnical Measure Rating	poor	
o. of yes answers) 9e (= no. of yes answers) = 11, max = 33) fa	rology Measures		
ge (= no. of yes answers) = 11, max = 33)	er quality protection (= no. of yes answers)	2	
= 11, max = 33) f	d and storm water storage (= no. of yes answers)	2	
	/Hydrology Score ($min = 11$, $max = 33$)	19	
	/Hydrology Rating	fair	

9/5/2017 S6W043 S6W043 10/06/15 0.1908 acres

CEMONS	00000437	. W		z	z	z		e	8	2	~	_	~	_	~	13	poor	mmunity type)	~	~	~	_	2	9	poor		က	3	23	fair
Polygon information	Polygon ID Polygon Sizo (2002)	Folygon Size (acres) Wetland Community Type	Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score (min = 5, max = 15)	Botanical Measure Rating	Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	Site/Hydrology Score (min = 11, max = 33)	Site/Hydrology Rating

9/5/2017	S6W044	S6W044	10/06/15	0.1969 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

S6W044																								
Polygon Information Polygon Size (acres) Wetland Community Type Red Flag (Special) Indicat Special Hydrologic Condition Special Hydrologic Condition Special Hydrologic Condition Special Hydrology Condition Wetland Size and connectiv Wetland Size and connectiv Surrounding land use Standing water Dead woody material Zonation and interspersion Stratification Tree canopy Mature trees Animal Habitat Measure S Animal Habitat Measure S Animal Habitat Measure S Conservatism rating Total hydrophytic taxa obse Number of dominant plant to Conservatism rating Botanical Measure Score Botanical Measure Score Botanical Measure Score Botanical Measure Score Botanical Measure Score Botanical Measure Score Water quality protection (= 1 Flood and storm water storic Site/Hydrology Score (mili	2100 C	OWOG		Jicators	N ed	Ires	ectivity	2	2	Zonation and interspersion		Animal Habitat Measure Score (min = 8, max = 24)	all except exotics dependent upon community type)	ant taxa observed 1	2	observed 1	(a	3	(min = 5, max = 15)		n (= no. of yes answers) 4	storage (= no. of yes answers)	Site/Hydrology Score (min = 11, max = 33) 23	

erated: 9/5/2017	S6W045	S6W045	10/01/15	ea: 2.3219 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Fotal wetland area:

TOTILIATION	
	S6W045A
Polygon Size (acres)	2.32
Wetland Community Type	WM
Red Flag (Special) Indicators	
Special Hydrologic Conditions	Z
Special Community Type	Z
Rare-Threatened-Endangered Species	Z
Animal Habitat Measures	
Wetland size and connectivity	3
Surrounding land use	2
Standing water	2
Dead woody material	-
Zonation and interspersion	-
Stratification	2
Tree canopy	-
Mature trees	
Animal Habitat Measure Score (min = 8, max = 24)	13
Animal Habitat Measure Rating	poor
Botanical Measures (all except exotics dependent upon community type)	
Number of dominant plant taxa observed	-
Conservatism rating	
Total hydrophytic taxa observed	
Number of indicator taxa	-
Exotic species rating	2
Botanical Measure Score (min = 5, max = 15)	9
Botanical Measure Rating	poor
Hydrology Measures	
Water quality protection (= no. of yes answers)	4
Flood and storm water storage (= no. of yes answers)	3
Site/Hydrology Score (min = 11, max = 33)	25
Site/Hydrology Rating	fair

9/5/2017	S6W046	S6W046	10/01/15	0.1031 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Information		
Polygon ID	S6W046A	
Polygon Size (acres)	0.10	
Wetland Community Type	WP	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	ღ	
Surrounding land use	2	
Standing water	2	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	ღ	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	14	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	-	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	-	
Exotic species rating	-	
Botanical Measure Score ($min = 5$, $max = 15$)	2	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	25	
Site/Hydrology Rating	fair	

lerated: 9/5/2017	S6W047	S6W047	11/01/15	9a: 0.0277 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

0.000	S6W04/A	0.03	WM		z	z	Z		2	2	_	_	2	_	_	_	11	poor	munity type)	_	_	_	_	က	7	poor		က	2	21	fair
Polygon information	Polygon ID	Polygon Size (acres)	Wetland Community Type	Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score (min = 5, max = 15)	Botanical Measure Rating	Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	Site/Hydrology Score (min = 11, max = 33)	Site/Hydrology Rating

Polygon Information	0 0000000	0 0000000	0 000000	000000	
Polygon ID	26VV 046A 26VV 046B 26VV 046C 26VV 046D	0000485	000048C 0	0vv048D	
Polygon Size (acres)	0.11	0.75	90.0	0.13	
/etland Community Type	SFB	SF	SOW	SFB	
Red Flag (Special) Indicators					
pecial Hydrologic Conditions	z	z	z	Z	
pecial Community Type	z	z	z	Z	
are-Threatened-Endangered Species	z	z	z	z	
Animal Habitat Measures					
Wetland size and connectivity	2	2	2	2	
urrounding land use	2	2	2	2	
Standing water	2	2	2	-	
ead woody material	_	2	_	_	
Zonation and interspersion	_	7	-	_	
Stratification	_	က	-	_	
Tree canopy	_	2	-	_	
Mature trees	_	2	-	_	
Animal Habitat Measure Score (min = 8, max = 24)	11	17	11	10	
Animal Habitat Measure Rating	poor	fair	poor	poor	
Botanical Measures (all except exotics dependent upon community type)					
Imber of dominant plant taxa observed	_	-	-	_	
Conservatism rating	_	-	2	_	
Total hydrophytic taxa observed	_	_	-	2	
mber of indicator taxa	_	-	-	_	
Exotic species rating	က	2	က	2	
Botanical Measure Score (min = 5, max = 15)	7	9	8	7	
Botanical Measure Rating	poor	poor	poor	poor	
rdrology Measures					
Water quality protection (= no. of yes answers)	2	က	က	_	
Flood and storm water storage (= no. of yes answers)	2	3	2	1	
Site/Hydrology Score (min = 11, max = 33)	25	23	21	15	
Site/Hydrology Rating	fair	fair	fair	poor	

Date Report Generated: 9/5/2017	Data reference # S6W049	Wetland Site S6W049	Date of site visit: 08/28/17	Total wetland area: 0.8788 acres
ť	Ë	≝	ė	an

ormation	
	S6W049A
Polygon Size (acres)	0.88
Wetland Community Type	puod
Red Flag (Special) Indicators	
Special Hydrologic Conditions	
Special Community Type	
Rare-Threatened-Endangered Species	
Animal Habitat Measures	
Wetland size and connectivity	
Surrounding land use	-
Standing water	
Dead woody material	
Zonation and interspersion	
Stratification	
Tree canopy	
Mature trees	
Animal Habitat Measure Score (min = 8, max = 24)	· ·
Animal Habitat Measure Rating	#N/A
Botanical Measures (all except exotics dependent upon community type)	
Number of dominant plant taxa observed	-
Conservatism rating	
Total hydrophytic taxa observed	HL HL
Number of indicator taxa	-
Exotic species rating	
Botanical Measure Score (min = 5, max = 15)	2
Botanical Measure Rating	#N/A
Hydrology Measures	
Water quality protection (= no. of yes answers)	
Flood and storm water storage (= no. of yes answers)	
Site/Hydrology Score (min = 11, max = 33) Site/Hydrology Rating	
6 (6	

9/5/2017	S6W053	S6W053	10/06/15	0.3963 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon ID Polygon Size (acres)	3600033A 0.40	
Wetland Community Type	出	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
ity Type	z	
d-Endangered Species	Z	
Animal Habitat Measures		
d connectivity	8	
q nse	ဇ	
	2	
Dead woody material	2	
Zonation and interspersion	2	
	က	
	2	
	2	
Animal Habitat Measure Score (min = 8, max = 24)	19	
Animal Habitat Measure Rating	poob	
Botanical Measures (all except exotics dependent upon community type)	(bd/	
inant plant taxa observed	2	
Conservatism rating	_	
ic taxa observed	_	
ator taxa	_	
ating	8	
Botanical Measure Score (min = 5, max = 15)	80	
sure Rating	poor	
Hydrology Measures		
Water quality protection $(= no. of yes answers)$	4	
Flood and storm water storage (= no. of yes answers)	2	
Score ($min = 11$, $max = 33$)	23	
Site/Hydrology Rating	fair	

9/5/2017	S6W054	S6W054	10/06/15	0.4852 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

4 1 0 3 0 0	S6W054A	0.49	Ħ		z	z	z		ဇ	e	2	_	2	n	2	ဇ	19	poob	imunity type)	_	_	_	_	n	2	poor		4	3	26	3
	Polygon ID	Polygon Size (acres)	Wetland Community Type	Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score (min = 5, max = 15)	Botanical Measure Rating	Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	Site/Hydrology Score ($min = 11$, $max = 33$)	(

9/5/2017	S6W055	S6W055	10/06/15	0.2061 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon ID Polygon Size (acres)	S6W055A	
Polygon Size (acres) Wetland Community Type	P H	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
nmunity Type	z	
tened-Endangered Species	Z	
Animal Habitat Measures		
e and connectivity	ဇ	
g land use	9	
ater	_	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	8	
Free canopy	8	
Mature trees	3	
Animal Habitat Measure Score (min = 8, max = 24)	18	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)	type)	
dominant plant taxa observed	2	
Conservatism rating	2	
phytic taxa observed	-	
indicator taxa	~	
ies rating	8	
Botanical Measure Score (min = 5, max = 15)	6	
Weasure Rating	fair	
Hydrology Measures		
Water quality protection (= no. of yes answers)	2	
torm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	27	
Site/Hydrology Rating	poob	

Polygon Information		
Polygon ID	S6W056A	
Polygon Size (acres)	0.16	
Wetland Community Type	SF	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	က	
Standing water	2	
Dead woody material	-	
Zonation and interspersion	က	
Stratification	-	
Tree canopy	2	
Mature trees	ဇ	
Animal Habitat Measure Score (min = 8 , max = 24)	17	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	-	
Total hydrophytic taxa observed	-	
Number of indicator taxa	_	
Exotic species rating	က	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	5	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score ($min = 11$, $max = 33$)	27	
Site/Hydrology Rating	poob	

Date Report Generated: 9/5/2017

Data reference # S6W057

Wetland Site | 10/08/15

Date of site visit: 10/08/15

Total wetland area: 1,3618 acres

														~													_			
	S6W057D	0.24	WP		z	Z	z		2	7	2	_	9	က	_	_	15	fair		_	_	_	_	2	9	pood		רמ	, 5	22
	6W057C	0.71	MM		z	z	z		2	2	2	~	3	3	_	_	15	fair		_	_	_	_	2	9	poor	_	רכי	2 6	22
	W057B S	0.22	WP		z	z	z		2	2	2	_	-	_	_	_	11	poor		_	_	-	_	2	9	poor		r (1	2	52
	S6W057A S6W057B S6W057C S6W057D	0.19	WP		z	z	z		2	2	2	2	_	_	2	_	13	poor		_	_	-	_	3	7	poor		+ c	2 6	25
Polygon Information	Polygon ID	Polygon Size (acres)	Vetland Community Type	Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Sotanical Measure Score ($min = 5$, $max = 15$)	Botanical Measure Rating	Hydrology Measures	Flood and storm water storage (- no. of year answers)	Toda and storm Water storage (= 110. or yes answers)	Site/Hydrology Score (min = 11, max = 33)

Date Report Generated: 9/5/2017

Data reference # SeW058

Wetland Site Site of Site visit: 04/11/17

Total wetland area: 3.2703 acres

formation			
	S6W058A S6W058B	W058B	
Polygon Size (acres)	3.06	0.21	
Wetland Community Type	SOW	SHM	
Red Flag (Special) Indicators			
Special Hydrologic Conditions	z	z	
Special Community Type	z	z	
Rare-Threatened-Endangered Species	z	z	
Animal Habitat Measures			
Wetland size and connectivity	2	2	
Surrounding land use	2	2	
Standing water	3	2	
Dead woody material	-	_	
Zonation and interspersion	_	_	
Stratification	-	_	
Tree canopy	-	_	
Mature trees	_	_	
Animal Habitat Measure Score (min = 8, max = 24)	12	11	
Animal Habitat Measure Rating	poor	poor	
Botanical Measures (all except exotics dependent upon community type)			
Number of dominant plant taxa observed	~	_	
Conservatism rating	~	_	
Total hydrophytic taxa observed	~	_	
Number of indicator taxa	~	_	
Exotic species rating	3	_	
Botanical Measure Score ($min = 5$, $max = 15$)	7	2	
Botanical Measure Rating	poor	poor	
Hydrology Measures			
Water quality protection (= no. of yes answers)	2	3	
Flood and storm water storage (= no. of yes answers)	2	2	
Site/Hydrology Score (min = 11, max = 33)	19	21	
Site/Hydrology Rating	fair	fair	

Polygon Information		
Polygon ID	S6W059A S6W059B	3W059B
Polygon Size (acres)	12.24	0.34
Wetland Community Type	MM	世
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	Z
Special Community Type	z	Z
Rare-Threatened-Endangered Species	z	Z
Animal Habitat Measures		
Wetland size and connectivity	က	ಣ
Surrounding land use	2	2
Standing water	2	2
Dead woody material	2	2
Zonation and interspersion	_	_
Stratification	-	3
Tree canopy	_	2
Mature trees	_	2
Animal Habitat Measure Score (min = 8, max = 24)	13	17
Animal Habitat Measure Rating	poor	fair
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	_
Exotic species rating	က	3
Botanical Measure Score ($min = 5$, $max = 15$)	7	L
Botanical Measure Rating	poor	poor
Hydrology Measures		
Water quality protection (= no. of yes answers)	က	3
Flood and storm water storage (= no. of yes answers)	2	2
Site/Hydrology Score ($min = 11$, $max = 33$)	21	21
Site/Hydrology Rating	fair	fair

9/5/2017	S6W060	S6W060	10/12/15	0.1194 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Information		
Polygon ID	S6W060A	
Polygon Size (acres)	0.12	
Wetland Community Type	MM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	3	
Surrounding land use	-	
Standing water	-	
Dead woody material	-	
Zonation and interspersion	-	
Stratification	_	
Tree canopy	_	
Mature trees	-	
Animal Habitat Measure Score (min = 8 , max = 24)	10	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	-	
Conservatism rating	-	
Total hydrophytic taxa observed	-	
Number of indicator taxa	-	
Exotic species rating	ဇ	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	2	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score (min = 11, max = 33)	19	
Site/Hydrology Rating	fair	

9/5/2017 S6W061	S6W061	10/12/15	0.327 acres
Date Report Generated: Data reference #	Wetland Site	Date of site visit:	Total wetland area:

munity Type pecial) Indicators rologic Conditions munuity Type munity Type ened-Endangered Species litat Measures and connectivity land use ther material d interspersion d interspersion material d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d interspersion d intersper	Polygon Intormation		
Species Species re (min = 8, max = 24) ring societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa dependent upon community type) societa de	Polygon ID	S6W061A	
Species re (min = 8, max = 24) ing i exotics dependent upon community type) a observed id in = 5, max = 15) of yes answers) of yes answers) 11, max = 33)	lygon Size (acres)	0.33	
Species Species re (min = 8, max = 24) re (x avits dependent upon community type) a observed ad in = 5, max = 15) re (in = 5, max = 15) re (in = 5, max = 3) re (in = 5, max = 33)	etland Community Type	SHM	
Species re (min = 8, max = 24) re (min = 8, max = 24) re exotics dependent upon community type) a observed a observed in = 5, max = 15) poor of yes answers) of yes answers) 1, max = 33) faa	d Flag (Special) Indicators		
Species re (min = 8, max = 24) ring to exotics dependent upon community type) to bserved in = 5, max = 15) pod of yes answers) r (= no. of yes answers) r (= no. of yes answers) r (= no. of yes answers) r (= no. of yes answers) r (= no. of yes answers) r (= no. of yes answers) r (= no. of yes answers) r (= no. of yes answers)	ecial Hydrologic Conditions	z	
Species re (min = 8, max = 24) ing re actics dependent upon community type) tobserved ad in = 5, max = 15) of yes answers) of yes answers) 1 (= no. of yes answers) 11, max = 33) fa	ecial Community Type	z	
re (min = 8, max = 24) ing poor texotics dependent upon community type) to bserved and in = 5, max = 15) of yes answers) of yes answers) 1 (= no. of yes answers) 11, max = 33) fa	re-Threatened-Endangered Species	Z	
re (min = 8, max = 24) fing poor (excites dependent upon community type) a observed ad in = 5, max = 15) poor of yes answers) t (= no. of yes answers) 11, max = 33) faa	imal Habitat Measures		
re (min = 8, max = 24) ing texotics dependent upon community type) to observed in = 5, max = 15) of yes answers) of yes answers) t = no. of yes answers) 11, max = 33)	tland size and connectivity	_	
re (min = 8, max = 24) ing to exotics dependent upon community type) to bserved in = 5, max = 15) of yes answers) of yes answers) 1 (= no. of yes answers) 11, max = 33) fa	rounding land use	-	
re (min = 8, max = 24) ing por re exotics dependent upon community type) stobserved ad in = 5, max = 15) of yes answers) of yes answers) 1 (= no. of yes answers) 11, max = 33) fa	nding water	7	
re (min = 8, max = 24) ing poor (exotics dependent upon community type) a observed ad in = 5, max = 15) of yes answers) of yes answers) 1 (= no. of yes answers) 11, max = 33) fa	ad woody material	_	
re (min = 8, max = 24) ing por exotics dependent upon community type) a observed ad in = 5, max = 15) por of yes answers) it = no, of yes answers) 11, max = 33)	lation and interspersion	2	
re (min = 8, max = 24) ing poor it exotics dependent upon community type) a observed a observed in = 5, max = 15) of yes answers) of yes answers) 11, max = 33) fa	tification	က	
upon community type) poor poor swers) fa	e canopy	2	
poor upon community type) swers) fall	ure trees	_	
upon community type) poc poc poc fa	mal Habitat Measure Score (min = 8, max = 24)	13	
upon community type) poc wers) fa	mal Habitat Measure Rating	poor	
poc swers) 2	anical Measures (all except exotics dependent upon community type)		
poor poor poor poor poor poor poor poor	nber of dominant plant taxa observed	_	
poo swers) 5	Iservatism rating	-	
poor poor swers) 2	al hydrophytic taxa observed	-	
) poo swers) 2	nber of indicator taxa	-	
poo swers) 2	tic species rating	8	
poor swers) 2	anical Measure Score ($min = 5$, $max = 15$)	7	
swers) 5	anical Measure Rating	poor	
swers)	drology Measures		
swers) 2 7	ter quality protection (= no. of yes answers)	က	
= 11, max = 33) f	od and storm water storage (= no. of yes answers)	2	
	∌/Hydrology Score (min = 11, max = 33)	21	
	∌/Hydrology Rating	fair	

nerated: 9/5/2017	# S6W062	S6W062	t: 10/12/15	rea: 0.0276 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Fotal wetland area:

Date Report Generated:	9/5/2017
Data reference #	S6W063
Wetland Site	SeW063
Date of site visit:	10/12/15
Total wetland area:	0.0545 acres

Polygon ID Polygon Size (acres)	S6W063A 0.05	
ommunity Type (Special) Indicators	MM	
Special Hydrologic Conditions	z	
ommunity Type	z	
satened-Endangered Species	z	
Animal Habitat Measures		
size and connectivity	_	
Surrounding land use	~	
water	_	
ody material	2	
Zonation and interspersion	3	
Stratification	_	
ree canopy	~	
Mature trees	_	
abitat Measure Score (min = 8, max = 24)	11	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)	(90	
if dominant plant taxa observed	2	
tism rating	~	
Total hydrophytic taxa observed	_	
of indicator taxa	_	
Exotic species rating	3	
Botanical Measure Score ($min = 5$, $max = 15$)	8	
Botanical Measure Rating	poor	
ly Measures		
Water quality protection (= no. of yes answers)	2	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score ($min = 11$, $max = 33$)	19	
Site/Hydrology Rating	fair	

9/5/2017 S6W064	S6W064	10/08/15	0.0201 acres
Date Report Generated: Data reference #	Wetland Site	Date of site visit:	Total wetland area:

J.
Botanical Measure Rating poor

: 9/5/2017	S6W065	S6W065	10/08/15	0.0084 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon ID Polygon Size (acres)	S6W065A	
rgon Size (acres) Iand Community Type	10.0 FF	
l Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
nal Habitat Measures		
and size and connectivity	3	
Surrounding land use	2	
iding water	_	
Dead woody material	2	
Zonation and interspersion	3	
Stratification	8	
Free canopy	2	
Mature trees	2	
Animal Habitat Measure Score (min = 8, max = 24)	18	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)	type)	
ber of dominant plant taxa observed	_	
servatism rating	_	
Total hydrophytic taxa observed	_	
ber of indicator taxa	_	
Exotic species rating	3	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
rology Measures		
Water quality protection (= no. of yes answers)	2	
d and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	27	
Site/Hydrology Rating	poob	

Date Report Generated:	9/5/2017
Data reference #	S6W066
Wetland Site	S6W066
Date of site visit:	10/08/15
Total wetland area:	0.4067 acres

CENTAGEA	COUNTROL	U.41 WM	141 A		z	z	z		ო	2	-	-	ო	-	2	-	14	fair		_	-	-	-	2	9	poor		ო	2	2 21
Polygon information	Folygon ID	Pulygon Size (adles) Wetland Community Type	Pod Elac (Special) Indicators	ned riag (openial) margins	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score ($min = 5$, $max = 15$)	Botanical Measure Rating	Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	Flood and storm water storage (= no. of yes answers) Site/Hydrology Score (min = 11, max = 33)

9/5/2017	S6W067	S6W067	10/08/15	0.0519 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Size (acres) Wetland Community Type Red Flag (Special) Indicators Special Hydrologic Conditions Special Community Type Rare-Threatened-Endangered Species Animal Habitat Measures Wetland size and connectivity	0.05 FF	
d Community Type ag (Special) Indicators ag (Special) Indicators I Hydrologic Conditions Community Type Interened-Endangered Species I Habitat Measures d size and connectivity	FF	
ag (Special) Indicators Hydrologic Conditions I Community Type Intestened-Endangered Species I Habitat Measures d size and connectivity		
al Hydrologic Conditions al Community Type Threatened-Endangered Species Il Habitat Measures al size and connectivity		
ul Community Type Threatened-Endangered Species II Habitat Measures II di size and connectivity	Z	
Threatened-Endangered Species Il Habitat Measures d size and connectivity	Z	
al Habitat Measures nd size and connectivity	Z	
nd size and connectivity		
	က	
Inding land use	е	
ing water	2	
Dead woody material	2	
Zonation and interspersion	8	
Stratification	8	
Tree canopy	2	
Mature trees	2	
Animal Habitat Measure Score (min = 8, max = 24)	20	
Animal Habitat Measure Rating	dood	
Botanical Measures (all except exotics dependent upon community type)		
er of dominant plant taxa observed	2	
Conservatism rating	_	
lydrophytic taxa observed	_	
er of indicator taxa	←	
species rating	2	
Botanical Measure Score (min = 5, max = 15)	2	
ical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
and storm water storage (= no. of yes answers)	3	
ydrology Score ($min = 11$, $max = 33$)	25	
Site/Hydrology Rating	fair	

ated: 9/5/2017	Sewoes	S6W068	10/08/15	: 0.3479 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

	* 000	
	SowoosA	
Polygon Size (acres)	0.35	
Wetland Community Type	FF	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	-	
Dead woody material	2	
Zonation and interspersion	က	
Stratification	က	
Tree canopy	2	
Mature trees	2	
Animal Habitat Measure Score (min = 8, max = 24)	17	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	-	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	-	
Exotic species rating	က	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	2	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score ($min = 11$, $max = 33$)	27	
Site/Hydrology Rating	poog	

d: 9/5/2017	890M9S	86W069	10/08/15	0.329 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Project Programment Prog		S6W069A	
Species Species re (min = 8, max = 24) ring re a strict dependent upon community type) a observed a observed ad in = 5, max = 15) of yes answers) of yes answers) 11, max = 33)		0.33	
Species Species re (min = 8, max = 24) re exotics dependent upon community type) a observed and in = 5, max = 15) of yes answers) of yes answers) 11, max = 33)	d Community Type	FF	
Species re (min = 8, max = 24) re (min = 8, max = 24) re (exotics dependent upon community type) t exotics dependent upon community type) t exotics dependent upon community type) t observed in = 5, max = 15) poor of yes answers) of yes answers) 11, max = 33)	ag (Special) Indicators		
Species re (min = 8, max = 24) from the exercise dependent upon community type) to be served a observed and in = 5, max = 15) from in = 5, max = 15) from in = 5, max = 3) from in = 5, max = 33)	al Hydrologic Conditions	z	
Species re (min = 8, max = 24) ring to exitiss dependent upon community type) to bserved and in = 5, max = 15) of yes answers) of yes answers) 11, max = 33) f	al Community Type	z	
re (min = 8, max = 24) fing fing textics dependent upon community type) to bserved a observed ad in = 5, max = 15) pc of yes answers) t = no. of yes answers 11, max = 33) f = 6, max = 33) f = 6, max = 33) f = 6, max = 33) f = 6, max = 33) f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15 f = 6, max = 15	Threatened-Endangered Species	Z	
re (min = 8, max = 24) fing ing it exerties dependent upon community type) a observed ad in = 5, max = 15) pc of yes answers) of yes answers) 11, max = 33) ff	al Habitat Measures		
re (min = 8, max = 24) fing fing t exotics dependent upon community type) t observed a observed in = 5, max = 15) po of yes answers) of yes answers) 11, max = 33) finatements	nd size and connectivity	2	
re (min = 8, max = 24) fing t exotics dependent upon community type) t observed in = 5, max = 15) po of yes answers) of yes answers) f(= no. of yes answers) f(+, max = 33) f	unding land use	2	
re (min = 8, max = 24) fing fing to exertiss dependent upon community type) to beenved and in = 5, max = 15) for yes answers) of yes answers) f(= no. of yes answers) f(+, max = 33) f(+, max = 33)	ng water	_	
re (min = 8, max = 24) fing fing it exotics dependent upon community type) s observed ed in = 5, max = 15) for yes answers) of yes answers) f = no. of yes answers f = 11, max = 33) f = 14, max = 33) f = 15, max = 33, for the statement of yes answers of the statement of yes answers of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statem	woody material	7	
re (min = 8, max = 24) fing restrics dependent upon community type) a observed ad in = 5, max = 15) pc of yes answers) t = no. of yes answers) 11, max = 33) f f	on and interspersion	_	
re (min = 8, max = 24) ing ing is exotics dependent upon community type) a observed a observed in = 5, max = 15) pc of yes answers) of yes answers) 11, max = 33) f	cation	က	
upon community type) powers)	anopy	2	
= 24) f upon community type) pc swers) f	trees	2	
upon community type) population (and the population) population	Il Habitat Measure Score (min = 8, max = 24)	15	
upon community type) po	Il Habitat Measure Rating	fair	
pc pc	cal Measures (all except exotics dependent upon community type)		
po swers)	er of dominant plant taxa observed	7	
po po swers)	rvatism rating	_	
pc pc swers)	ydrophytic taxa observed	_	
po wers)	er of indicator taxa	_	
po swers)	species rating	ĸ	
provinces)	ical Measure Score ($min = 5$, $max = 15$)	8	
swers)	ical Measure Rating	poor	
swers)	logy Measures		
wers)	quality protection (= no. of yes answers)	3	
= 11, max = 33) f	and storm water storage (= no. of yes answers)	3	
	ydrology Score ($min = 11$, $max = 33$)	23	
	ydrology Rating	fair	

9/5/2017	S6W070	S6W070	09/24/15	0.1047 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon ID	S6W070A	
Polygon Size (acres) Wetland Community Type	O.T.O WW	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
nmunity Type	z	
itened-Endangered Species	Z	
Animal Habitat Measures		
re and connectivity	3	
g land use	2	
ater	2	
Dead woody material	_	
Zonation and interspersion	3	
Stratification	_	
Free canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	14	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)	type)	
dominant plant taxa observed	_	
Conservatism rating	_	
phytic taxa observed	_	
indicator taxa	_	
ies rating	2	
Botanical Measure Score (min = 5, max = 15)	9	
Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	25	
Site/Hydrology Rating	fair	

	S6W071A	
	0.11	
Wetland Community Type	WM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	8	
Surrounding land use	2	
Standing water	2	
Dead woody material	2	
Zonation and interspersion	ဇ	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	15	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	2	
Botanical Measure Score ($min = 5$, $max = 15$)	9	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	_	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score (min = 11, max = 33)	15	
Site/Hydrology Rating	poor	

9/5/2017	S6W073	S6W073	09/21/15	0.138 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon ID	S6W073A	
Polygon Size (acres)	0.14	
Wetland Community Type	MM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	က	
Standing water	-	
Dead woody material	2	
Zonation and interspersion	2	
Stratification	_	
Tree canopy	2	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	14	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	2	
Conservatism rating	~	
Total hydrophytic taxa observed	-	
Number of indicator taxa	~	
Exotic species rating	3	
Botanical Measure Score (min = 5, max = 15)	8	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	က	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score (min = 11, max = 33)	21	
Site/Hydrology Rating	fair	

Date Report Generated: 9/5/2017	Ice # S6W074	S6W074	visit: 09/21/15	Total wetland area: 0.5888 acres
eport	Data reference #	Wetland Site	Date of site visit:	wetlar

Polygon Information		
Polygon ID	S6WU/4A	
Polygon Size (acres)	0.59	
Wetland Community Type	SHM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	8	
Standing water	2	
Dead woody material	2	
Zonation and interspersion	2	
Stratification	-	
Tree canopy	_	
Mature trees	-	
Animal Habitat Measure Score ($min = 8$, $max = 24$)	14	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	2	
Total hydrophytic taxa observed	-	
Number of indicator taxa	_	
Exotic species rating	8	
Botanical Measure Score (min = 5, max = 15)	8	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	5	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	27	
Site/Hydrology Rating	poob	

9/5/2017	S6W075	S6W075	09/21/15	0.009 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon ID	S6W075A	
Polygon Size (acres)	100	
Wetland Community Type	WW.	
Red Flag (Special) Indicators		
al Hydrologic Conditions	z	
al Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
nd size and connectivity	2	
unding land use	8	
ing water	_	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Free canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	11	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)	r type)	
er of dominant plant taxa observed	_	
Conservatism rating	_	
lydrophytic taxa observed	_	
er of indicator taxa	_	
species rating	3	
Botanical Measure Score (min = 5 , max = 15)	7	
ical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	2	
and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	27	
Site/Hydrology Rating	poob	

9/5/2017	S6W076	S6W076	09/03/15	0.0247 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon information	V 320/V/30	
al nogylo	SOVICION	
olygon Size (acres)	0.02	
Wetland Community Type	WM	
ted Flag (Special) Indicators		
Special Hydrologic Conditions	z	
special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
tanding water	_	
ead woody material	-	
onation and interspersion	-	
ratification	-	
ree canopy	-	
Mature trees	_	
nimal Habitat Measure Score (min = 8, max = 24)	10	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
umber of dominant plant taxa observed	2	
Conservatism rating	-	
otal hydrophytic taxa observed	-	
umber of indicator taxa	-	
Exotic species rating	2	
otanical Measure Score (min = 5 , max = 15)	7	
Botanical Measure Rating	poor	
ydrology Measures		
Water quality protection (= no. of yes answers)	4	
lood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score ($min = 11$, $max = 33$)	52	
Site/Hydrology Rating	fair	

9/5/2017 S6W077 S6W077 08/31/15 0.0305 acres

V EEO V 100	Soviula	0.03	SC		z	z	z		2	2	2	_	~	e	2	2	15	fair	mmunity type)	~	~	_	_	2	9	poor		က	e	23	
	Polygon ID	Polygon Size (acres)	Wetland Community Type	Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score ($min = 5$, $max = 15$)	Botanical Measure Rating	Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	Site/Hydrology Score (min = 11, max = 33)	

0,	S6W078	S6W078	09/03/15	0.1482 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

* 01074700	S6W0/8A	0.15	SHM		z	z	Z		2	8	8	_	2	_	_	_	13	poor	nity type)	_	2	_	_	8	8	poor		4	3	25	fair
Polygon Information	Polygon ID	Polygon Size (acres)	Wetland Community Type	Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score (min = 5, max = 15)	Botanical Measure Rating	Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	Site/Hydrology Score (min = 11, max = 33)	Site/Hydrology Rating

Date Report Generated: Data reference # Wetland Site Date of site visit:	9/5/2017 S6W079 S6W079 09/03/15
Total wetland area:	0.2507 acres

	S6W079A	
olygon Size (acres)	0.25	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
standing water	-	
Dead woody material	-	
Conation and interspersion	8	
stratification	8	
Free canopy	2	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	15	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	2	
Sonservatism rating	-	
Total hydrophytic taxa observed	-	
Number of indicator taxa	-	
Exotic species rating	-	
3otanical Measure Score (min = 5, max = 15)	9	
Botanical Measure Rating	poor	
lydrology Measures		
Water quality protection (= no. of yes answers)	4	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	25	
Site/Hydrology Rating	fair	

Date Report Generated: Data reference # Wetland Site Date of site visit: Total wetland area:	9/5/2017 S6W080 S6W080 08/31/15 0.1984 acres
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Polygon Intormation		
Polygon ID	S6W080A	
Polygon Size (acres)	0.20	
Wetland Community Type	SC	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	z	
Rare-Threatened-Endangered Species	z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	2	
Dead woody material	2	
Zonation and interspersion	_	
Stratification	က	
Tree canopy	2	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	15	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	2	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	2	
Botanical Measure Score (min = 5, max = 15)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score ($min = 11$, $max = 33$)	22	
Site/Hydrology Rating	fair	

Date Report Generated: 9/5/2017	Data reference # S6W081	ite S6W081	Date of site visit: 09/08/15	Total wetland area: 0.0272 acres
od	fere	Wetland Site	fsite	vetla

Polygon information		
Polygon ID	Sewugia	
Polygon Size (acres)	0.03	
Wetland Community Type	WM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	-	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	3	
Stratification	ဇ	
Tree canopy	2	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	14	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	2	
Total hydrophytic taxa observed	-	
Number of indicator taxa	_	
Exotic species rating	က	
Botanical Measure Score ($min = 5$, $max = 15$)	8	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	25	
Site/Hydrology Rating	fair	

ed: 9/5/2017	S6W082	S6W082	10/21/15	0.024 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

icators icators icators icators diditions be ngered Species ectivity ire Score (min = 8, max = 24) ire Rating ant taxa observed abserved a ore (min = 5, max = 15) iting iting iting iting itinax = 16, itinax = 15, iting iting iting iting iting iting itinax = 11, max = 33, itinax	Polygon ID	S6W082A	
max = 24) dent upon community type) : 15) IS) answers)	(Section Cores)		
max = 24) dent upon community type) : 15) Its) answers)	INGUI OIZE (acres)	0.02	
max = 24) pc dent upon community type) pc : 15) pc rs: ncs rs: ncs gnswers) f	tland Community Type	WM	
max = 24) pc dent upon community type) trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace trace tra	d Flag (Special) Indicators		
max = 24) pot dent upon community type) 15) pot answers) fts) fts	ecial Hydrologic Conditions	z	
max = 24) pc dent upon community type) pc (15) pc Its) answers) f	ecial Community Type	z	
max = 24) pc dent upon community type) 15) pc 15) pc	e-Threatened-Endangered Species	Z	
max = 24) pc dent upon community type) 15) pc 15) pc	imal Habitat Measures		
max = 24) podent upon community type) 15) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon com	tland size and connectivity	2	
max = 24) podent upon community type) 15) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type) podent upon community type)	rounding land use	_	
max = 24) pc dent upon community type) pc (15) pc answers) f	nding water	2	
max = 24) po dent upon community type) (15) pc Its) answers) f	d woody material	_	
max = 24) pc dent upon community type) pc 15) pc 15) pc 15) pc 15) pc 15) pc	ation and interspersion	_	
riax = 24) podent upon community type) (15) pc answers) f	tification	_	
max = 24) pot dent upon community type) refs) pot answers) ft	e canopy	_	
max = 24) pc dent upon community type) pc (15) pc Its) answers) f	ure trees	_	
dent upon community type) 15) Is answers)	mal Habitat Measure Score (min = 8, max = 24)	10	
dent upon community type) 15) poc IS) answers) 2	mal Habitat Measure Rating	poor	
: 15) poc Irs) answers)	anical Measures (all except exotics dependent upon community ty	rpe)	
r15) pocriss sarswers) 2 fa	nber of dominant plant taxa observed	_	
r15) poor	servatism rating	_	
r 15) poc Irs) answers) 2	al hydrophytic taxa observed	_	
rrs) poc answers) 2	nber of indicator taxa	_	
r 15) poc rrs) answers) 2	tic species rating	2	
poor	anical Measure Score (min = 5, max = 15)	9	
5 fa	anical Measure Rating	poor	
, ta	Irology Measures		
fa	ter quality protection (= no. of yes answers)	3	
-	od and storm water storage (= no. of yes answers)	2	
	3 /Hydrology Score (min = 11, max = 33)	21	
	a/Hydrology Rating	fair	

9/5/2017 S6W085	SeW085	10/20/15	0.0538 acres
Date Report Generated:	Wetland Site	Date of site visit:	Total wetland area:

Polygon Information		
Polygon ID	S6W085A	
Polygon Size (acres)	0.05	
Wetland Community Type	WM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	~	
Surrounding land use	-	
Standing water	2	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	-	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	~	
Conservatism rating	-	
Total hydrophytic taxa observed	_	
Number of indicator taxa	-	
Exotic species rating	က	
Botanical Measure Score ($min = 5$, $max = 15$)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	-	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score ($min = 11$, $max = 33$)	15	
Site/Hydrology Rating	poor	

9/5/2017 S6W086	S6W086	07/09/15	0.3676 acres
Date Report Generated: Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon ID	S6W086A	
	0.37	
	SHM	
itors		
Special Hydrologic Conditions	z	
	z	
lered Species	z	
Animal Habitat Measures		
tivity	_	
	_	
	-	
	_	
Zonation and interspersion	_	
	_	
	_	
	_	
Animal Habitat Measure Score (min = 8, max = 24)	8	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)	(e)	
nt taxa observed	-	
	-	
Total hydrophytic taxa observed	-	
Number of indicator taxa	_	
	8	
ore $(min = 5, max = 15)$	7	
Botanical Measure Rating	poor	
Water quality protection (= no. of yes answers)	က	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score (min = 11, max = 33)	21	
	fair	

Date Report Generated: 9/5/2017	ce # S6W087	Sewor	/isit: 07/09/15	d area: 0.0912 acres
Report	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

	- c	1	fair	11	က	_	က	_	က		poor		-	_	-	-	-	2	က	_		Z	Z	z		SOW	60.0	S6W087A	
. / L 3 / L 2	Flood and storm water storage (= no. of yes answers)	Hydrology Measures Water quality protection (= no. of yes answers)	Botanical Measure Rating	Botanical Measure Score (min = 5, max = 15)	Exotic species rating	Number of indicator taxa	Total hydrophytic taxa observed	Conservatism rating	Number of dominant plant taxa observed	Botanical Measures (all except exotics dependent upon community type)	Animal Habitat Measure Rating	A mine of Habitat Manager Court (mine O mone)	Mature trees	Tree canopy	Stratification	Zonation and interspersion	Dead woody material	Standing water	Surrounding land use	Wetland size and connectivity	Animal Habitat Measures	Rare-Threatened-Endangered Species	Special Community Type	Special Hydrologic Conditions	Red Flag (Special) Indicators	Wetland Community Type	Polygon Size (acres)	Polygon ID	Polygon information

Polygon Information				
	S6W089A 8	S6W089A S6W089B S6W089C	6W089C	
acres)	0.17	0.07	09:0	
nunity Type	WM	SC	SOW	
cial) Indicators				
ogic Conditions	z	z	z	
unity Type	z	z	z	
ad-Endangered Species	z	z	z	
Animal Habitat Measures				
Wetland size and connectivity	က	က	က	
nd use	2	2	2	
	2	2	က	
Dead woody material	_	-	-	
Zonation and interspersion	က	က	-	
-	_	-	-	
	_	-	-	
	_	-	_	
Animal Habitat Measure Score (min = 8, max = 24)	14	14	13	
Animal Habitat Measure Rating	fair	fair	poor	
asures (all except exotics dependent upon community type)				
ninant plant taxa observed	2	-	_	
Conservatism rating	_	-	-	
Fotal hydrophytic taxa observed	_	-	_	
icator taxa	_	-	-	
Exotic species rating	2	2	က	
asure Score (min = 5, max = 15)	7	9	7	
Botanical Measure Rating	poor	poor	poor	
asures				
Water quality protection (= no. of yes answers)	3	8	2	
Flood and storm water storage (= no. of yes answers)	2	2	2	
Site/Hydrology Score (min = 11, max = 33)	21	21	19	
v Rating	fair	fair	foir	

Date Report Generated: 9/5/2017	Data reference # S6W091	te S6W091	Date of site visit: 04/21/16	Total wetland area: 0.0221 acres
8	efere	Wetland Site	of Site	wetla

Polygon information	SEM001 A	
di nog	SOW UST A	
gon Size (acres)	0.02	
Wetland Community Type	SFB	
Flag (Special) Indicators		
Special Hydrologic Conditions	z	
sial Community Type	Z	
Rare-Threatened-Endangered Species	Z	
nal Habitat Measures		
and size and connectivity	2	
Surrounding land use	2	
ding water	2	
d woody material	2	
tion and interspersion	ဧ	
ification	_	
Free canopy	2	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	15	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	-	
servatism rating	_	
Total hydrophytic taxa observed	_	
ber of indicator taxa	_	
Exotic species rating	ဧ	
inical Measure Score (min = 5 , max = 15)	7	
Botanical Measure Rating	poor	
ology Measures		
Water quality protection (= no. of yes answers)	2	
Flood and storm water storage (= no. of yes answers)	1	
Site/Hydrology Score (min = 11, max = 33)	17	
Site/Hydrology Rating	poor	

9/5/2017	S6W092	S6W092	11/20/15	0.2421 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

	S6W092A	
Polygon Size (acres)	0.24	
Wetland Community Type	FF	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	3	
Surrounding land use	က	
Standing water	2	
Dead woody material	2	
Zonation and interspersion	9	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	16	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	2	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	9	
Botanical Measure Score (min = 5, max = 15)	8	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	4	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score ($min = 11$, $max = 33$)	25	
Site/Hydrology Rating	fair	

O,	SeW093	S6W093	11/20/15	1.4581 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

193A	1.46	MHW		2	2	Z		3		2	-	2		_	-	14	fair		-	-	_	-	ო		poor		4	2	23
Polygon ID S6W093A			Red Flag (Special) Indicators	Special Hydrologic Conditions	Special Community Type	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity	Surrounding land use	Standing water	Dead woody material	Zonation and interspersion	Stratification	Tree canopy	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)		Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating	Botanical Measure Score ($min = 5$, $max = 15$)		Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	Site/Hydrology Score (min = 11, max = 33)

Date Report Generated: 9/5/2017	Data reference # S6W094	te S6W094	Date of site visit: 05/28/15	Fotal wetland area: 0.0365 acres
	e.e	Wetland Site	site	eţa

Official	Polygon ID S6W094A	Polygon Size (acres) 0.04	Wetland Community Type WM	Red Flag (Special) Indicators	Special Hydrologic Conditions	Rare-Threatened-Endangered Species	Animal Habitat Measures	Wetland size and connectivity 3	Surrounding land use 3	Standing water 2	Dead woody material	Zonation and interspersion 3	Stratification 1	Tree canopy 1	Mature trees	Animal Habitat Measure Score (min = 8, max = 24)	Animal Habitat Measure Rating	Botanical Measures (all except exotics dependent upon community type)	Number of dominant plant taxa observed	Conservatism rating	Total hydrophytic taxa observed	Number of indicator taxa	Exotic species rating 3	Botanical Measure Score (min = 5, max = 15) 8	Botanical Measure Rating poor	Hydrology Measures	Water quality protection (= no. of yes answers)	Flood and storm water storage (= no. of yes answers)	100

Polygon Information	CENTODEA	
John ID	SewuseA	
gon Size (acres)	2.46	
Wetland Community Type	FF	
Red Flag (Special) Indicators		
ial Hydrologic Conditions	Z	
sial Community Type	Z	
Rare-Threatened-Endangered Species	Z	
nal Habitat Measures		
and size and connectivity	2	
Surrounding land use	က	
ding water	2	
1 woody material	2	
ition and interspersion	_	
ification	2	
Free canopy	က	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	16	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	2	
ervatism rating	2	
Total hydrophytic taxa observed	_	
per of indicator taxa	-	
Exotic species rating	_	
nical Measure Score (min = 5 , max = 15)	7	
Botanical Measure Rating	poor	
ology Measures		
Water quality protection (= no. of yes answers)	9	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	29	
Site/Hydrology Rating	poob	

srated: 9/5/2017	Sew098	S6W098	04/19/15	a: 0.1151 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Information		
	S6W098A	
Polygon Size (acres)	0.12	
Wetland Community Type	HH.	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	က	
Surrounding land use	2	
Standing water	_	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	ဇ	
Tree canopy	2	
Mature trees	က	
Animal Habitat Measure Score (min = 8, max = 24)	16	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	2	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	က	
Botanical Measure Score ($min = 5$, $max = 15$)	8	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)		
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score ($min = 11$, $max = 33$)	23	
Site/Hydrology Rating	fair	

9/5/2017	S6W103	S6W103	09/08/15	0.0403 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon Intormation	000 V	
Polygon ID	SOW 103A	
Polygon Size (acres)	0.04	
Wetland Community Type	WM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	-	
Surrounding land use	-	
Standing water	2	
Dead woody material	-	
Zonation and interspersion	-	
Stratification	_	
Tree canopy	_	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	-	
Conservatism rating	-	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	2	
Botanical Measure Score ($min = 5$, $max = 15$)	9	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	2	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score ($min = 11$, $max = 33$)	19	
Site/Hydrology Rating	fair	

l: 9/5/2017	S6W106	S6W106	11/20/15	0.5047 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

Polygon ID	S6W106A	
e (acres)	0.50	
Wetland Community Type	SC	
pecial) Indicators		
Special Hydrologic Conditions	z	
nmunity Type	z	
tened-Endangered Species	Z	
Animal Habitat Measures		
e and connectivity	2	
) land use	_	
ater	_	
Dead woody material	2	
Zonation and interspersion	ဧ	
Stratification	ო	
ree canopy	2	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	15	
Animal Habitat Measure Rating	fair	
Botanical Measures (all except exotics dependent upon community type)	(əd.	
dominant plant taxa observed	_	
im rating	_	
Fotal hydrophytic taxa observed	_	
ndicator taxa	_	
ies rating	7	
Botanical Measure Score (min = 5, max = 15)	9	
Weasure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	_	
torm water storage (= no. of yes answers)	_	
Site/Hydrology Score (min = 11, max = 33)	15	
Site/Hydrology Rating	poor	

Date Report Generated: 9/5/2017	e# S6W107	S6W107	sit: 04/19/15	area: 0.0618 acres
Report G	Data reference #	Wetland Site	Date of site visit:	otal wetland area:

Polygon ID	S6W107A	
Polygon Size (acres)	90.0	
Wetland Community Type	WM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	_	
Standing water	2	
Dead woody material	-	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	-	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	10	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	-	
Conservatism rating	-	
Total hydrophytic taxa observed	-	
Number of indicator taxa	-	
Exotic species rating	2	
Botanical Measure Score (min = 5, max = 15)	9	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	က	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score (min = 11, max = 33)	21	
Site/Hydrology Rating	fair	

9/5/2017 S6W113	S6W113	01/21/16	0.3874 acres
Date Report Generated: Data reference #	Wetland Site	Date of site visit:	Total wetland area:

	S6WTT3A	
Polygon Size (acres)	0.39	
Wetland Community Type	SC	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	z	
Rare-Threatened-Endangered Species	N	
Animal Habitat Measures		
Wetland size and connectivity	2	
Surrounding land use	2	
Standing water	2	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	3	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	13	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	-	
Conservatism rating	2	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating		
Botanical Measure Score (min = 5, max = 15)	8	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	8	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	23	
Site/Hydrology Rating	fair	

9/5/2017	S6W116	S6W116	06/05/16	0.0396 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

	S6W116A	
Polygon Size (acres)	0.04	
Wetland Community Type	WM	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	_	
Surrounding land use	_	
Standing water	2	
Dead woody material	_	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	_	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	_	
Total hydrophytic taxa observed	_	
Number of indicator taxa	_	
Exotic species rating	8	
Botanical Measure Score ($min = 5$, $max = 15$)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)		
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	17	
Site/Hydrology Rating	poor	

: 9/5/2017	S6W126	S6W126	08/29/17	0.1186 acres
Date Report Generated:	Data reference #	Wetland Site	Date of site visit:	Total wetland area:

	S6W126A	
Polygon Size (acres)	0.12	
Wetland Community Type	SFB	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	Z	
Special Community Type	Z	
Rare-Threatened-Endangered Species	Z	
Animal Habitat Measures		
Wetland size and connectivity	-	
Surrounding land use	2	
Standing water	-	
Dead woody material	-	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	_	
Mature trees	-	
Animal Habitat Measure Score (min = 8, max = 24)	6	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	_	
Conservatism rating	-	
Total hydrophytic taxa observed	-	
Number of indicator taxa	-	
Exotic species rating	3	
Botanical Measure Score ($min = 5$, $max = 15$)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	1	
Flood and storm water storage (= no. of yes answers)	3	
Site/Hydrology Score (min = 11, max = 33)	19	
Site/Hydrology Rating	fair	

formation		
	S6W127A	
Polygon Size (acres)	0.21	
Wetland Community Type	SC	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	z	
Animal Habitat Measures		
Wetland size and connectivity	-	
Surrounding land use	-	
Standing water	_	
Dead woody material	-	
Zonation and interspersion	-	
Stratification	-	
Tree canopy	-	
Mature trees	-	
Animal Habitat Measure Score (min = 8 , max = 24)	8	
	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	~	
Conservatism rating	~	
Total hydrophytic taxa observed	_	
Number of indicator taxa	~	
Exotic species rating	ဇ	
Botanical Measure Score ($min = 5$, $max = 15$)	7	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	2	
Flood and storm water storage (= no. of yes answers)	ဇ	
Site/Hydrology Score ($min = 11$, $max = 33$)	21	
Site/Hydrology Rating	fair	

Date Report Generated: 9/5/2017

Data reference # S6W128

Wetland Site Site of site visit: 08/29/17

Total wetland area: 0.1751 acres

Polygon Information		
Polygon ID	S6W128A	
Polygon Size (acres)	0.18	
Wetland Community Type	WW	
Red Flag (Special) Indicators		
Special Hydrologic Conditions	z	
Special Community Type	z	
Rare-Threatened-Endangered Species	z	
Animal Habitat Measures		
Wetland size and connectivity	_	
Surrounding land use	-	
Standing water	_	
Dead woody material	-	
Zonation and interspersion	_	
Stratification	_	
Tree canopy	-	
Mature trees	_	
Animal Habitat Measure Score (min = 8, max = 24)	8	
Animal Habitat Measure Rating	poor	
Botanical Measures (all except exotics dependent upon community type)		
Number of dominant plant taxa observed	-	
Conservatism rating	2	
Total hydrophytic taxa observed	-	
Number of indicator taxa	-	
Exotic species rating	က	
Botanical Measure Score ($min = 5$, $max = 15$)	8	
Botanical Measure Rating	poor	
Hydrology Measures		
Water quality protection (= no. of yes answers)	2	
Flood and storm water storage (= no. of yes answers)	2	
Site/Hydrology Score ($min = 11$, $max = 33$)	19	
Site/Hydrology Rating	fair	

I-69 EVANSVILLE TO INDIANAPOLIS TIER 2 STUDIES

Section 6—Final Environmental Impact Statement





APPENDIX D

Wetland Matrix for I-69 Alternatives: **Section 6 Right of Way Limits**

Wetla	nd ID	DATA		Alt	ternative (C1			Alt	ternative C2			Al	ternative (C3			A	Iternative (C4				RPA		
	S	Cowardin et al. Classification																				PEM				
	Yes	Indiana Community Type																				SFB				
	on:	Size (acres)																				0.31				
	适	Impact (acres)																				0.01				
	Jurisdictio	Animal Habitat																				fair				
-		Botanical																				fair				
00/	S	Hydrology																				fair				
S6W001	USACE	Red Flags																				N				
(O)			PFO	DEM				PFO	DEM								PFO	PEM				PFO	PEM			
	Yes	Cowardin et al. Classification		PEM					PEM SFB							-		SFB					SFB			
		Indiana Community Type	FF	SFB				FF									FF 0.47					FF				
	Jurisdiction:	Size (acres)	0.17	0.04				0.17	0.04								0.17	0.04				0.17	0.04			
	isdi	Impact (acres)	0.17	0.03				0.17	0.03								0.09	0.00	1			0.09	0.00			ļ
	٦'n	Animal Habitat	fair	poor				fair	poor								fair	poor				fair	poor			ļ
S6W002	끥	Botanical	fair	poor				fair	poor								fair	poor				fair	poor			
) We	USACE	Hydrology	fair	fair				fair	fair								fair	fair				fair	fair			
ഗ്		Red Flags	N	N				N	N								N	N				N	N			
	Yes	Cowardin et al. Classification	PEM					PEM									PEM		ļ		ļ	PEM				
	- -	Indiana Community Type	SFB					SFB									SFB					SFB				
		Size (acres)	0.14					0.14									0.14					0.14			'	
	Jurisdictio	Impact (acres)	0.07					0.07									0.01					0.01				
	Ē	Animal Habitat	poor					poor									poor					poor				
03	Ä	Botanical	poor					poor									poor					poor				
S6W003	USACE	Hydrology	fair					fair									fair					fair				
S6	S	Red Flags	N					N									N					N				
	Se	Cowardin et al. Classification	PEM					PEM				PEM					PEM					PEM				
	: Yes	Indiana Community Type	SFB					SFB				SFB					SFB					SFB				
	E	Size (acres)	0.35					0.35				0.35					0.35					0.35				
	Jurisdiction:	Impact (acres)	0.34					0.34				0.03					0.08					0.08				
	ıris	Animal Habitat	poor					poor				poor					poor					poor				
4		Botanical	poor					poor				poor					poor					poor				
Sewoo	USACE	Hydrology	fair					fair				fair					fair					fair			\Box	
96/	S	Red Flags	N					N				N					N					N				
		Cowardin et al. Classification	PEM					PEM				PEM					PEM					PEM				
	Yes	Indiana Community Type	DM					DM				DM					DM					DM				
	risdiction:	Size (acres)	0.11					0.11				0.11					0.11					0.11				
	dict	Impact (acres)	0.06					0.06				0.02					0.06					0.06				
		Animal Habitat	poor					poor				poor					poor					poor				
22	n T	Botanical	poor					poor				poor					poor					poor				
700	Š	Hydrology	poor					poor			1	poor					poor					poor				
S6W005	USACE	Red Flags	N					N				N					N					N			$\overline{}$	
		Cowardin et al. Classification	PFO					PFO				PFO					PFO		1	1	İ	PFO				†
	Yes	Indiana Community Type	FF					FF				FF					FF					FF			$\overline{}$	
	Jurisdiction:	Size (acres)	0.17					0.17		 	 	0.17					0.17				1	0.17			$\overline{}$	
	jcti	Impact (acres)	0.06					0.06		 	 	0.17					0.17				1	0.17			$\overline{}$	
	risc	Animal Habitat	fair				 	fair			 	fair					fair		1	1	-	fair				
_	n N	Botanical	fair				 	fair			 	fair					fair		1	1	-	fair				
200W9S	USACE	Hydrology	fair				 	fair			 	fair					fair		1	1	 	fair				1
36W	JSΔ	Red Flags	N				 	N			 	N					N		1	1	 	N				†
3)		Cowardin et al. Classification	PFO	PUB	PFO			PFO	PUB	PFO	 	.,,										· ·			$\overline{}$	
	Yes	Indiana Community Type	FF	SOW	FF		 	FF	SOW	FF	 								1	1	 					1
		Size (acres)	0.18	7.65				0.18	7.65	0.31	 															
	i <u>či</u>		0.18	0.01	0.00		 	0.00	0.01	0.00	 															
	Jurisdiction:	Impact (acres) Animal Habitat			fair					fair	 										-					1
~	η		fair	fair			 	fair	fair		 								1	1	-					1
300,	S	Botanical	fair	poor	poor		 	fair	poor	poor	 								1	1	-					1
S6W008	USACE	Hydrology	good	good	good N			good N	good N	good N																1
Ś	\supset	Red Flags	N	N	N			IN	IN	IN					l											

Wetts	nd ID	DATA		Alternative	v.C1			A.I.	ternative (C2			ΔI	ternative	C2			ΔΙ	ternative	CA			RPA	
wella				Alternative	: 01			AI	ternative	62			Al	lerrialive	C3			Al	lerrialive	C 4			KFA	
	Yes	Cowardin et al. Classification	PEM				PEM															PEM		
		Indiana Community Type	SFB				SFB															SFB		
	Jurisdiction:	Size (acres)	0.03				0.03															0.03		
	isdi	Impact (acres)	0.03				0.03															0.02		
	Jur	Animal Habitat	poor				poor															poor		
SeW009	USACE	Botanical	poor				poor															poor		
We.	SA(Hydrology	good				good															good		
ο̈́	Ö	Red Flags	N				N															N		
	8	Cowardin et al. Classification					PEM																	
	n:	Indiana Community Type					SHM																	
	ction:	Size (acres)					0.09																	
	Ġ	Impact (acres)					0.00																	
	Juris	Animal Habitat					poor																	
S6W020	兴	Botanical			4		poor				ļ											<u> </u>		
3W(USACE	Hydrology					poor																	
Šć	ň	Red Flags					N																	
	Yes	Cowardin et al. Classification	PSS									PSS					PSS					PSS		
		Indiana Community Type	SC									SC					SC					SC		
	Jurisdiction:	Size (acres)	0.21									0.21					0.21					0.21		
	sdic	Impact (acres)	0.09									0.09					0.09					0.10		
	luris	Animal Habitat	poor									poor					poor					poor		
21		Botanical	fair									fair					fair					fair		
S6W021	USACE	Hydrology	fair									fair					fair					fair		
98	SN	Red Flags	N									N					N					N		
	Yes	Cowardin et al. Classification	PSS	PUB			PSS	PUB				PSS	PUB				PSS	PUB						
		Indiana Community Type	SC	SOW			SC	SOW				SC	SOW				SC	SOW						
	tion	Size (acres)	0.06	0.38			0.06	0.38				0.06	0.38				0.06	0.38						
	Jurisdiction:	Impact (acres)	0.06	0.38			0.06	0.38				0.06	0.38				0.06	0.38						
	uris	Animal Habitat	fair	poor			fair	poor				fair	poor				fair	poor						
55	ЕЈ	Botanical	poor	fair			poor	fair				poor	fair				poor	fair						
S6W025	USACE	Hydrology	fair	fair			fair	fair				fair	fair				fair	fair						
Se	SN	Red Flags	N	N			N	N				N	N				N	N						
	Yes	Cowardin et al. Classification																				PEM		
		Indiana Community Type																				SHM		
	sdiction:	Size (acres)																				1.97		
	dic	Impact (acres)																				0.01		
	Juris	Animal Habitat																				fair		
56	ЕЈ	Botanical																				fair		
S6W026	USACE	Hydrology																				fair		
S6'	sn	Red Flags																				N		
		Cowardin et al. Classification					PUB					PUB					PUB					PUB		
	: Yes	Indiana Community Type			1		pond					pond					pond					pond		
	Jurisdiction:	Size (acres)					1.21					1.21					1.21					1.21		
	dict	Impact (acres)					0.15					0.09					0.15					0.09		
	uris	Animal Habitat			İ		no rating					no rating					no rating					no rating		
27	j	Botanical			İ		no rating					no rating					no rating					no rating		
S6W027	USACE	Hydrology		İ	1		no rating					no rating					no rating					no rating		
S6\	US,	Red Flags		1			ا					J										Ĭ		
		Cowardin et al. Classification		İ																		PEM		
	: Yes	Indiana Community Type			1															1		SFB		
	ion:	Size (acres)		- 	1										1					1		0.04		
	dict	Impact (acres)		1	1										1					İ		0.00		
	Jurisdiction:	Animal Habitat		1	+																	poor		
<u>φ</u>	_ J.	Botanical		1	+																	poor		
S6W028	USACE	Hydrology		1																l		poor		
367	JS/	Red Flags			+	1									1					 		N		
(I)				1	1	I									<u> </u>	1					I	14		

Wetla	nd ID	DATA		Alternative (C1			Alternativ	ve C2			Alternative (C3		А	Iternative (C4		RPA		
	Yes	Cowardin et al. Classification									PEM										
		Indiana Community Type									WP										
	ction	Size (acres)									0.15									ļ	
	'n	Impact (acres)									0.15									·	
1 _ 1	Jur	Animal Habitat									poor										ļ
,037	CE	Botanical									poor										-
S6W034		Hydrology Red Flags							+		good N										
0)		Cowardin et al. Classification									PSS										
	Yes	Indiana Community Type									SC										
	ion:	Size (acres)									0.02										
	dicti	Impact (acres)									0.02										
	'	Animal Habitat									fair										
35	ЕJ	Botanical									poor										
S6W035		Hydrology									fair										
9S		Red Flags									N									<u> </u>	
	. •	Cowardin et al. Classification	PEM				PEM				PEM			PEM				PEM		·	1
	n: Y	Indiana Community Type	WM				WM				WM			WM				WM		·	
	75	Size (acres)	0.06				0.06				0.06			0.06				0.06		·	1
	isdi	Impact (acres)	0.06				0.05		+		0.01			0.05				0.05			
_	Jur	Animal Habitat	poor	_			poor				poor	+		poor	1			poor			1
26W037		Botanical Hydrology	poor fair				poor fair				poor fair			pooi faii	1			poor fair			
W98	JSA	Red Flags	N				N				N			N				N		! 	
0,		Cowardin et al. Classification	PEM								PEM										
	×	Indiana Community Type	SHM								SHM										1
	_	Size (acres)	0.61								0.61										
	dict	Impact (acres)	0.45								0.45										
	Jurisdi	Animal Habitat	fair								fair										
39	ЖĴ	Botanical	poor								poor										
S6W039		Hydrology	fair								fair									ļ	
Š		Red Flags	N							_	N										
	Yes	Cowardin et al. Classification	PEM			_	PEM				PEM	_		PEN				PEM			<u> </u>
		Indiana Community Type	0.04			_	WM 0.04				WM 0.04			0.04				WM 0.04			-
	\pm	Size (acres) Impact (acres)	0.04				0.04		+		0.04			0.04				0.04			<u> </u>
		Animal Habitat							+	_					ì						
으	_	Botanical	poor				poor				poor			pooi	1			poor			
W04	ACE	Hydrology	fair				fair				fair			fair				fair			
S6W040		Red Flags	N				N				N			N				N			
		Cowardin et al. Classification	PEM				PEM				PEM			PEN				PEM			
		Indiana Community Type	SM				SM				SM			SM				SM			
	tior	Size (acres)	0.14				0.14				0.14			0.14				0.14			
	sdic	Impact (acres)	0.14				0.14				0.14			0.14				0.14		ļ	
	=	Animal Habitat	poor				poor				poor			poor				poor		<u> </u>	
S6W041	Э	Botanical	poor		 		poor		+		poor	1		pooi	•			poor		·	_
%		Hydrology Red Flags	fair N				fair N		+		fair N			fair N	•			fair N		·	-
S		Cowardin et al. Classification	PEM			-	PEM		+		PEM	+		PEM				PEM	ĺ		+
	×	Indiana Community Type	WP			_	WP		+ +		WP	+		WP				WP		<u>'</u>	
	ion:	Size (acres)	0.10			-	0.10		+		0.10	+		0.10			+	0.10		'	†
	dicti	Impact (acres)	0.10		 	-	0.10		+ +		0.10	1		0.10				0.10			
		Animal Habitat	fair				fair		+ +		fair			fair				fair			
46	ЕJ	Botanical	poor				poor				poor			poor	1			poor			
S6W046	AC	Hydrology	fair				fair				fair			fai				 fair	 		
Se	S	Red Flags	N				N				N			N				N			

Wetla	ind ID			Alt	ernative (C1			Alt	ernative C	;2			Alt	ternative C	:3			Ali	ernative C	4			RPA		
	Yes	Cowardin et al. Classification	PEM					PEM					PEM					PEM				PEM				
		Indiana Community Type	WM				_	WM				_	WM	Į.				WM				WM				
	ctio	Size (acres)	0.03				_	0.03				_	0.03					0.03				0.03				
	Jurisdiction:	Impact (acres)	0.03				_	0.03					0.03					0.03				0.03				
	Jur	Animal Habitat	poor					poor					poor					poor				poor				
047	SE	Botanical	poor					poor					poor					poor				poor				
S6W047	USA	Hydrology	fair					fair					fair					fair				fair				
Ö		Red Flags	N					N				_	N					N				N				
	Yes	Cowardin et al. Classification	PEM	PFO	PUB		_	PEM	PFO		PEM	_	PEM	PFO	PUB	PEM		PEM	PFO	PUB	PEM	PEM	PFO	PUB		
		Indiana Community Type	SFB	SF	SOW		_	SFB	SF	SOW	SFB	_	SFB	SF		SFB		SFB	SF	SOW	SFB	SFB	SF	SOW	SFB	
	urisdiction:	Size (acres)	0.11	0.75	0.06		_	0.11	0.75	0.06	0.13	_	0.11	0.75	0.06	0.13		0.11	0.75	0.06	0.13	0.11	0.75	0.06	0.13	
	isdi	Impact (acres)	0.11	0.75	0.06		_	0.11	0.75	0.06	0.13	_	0.11	0.75	0.06	0.13		0.11	0.75	0.06	0.13	0.11	0.75	0.06	0.13	
	Ju	Animal Habitat	poor	fair	poor	poor		poor	fair	poor	poor		poor	fair	poor	poor		poor	fair	poor	poor	poor	fair	poor	poor	1
S6W048	111	Botanical	poor	poor	poor	poor		poor	poor	poor	poor		poor	poor	poor	poor		poor	poor	poor	poor	poor	poor	poor	poor	
M9	USACI	Hydrology	fair	fair	fair			fair N	fair N	fair N	poor		fair	fair N	fair	poor		fair N	fair	fair	poor N	fair	fair	fair	poor	-
S		Red Flags	11	N	N	IN	_		IN	IN	IN		IN	IN	N	IN		- ' '	IN	IN	IN	N	IN	N	N	
	Yes	Cowardin et al. Classification	PUB					PUB										PUB				PUB				
	 ::	Indiana Community Type	pond					pond										pond				pond				
	Jurisdiction	Size (acres)	0.48					0.48										0.48				0.48				
	isd	Impact (acres)	0.11				_	0.10										0.10				0.21				
	٦	Animal Habitat	no rating					no rating										no rating				no rating				
S6W050	S	Botanical	no rating					no rating									t	no rating				no rating				
M9	USA	Hydrology Red Flags	no rating				n	no rating										no rating				no rating				
S		, and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second	DUD				_	DUD										DUD				DUD				
	Yes	Cowardin et al. Classification	PUB					PUB										PUB				PUB				
		Indiana Community Type	pond					pond										pond				pond				
	iction:	Size (acres)	0.39					0.39										0.39				0.39				
	Jurisdi	Impact (acres)	0.06					0.08										0.08				0.12				
_	Ъ	Animal Habitat	no rating					no rating										no rating			-	no rating				
S6W051	USACE	Botanical	no rating					no rating									-	no rating			+	no rating				
W9:	ISA	Hydrology Red Flags	no rating				T I	no rating										no rating			+	no rating				
(C)		Cowardin et al. Classification	PUB					PUB										PUB				PUB				
	Yes	Indiana Community Type																								
	ü.	Size (acres)	pond 0.35					pond 0.35										pond 0.35				pond 0.35				
	risdictior	Impact (acres)	0.33					0.09										0.09				0.33				
		A : 111 126 6					n																			
7	_	Botanical	no rating					no rating										no rating				no rating				
/05	Š	Hydrology	no rating					no rating				-						no rating			+	no rating				
S6W052	USACE	Red Flags	no rating				- ''	io rating										no rating				no rating				
- 07	es (Cowardin et al. Classification	PFO					PFO				_	PFO					PFO				PFO				
	>	Indiana Community Type	FF					FF					FF					FF				FF				
	Jurisdiction:	Size (acres)	0.40					0.40					0.40					0.40				0.40				
	Zicti	Impact (acres)	0.04					0.04					0.00					0.04				0.02				
	ırisc	Animal Habitat	good					good					good					good				good				
က္	ું.:	Botanical	poor					poor					poor					poor				poor				
S6W053	USACE	Hydrology	fair					fair					fair					fair				fair				
36V	JS/	Red Flags	N					N					N					N				N				
3,		Cowardin et al. Classification	PFO					PFO				_	PFO					PFO				PFO				
	۶	Indiana Community Type	FF					FF					FF					FF				FF				
	ion:	Size (acres)	0.49					0.49					0.49					0.49		+		0.49				
	dicti	Impact (acres)	0.28					0.46					0.12					0.26		+		0.19				
	Jurisdiction:	Animal Habitat	good					good					good					good		+		good				
. 4	٦,	Botanical	poor					poor					poor					poor		+		poor				
S6W054	USACE	Hydrology	fair					fair					fair					fair				fair				
36V	JS/	Red Flags	N				 	N					N					N				N				1
(V)	ر	itou i lago	IN					IN					IN					IN				IN				<u> </u>

Wetla	ınd ID	DATA		Altern	ative C1		Al	ternative C2	!		Al	ternative (C3			Al	ternative C4				RPA		
	Yes	Cowardin et al. Classification	PFO			PFO									PFO				PFO				
		Indiana Community Type	FF			FF									FF				FF				
	ction	Size (acres)	0.21			0.21									0.21				0.21				
	Jurisdiction:	Impact (acres)	0.07			0.07									0.07				0.08				
	Juri	Animal Habitat	fair			fair									fair				fair				
S6W055	111	Botanical	fair			fair									fair				fair				
M9	USACE	Hydrology Red Flags	good N			good N									good N				good N				
S																							
	Yes	Cowardin et al. Classification Indiana Community Type	PFO SF			PFO SF			+					1	PFO SF				PFO SF				
		Size (acres)	0.16			0.16			+						0.16				0.16				
	Jurisdiction:	Impact (acres)	0.10			0.13									0.10				0.10				
	risc	Animal Habitat	fair			fair									fair				fair				
9	E Ju	Botanical	poor			poor			+						poor				poor				
V05	\CE	Hydrology	good			good									good				good				
S6W056	USACI	Red Flags	N			N				1					N				N				<u> </u>
	es I	Cowardin et al. Classification								PEM	PEM	PEM	PEM										
	>	Indiana Community Type								WP	WP		WP					1					
	Jurisdiction:	Size (acres)								0.19	0.22	0.71	0.24						1				
	dict	Impact (acres)								0.08	0.08	0.67	0.23										
	uris	Animal Habitat								poor	poor	fair	fair										
22	ЕЈ	Botanical								poor	poor	poor	poor										
S6W057	USACE	Hydrology								fair	fair	fair	fair										
S6	SN	Red Flags								N	N	N	N										
	Yes	Cowardin et al. Classification	PUB	PEM		PUB				PUB	PEM				PUB	PEM			PUB	PEM			
	γ: Τ	Indiana Community Type	SOW	SHM		SOW	SHM			SOW	SHM				SOW	SHM			SOW	SHM			
	iction:	Size (acres)	3.06	0.21		3.06	0.21			3.06	0.21				3.06	0.21			3.06	0.21			
	sdic	Impact (acres)	0.00	0.03		0.00	0.12			0.05	0.09				0.01	0.06			0.10	0.16			
	Jurisdi	Animal Habitat	poor	poor		poor	poor			poor	poor				poor	poor			poor	poor			
S6W058	SE.	Botanical	poor	poor		poor	poor			poor	poor				poor	poor			poor	poor			
)M9	USACE	Hydrology	fair N	fair		fair	fair			fair	fair				fair	fair			fair	fair			
Ś		Red Flags	IN	N		N	N			N	N			1	N	N			N	N			
	Yes	Cowardin et al. Classification Indiana Community Type				PEM	PFO			PEM WM	PFO FF			}	-				PEM	PFO			
	:uc	Size (acres)				WM 12.24	FF 0.34		+	12.24	0.34								WM 12.24	FF 0.34			
	risdiction:	Impact (acres)				5.14	0.34			3.17	0.34								0.00	0.01			
	risd	Animal Habitat					fair				fair			1						fair			
စ	٦	Botanical				poor	poor			poor	poor				+				poor	poor			
V05	\CE	Hydrology				fair	fair		+	fair	fair								fair	fair			
86W059	USACE	Red Flags				N	N			N	N			1	1				N	N			
	es I	Cowardin et al. Classification	PFO			PFO				PFO					PFO								
	>	Indiana Community Type	FF			FF				FF					FF							-	
	Jurisdiction:	Size (acres)	0.03			0.03				0.03					0.03								
	dici	Impact (acres)	0.03			0.03				0.03					0.03								
	uris	Animal Habitat	fair			fair				fair					fair								
62	Ή	Botanical	poor			poor				poor					poor								
S6W062	USACE	Hydrology	good			good				good					good								
Se	SN	Red Flags	N			N				N					N								
	Yes	Cowardin et al. Classification	PEM			PEM				PEM					PEM				PEM				ļ
		Indiana Community Type	WM			WM				WM					WM				WM				
	ctio	Size (acres)	0.05			0.05				0.05					0.05				0.05				ļ
	isdi	Impact (acres)	0.05			0.05				0.05					0.05				0.05				.
	5	Animal Habitat	poor			poor				poor					poor				poor				<u> </u>
S6W063	USACE	Botanical	poor			poor				poor					poor				poor				
M9	SA	Hydrology	fair			fair				fair					fair				fair				
Ś	\supset	Red Flags	N			N				N					N				N				

Wetla	and ID	DATA	Alternative	C1	А	Iternative C2	Alternative	: C3	A	Iternative C4		RPA	
	S	Cowardin et al. Classification			PFO				PFO		PFO		
	: Yes	Indiana Community Type			FF				FF		FF		
	Jurisdiction:	Size (acres)			0.02				0.02		0.02		
	dic	Impact (acres)			0.00				0.00		0.00		
	uris	Animal Habitat			good				good		good		
64	Ä	Botanical			poor				poor		poor		
S6W064	USACE	Hydrology			fair				fair		fair		
Se	SN	Red Flags			N				N		N		
	Yes	Cowardin et al. Classification			PFO				PFO		PFO		
		Indiana Community Type			FF				FF		FF		
	Jurisdiction:	Size (acres)			0.01				0.01		0.01		
	sdic	Impact (acres)			0.01				0.01		0.01		
	Juri	Animal Habitat			fair				fair		fair		
365	Ä	Botanical			poor				poor		poor		
S6W065	USACE	Hydrology			good				good		good		
Š		Red Flags	DEM		N		DEM	 	N		N		\longrightarrow
	Yes	Cowardin et al. Classification	PEM		PEM		PEM	 	PEM		PEM		$\overline{}$
		Indiana Community Type	WM		WM	 	WM		WM	 	WM		
	Jurisdiction:	Size (acres)	0.41		0.41		0.41		0.41	 	0.41		
	isd	Impact (acres) Animal Habitat	0.41		0.41		0.41		0.41		0.41		
(0	Jur		fair		fair		fair		fair		fair		
S6W066	USACE	Botanical	poor		poor	+ + + + + + + + + + + + + + + + + + + +	poor		poor	 	poor		
W99	ISA	Hydrology Red Flags	fair N		fair N	+ + + + + + + + + + + + + + + + + + + +	fair N		fair N	 	fair N		
0)		Cowardin et al. Classification	PFO		PFO		PFO		PFO	 	PFO		
	Yes	Indiana Community Type	FF		FF	 	FF		FF	 	FF		_
	iction:	Size (acres)	0.05		0.05		0.05		0.05		0.05		
	licti	Impact (acres)	0.05		0.05		0.04		0.05	 	0.05		-
	Jurisdi	Animal Habitat	good		good		good		good		good		
<u> </u>	n T	Botanical	poor		poor		poor		poor		poor		
S6W067	USACE	Hydrology	fair		fair		fair		fair	† † †	fair		
S6\	NS)	Red Flags	N		N		N		N		N		-
	Se	Cowardin et al. Classification	PFO		PFO		PFO		PFO		PFO		
	¥	Indiana Community Type	FF		FF		FF		FF		FF		
	tion	Size (acres)	0.35		0.35		0.35		0.35		0.35		
	risdictior	Impact (acres)	0.27		0.22		0.09		0.22		0.22		
	Juris	Animal Habitat	fair		fair		fair		fair		fair		
S6W068	Щ.	Botanical	poor		poor		poor		poor		poor		
WC SWC		Hydrology	good		good		good		good		good		
Se		Red Flags	N		N		N		N		N		
		Cowardin et al. Classification	PFO				PFO	<u> </u>					\longrightarrow
		Indiana Community Type	FF				FF						
	Jurisdiction:	Size (acres)	0.33				0.33						
	isdi	Impact (acres)	0.33				0.33	 			 	 	
~	Jur	Animal Habitat	fair				fair	+ + -				 	
390.	핑	Botanical	poor				poor	+				 	
86W069	USACE	Hydrology Red Flags	fair N		 		fair N	+				 	
S		Cowardin et al. Classification	PEM		PEM	+ + +	PEM	+ +	PEM	+ + +	PEM	+ +	_
		Indiana Community Type	WM		WM	+ + +	WM	+ + -	WM	 	WM	+ +	
		Size (acres)	0.10		0.10		0.10	+ +	0.10	 	0.10	 	
	licti	Impact (acres)	0.09		0.09	+ + + + + + + + + + + + + + + + + + + +	0.04	+ +	0.09	+ + + -	0.09	+ +	-
		Animal Habitat	fair	 	fair	+ + + - +	fair	+ + -	fair	 	fair	 	+
0	Jul.	Botanical	poor		poor		poor	+ + -	poor	 	poor		$\overline{}$
S6W070		Hydrology	fair		fair	 	fair	 	fair	 	fair	† †	+
36V	7SC	Red Flags	N		N		N	 	N	 	N		
97	_	· · · · · · · · · · · · · · · · · · ·	• •		• • • • •				* *		* *		

Wetland	ID I																		
\ \		DATA	Alternative	C1		Alternative	C2		Alt	ternative C	3			Alte	rnative C4			RPA	
>		Cowardin et al. Classification	PEM		PEM			PEM					PEM				PEM		
1 '	<u> </u>	Indiana Community Type	WM		WM			WM					WM				WM		
diction:		Size (acres)	0.11		0.11			0.11					0.11				0.11		<u> </u>
ایال		Impact (acres)	0.11		0.11			0.11					0.11				0.11		
Juris		Animal Habitat	fair		fair			fair					fair				fair		
S6W071	<u> </u>	Botanical	poor		poor			poor					poor				poor		
Sew		Hydrology	poor		poor			poor					poor				poor		+
	_	Red Flags	N		N			N					N				N		
Xes		Cowardin et al. Classification	PSS		PSS			PSS					PSS				PSS		
		Indiana Community Type	SC		SC			SC					SC				SC		
diction:		Size (acres)	0.03		0.03			0.03				_	0.03				0.03		
urisd	lsd L	Impact (acres)	0.03		0.03							_	0.03				0.03		+
	٠ ا	Animal Habitat	fair		fair			fair					fair				fair		+
S6W077	5 4	Botanical Hydrology	poor fair		poor fair			poor					poor fair				poor fair		+
S6W07	₹ <u> </u>	Red Flags	N		N			fair N	+	+			N				N		+
		Cowardin et al. Classification	PSS		PSS			PSS				_	PSS				1		+
Xes	≍ [_i	Indiana Community Type	SC	+ +	SC			SC					SC		-				+
ction:		Size (acres)	0.20		0.20			0.20					0.20						+
<u>:</u>		Impact (acres)	0.02		0.02			0.02					0.02						+
ان ي		Animal Habitat	fair		fair			fair					fair						
0 Juris	n	Botanical	poor		poor			poor					poor						
S6W080 USACE	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	Hydrology	fair		fair			fair					fair						
795 751		Red Flags	N		N			N					N						
		Cowardin et al. Classification	PEM		PEM			PEM					PEM				PEM		†
Yes	≍ լ	Indiana Community Type	WM		WM			WM					WM				WM		†
iction:		Size (acres)	0.02		0.02			0.02					0.02				0.02		1
; ;		Impact (acres)	0.02		0.02			0.02					0.02				0.02		
Juris		Animal Habitat	poor		poor			poor					poor				poor		
82 F. J.	11 H	Botanical	poor		poor			poor					poor				poor		1
S6W082 USACE	\{\bar{2}	Hydrology	fair		fair			fair					fair				fair		1
S6'	S	Red Flags	N		N			N					N				N		
S	es G	Cowardin et al. Classification															PUB		
\>	<u> </u>	Indiana Community Type															pond		
iệ	101	Size (acres)															1.18		
risdiction		Impact (acres)															0.00		
_	≓ Ľ	Animal Habitat															no rating		
S6W083 USACE J	بِ إِ	Botanical															no rating		
S6W083 USACE	¥ [Hydrology															no rating		
S S		Red Flags																	<u> </u>
S	_	Cowardin et al. Classification	PEM		PEM			PEM					PEM						
<u>د</u> د		Indiana Community Type	WM		WM			WM					WM						
Jurisdiction:		Size (acres)	0.05		0.05			0.05				_	0.05						
ة. ن <u>م</u>		Impact (acres)	0.00		0.00			0.00	-	-			0.00						
ا ا		Animal Habitat	poor		poor			poor					poor						
S6W085 USACE J	<u>" </u>	Botanical	poor	+	poor			poor					poor						+
79 A	ξ I	Hydrology Red Flags	poor N	+ +	poor N		 	poor N	+	-			poor N	+	+	+			+
		Cowardin et al. Classification	PUB	+ +	IN IN			17					IN						\vdash
Xes	_	Indiana Community Type	SOW	+ +			 		-	+			+	+	+				+
		Size (acres)	0.09	+ +								+			+				+
Ξ̈́		Impact (acres)	0.00	+ + +									+		- 				+
Jurisdiction:		Animal Habitat	poor	+ + +				 				$\overline{}$	+						
Σ: Iυ	۲. <u>۲</u>	Botanical	fair	+ +											- 				
S6W087 USACE	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	Hydrology	poor	1 1											+	+			<u> </u>
\9S		Red Flags	N	 															†

Wetla	nd ID	DATA		Alt	ternative (C1		Alt	ernative (C2			Alt	ternative (C3			Al	ternative (C4			RPA	
	Yes	Cowardin et al. Classification					PUB										PUB				PUB			
		Indiana Community Type					pond										pond				pond			
	Jurisdiction:	Size (acres)					0.13										0.13				0.13			
	sdic	Impact (acres)					0.02										0.02				0.02			
	J Si N	Animal Habitat					no rating									no	rating				no rating			
SeW088	111	Botanical					no rating									no	rating				no rating			
) W	USACE	Hydrology					no rating									no	rating				no rating			
Š		Red Flags																						
	Yes	Cowardin et al. Classification	PEM	PSS	PUB		PEM	PSS				PEM	PSS	PUB			PEM	PSS	PUB		PEM	PSS	PUB	
		Indiana Community Type	WM	SC	SOW		WM	SC	SOW			WM	SC	SOW			WM	SC	SOW		WM	SC	SOW	
	Jurisdiction:	Size (acres)	0.17	0.07	0.60		0.17	0.07	0.60			0.17	0.07	0.60			0.17	0.07	0.60		0.17	0.07	0.60	
	isdi	Impact (acres)	0.00	0.00	0.22		0.00	0.00	0.01			0.00	0.00	0.01			0.00	0.00	0.22		0.00	0.00	0.58	
	Jin	Animal Habitat	fair	fair	poor		fair	fair	poor			fair	fair	poor			fair	fair	poor		fair	fair	poor	
S6W089	S	Botanical	poor	poor	poor		poor	poor	poor			poor	poor	poor			poor	poor	poor		poor	poor	poor	
M9.	USACI	Hydrology Red Flags	fair	fair N	fair N		fair N	fair N	fair N			fair N	fair N	fair N			fair N	fair	fair N		fair N	fair	fair N	
S		Cowardin et al. Classification	IN	IN	IN		PUB	IN	IN			PUB	IN	IN			IN	IN	IN			IN	IN	
	Yes	Indiana Community Type					pond			+		pond									PUB pond	-		
	.: O	Size (acres)					0.74				_	0.74									0.74			
	Jurisdiction:	Impact (acres)					0.74					0.03									0.00			
	riso	Animal Habitat					no rating				_	no rating									no rating			
0	<u>ا</u>	Botanical					no rating					no rating									no rating			
060W9S	USACE	Hydrology					no rating					no rating									no rating			
36V	JS/	Red Flags					no raing					no rating									no rating			
9,		Cowardin et al. Classification					PEM										PEM							Ì
	Yes	Indiana Community Type					SFB										SFB							
	iction:	Size (acres)					0.02										0.02							
	dict	Impact (acres)					0.02										0.02							
	Jurisdi	Animal Habitat					fair										fair							
91	Э	Botanical					poor										poor							
S6W091	USACE	Hydrology					poor										poor							
98	SN	Red Flags					N										N							
	es	Cowardin et al. Classification					PEM					PEM												
	;- >-	Indiana Community Type					WM					WM												
	isdiction:	Size (acres)					0.04				_	0.04												
	sdic	Impact (acres)					0.04				_	0.04												
	Juri	Animal Habitat					fair					fair												
S6W094	S	Botanical					poor					poor												
W9	USACE	Hydrology Red Flags					fair N					fair N												1
S		Cowardin et al. Classification					PUB					IN												
	Yes	Indiana Community Type					pond																	
		Size (acres)					10.91																	
	Jurisdiction:	Impact (acres)					0.05			+							-					-		
	ırisc	Animal Habitat					no rating			+		+												
5	n L	Botanical					no rating				-													<u> </u>
400	^CE	Hydrology					no rating										 							†
S6W095	USACE	Red Flags					- · - · · · · · · · · · · · ·																	1
		Cowardin et al. Classification	PUB				PUB				_	PUB					PUB				PUB			
	: Yes	Indiana Community Type	pond				pond					pond					pond				pond			
	tion	Size (acres)	2.05				2.05					2.05					2.05				2.05			
	dia	Impact (acres)	0.37				0.34					0.48					0.83				0.89			
	Jurisdiction:	Animal Habitat	no rating				no rating					no rating				no	rating				no rating			
26	Ή	Botanical	no rating				no rating					no rating				no	rating				no rating			
260W9S	USACE	Hydrology	no rating				no rating					no rating				no	rating				no rating			
S6	S	Red Flags																						

Wetla	and ID	DATA		Alte	rnative C	1			Alt	ternative (C2		Al	ternative (C3		A	ternative (C4		RPA		
	Yes	Cowardin et al. Classification						PUB															
		Indiana Community Type						pond														<u> </u>	
	tior	Size (acres)						3.12														<u> </u>	
	òdic	Impact (acres)						3.12														<u> </u>	
	Jurisdiction:	Animal Habitat						no rating														<u> </u>	
66	Щ	Botanical						no rating														<u> </u>	
SeW099	USACE	Hydrology						no rating														<u> </u>	
Se	SN	Red Flags																					
	Yes	Cowardin et al. Classification	PUB																				
		Indiana Community Type	pond																				
	Jurisdiction:	Size (acres)	5.28																			<u> </u>	
	sdic	Impact (acres)	2.78																				
	Juris	Animal Habitat	no rating																				
00	щ	Botanical	no rating																				
S6W100	USACE	Hydrology	no rating																			<u> </u>	
Se	ñ	Red Flags																					
	,es	Cowardin et al. Classification						PUB								PUB				PUB			ļ
	.: 	Indiana Community Type						pond								pond				pond			
	Jurisdiction:	Size (acres)						1.82								1.82				1.82			ļ
	sdic	Impact (acres)						1.82								0.00				0.00			
	Juri	Animal Habitat						no rating								no rating				no rating			
S6W101	ж	Botanical						no rating								no rating				no rating			
) N	USACE	Hydrology						no rating								no rating				no rating			
Se		Red Flags																					
	Yes	Cowardin et al. Classification	PEM					PEM				PEM				PEM				PEM			
): 	Indiana Community Type	WM					WM				WM				WM				WM			
	iction:	Size (acres)	0.04					0.04				0.04				0.04				0.04			
	sdie	Impact (acres)	0.04					0.04				0.04				0.04				0.04			
	Jurisdi	Animal Habitat	poor					poor				poor				poor				poor			
S6W103	Ŕ	Botanical	poor					poor				poor				poor				poor			
Me	USACE	Hydrology	fair					fair				fair				fair				fair			
Š	Ď	Red Flags	N					N				N				N				N			
	Yes	Cowardin et al. Classification						PUB				PUB				PUB							
		Indiana Community Type	.					pond				pond				pond							
	risdiction:	Size (acres)						14.97				14.97				14.97							
	isdi	Impact (acres)						1.13				1.13				1.13							
	П	Animal Habitat			-			no rating				no rating				no rating							
104	CE	Botanical			+			no rating				no rating				no rating							<u> </u>
S6W104	USACE	Hydrology						no rating				no rating				no rating							
S		Red Flags	1 411				-	1.417				1.417				1.411				1.411			
	Yes	Cowardin et al. Classification Indiana Community Type	L1U	-				L1U				L1U				L1U				L1U			
			pond 46.82		-			pond 46.82				pond 46.82				pond 46.82				pond 46.82			
	ictic	Size (acres)			-			46.82 8.68				46.82 8.68											
	Jurisdiction:	Impact (acres)	37.91		-											8.68				0.16			
ıC	Jul	Animal Habitat Botanical	no rating	+	+			no rating				no rating				no rating				no rating			
S6W105	USACE	Hydrology	no rating no rating		+			no rating no rating				no rating no rating				no rating no rating				no rating no rating			1
W9;	ISA	Red Flags	no rating		+			no raung				no raung				no raung				no rating			1
S		Cowardin et al. Classification		-				L1UB				L1UB				L1UB							1
	Yes	Indiana Community Type		+	+	-																	
		Size (acres)		+	+			pond 19.78				pond 19.78				pond 19.78							
	Jurisdiction:	Impact (acres)		+				0.67				0.67				0.67							1
	risd	Animal Habitat		+				no rating				no rating				no rating							1
ω	Ju	Botanical						no rating				no rating				no rating							
S6W108	USACE	Hydrology						no rating				no rating				 no rating							
,6W	JSA	Red Flags						no rating				no raung				no raung							
S	ر	ineu i iago																					

Wetlan	d ID	DATA	Al	Iternative C1		Alternative C2		Alt	ternative (C3			Alternative (C4			RPA		
		Cowardin et al. Classification	PUB		PUB		PUB					PUB							
	Yes			 				-										\longrightarrow	
		Indiana Community Type	pond		pond 23.00		pond 23.00					23.00							—
	Jurisdiction:	Size (acres)	23.00																
	isdi	Impact (acres)	0.20	 	1.64		1.64	-				1.64							
		Animal Habitat	no rating		no rating		no rating					no rating							
S6W109	USACE	Botanical	no rating		no rating		no rating					no rating							
Š	SA(Hydrology	no rating		no rating		no rating					no rating							
Š	Š	Red Flags																	
	Yes	Cowardin et al. Classification	PUB		PUB		PUB					PUB							
		Indiana Community Type	pond		pond		pond					pond							1
	Jurisdiction:	Size (acres)	15.02		15.02		15.02					15.02							1
	ğ	Impact (acres)	4.22		3.51		3.51					3.51							İ
	.E	Animal Habitat	no rating		no rating		no rating					no rating							1
10	Ш	Botanical	no rating		no rating		no rating					no rating							ĺ
8	USACE	Hydrology	no rating		no rating		no rating					no rating							ĺ
S6W110	NS	Red Flags																	
	Yes	Cowardin et al. Classification	PUB		PUB		PUB					PUB				PUB			
		Indiana Community Type	pond		pond		pond					pond				pond			Ī
	Jurisdiction:	Size (acres)	0.55		0.55		0.55					0.55				0.55		\longrightarrow	Ī
	dict	Impact (acres)	0.27		0.10		0.10					0.10				0.10			Ī
	ıris	Animal Habitat	no rating		no rating		no rating					no rating				no rating			
←		Botanical	no rating		no rating		no rating					no rating				no rating			
S6W11	USACE	Hydrology	no rating		no rating		no rating					no rating				no rating			
V96	S√	Red Flags	norating		no rating		no rating					no rating				no rating		\longrightarrow	
0)		Cowardin et al. Classification	PSS		PSS		PSS					PSS				PSS		-	
	õ	Indiana Community Type	SC	 	SC		SC					SC				SC		$\overline{}$	
			0.39	 	0.39	- 	0.39					0.39				0.39			
	Jurisdiction:	Size (acres)	0.39	 		- 	0.39												
	isq	Impact (acres)			0.05							0.05				0.05			
_	٦	Animal Habitat	poor		poor		poor					poor				poor			
S6W113	USACE	Botanical	poor	 	poor		poor	-				poor				poor			
M9	SA	Hydrology	fair		fair		fair					fair				fair			
Ö	Ď	Red Flags	N		N		N					N				N			-
	,es	Cowardin et al. Classification	PEM		PEM		PEM					PEM				PEM			
	<u>`</u>	Indiana Community Type	WM		WM		WM					WM				WM			
	isdiction	Size (acres)	0.04		0.04		0.04					0.04				0.04			
	sdic	Impact (acres)	0.04		0.04		0.04					0.04				0.04			1
	Juris	Animal Habitat	poor		poor		poor					poor				poor			
16	щ	Botanical	poor		poor		poor					poor				poor			1
S6W116	USACE	Hydrology	poor		poor		poor					poor				poor			
Se	ĭ	Red Flags	N		N		N					N				N			
	Yes	Cowardin et al. Classification	PUB		PUB							PUB							
		Indiana Community Type	pond		pond							pond							
	Jurisdiction:	Size (acres)	0.23		0.23							0.23							
	dic	Impact (acres)	0.10		0.10							0.12							i -
	uris	Animal Habitat	no rating		no rating							no rating							ĺ
17	Э	Botanical	no rating		no rating							no rating							i
S6W117	USACE	Hydrology	no rating		no rating							no rating							i
S6/	US	Red Flags										1							ĺ
		Cowardin et al. Classification	PUB		PUB		PUB					PUB				PUB		o	
	Yes	Indiana Community Type	pond		pond		pond					pond				pond		\rightarrow	ĺ
	ion:	Size (acres)	0.10		0.10		0.10					0.10				0.10		\rightarrow	
	dict	Impact (acres)	0.10		0.10		0.10					0.10				0.10		\longrightarrow	
	Jurisdiction:	Animal Habitat	no rating		no rating	- 	no rating					no rating				no rating		\longrightarrow	
ω	٦C ::	Botanical	no rating		no rating	- 	no rating					no rating				no rating		\longrightarrow	ſ
S6W118	USACE.	Hydrology	no rating		no rating		no rating					no rating				no rating		\longrightarrow	
V9;	JSA	Red Flags	no raulty		no raung	 	no rating				-	no raung				110 Talling		\longrightarrow	
(I)	_	1 tou i lugo												<u>I</u>	<u> </u>				<u> </u>

Wetla	and ID	DATA		Alternat	ive C1			Alte	ernative C2			Alt	ternative C	23		Al	ternative	C4			RPA	
	Yes	Cowardin et al. Classification	PUB				PUB				PUB				PUB					PUB		<u> </u>
	Υ.	Indiana Community Type	pond				pond				pond				pond					pond		<u> </u>
	diction:	Size (acres)	0.08				0.08				0.08				0.08					0.08		
	dic	Impact (acres)	0.08				0.03				0.03				0.03					0.00		
	Juris	Animal Habitat	no rating				no rating				no rating				no rating					no rating		<u> </u>
19	Ä	Botanical	no rating				no rating				no rating				no rating					no rating		<u> </u>
S6W119	USACE	Hydrology	no rating				no rating				no rating				no rating					no rating		i .
Se	sn	Red Flags																				
	Yes	Cowardin et al. Classification	PUB				PUB				PUB				PUB					PUB		ĺ
	Σ	Indiana Community Type	pond				pond				pond				pond					pond		i
	ction:	Size (acres)	1.64				1.64				1.64				1.64					1.64		ī —
		Impact (acres)	0.26				0.26				0.26				0.26					0.26		i Total
	Juris	Animal Habitat	no rating				no rating				no rating				no rating					no rating		
20	Б	Botanical	no rating				no rating				no rating				no rating					no rating		·
S6W120	USACE	Hydrology	no rating				no rating				no rating				no rating				1	no rating		
S6/	NS	Red Flags																				
	es	Cowardin et al. Classification									PUB											
	γ.	Indiana Community Type									pond											
	ion	Size (acres)									0.16											i
	Jurisdictic	Impact (acres)									0.03											ī
	ıris	Animal Habitat									no rating											ī
က္လ	<u>ا</u> ا	Botanical									no rating											
V12	₹CE	Hydrology									no rating											ī —
S6W123	USACE	Red Flags																				ī —
- 0,		Cowardin et al. Classification													PEM					PEM		i i
	8	Indiana Community Type													SFB					SFB		ī
	on:	Size (acres)													0.12					0.12		
	isdiction:	Impact (acres)													0.01					0.01		
		Animal Habitat													poor					poor		
9	Jur	Botanical													poor					poor		
S6W126	USACE	Hydrology													fair					fair		
96V	/Sſ	Red Flags													N					N		
0,) se	Cowardin et al. Classification					PSS	 			PSS				PSS					PSS		
	>	Indiana Community Type					SC				SC				SC					SC		i
	on:	Size (acres)					0.21				0.21				0.21					0.21		i
	isdiction:	Impact (acres)					0.21				0.21				0.21					0.21		i
		Animal Habitat		<u> </u>			poor			1	poor				poor			<u> </u>		poor		i
۲,	$\bar{}$	Botanical					poor				poor				poor			 		poor		ĺ
۷12	CE	Hydrology	1			+	fair			1	fair				fair			 	 	fair	-	1
S6W127		Red Flags	1			+	N			1	N				N			 	 	N	-	1
(,		Cowardin et al. Classification					PEM			1	PEM				PEM					PEM		[
	×	Indiana Community Type					WM				WM				WM					WM		ſ
		Size (acres)					0.18				0.18				0.18					0.18		ſ
	licti	Impact (acres)					0.18				0.18				0.18					0.18		ſ
		Animal Habitat	 							+								 				ſ
æ	Ju						poor			1	poor				poor			 		poor		
/128	S	Botanical Hydrology					poor fair				poor fair				poor fair			 		poor fair		(
S6W128		Red Flags				1	fair N		-		tair N			-	tair N			 	1	tair N		ſ
(J)	ر	1.00 1 1090				I	IN				1 1				IN			I	I .	IN		

Wetland Matrix for I-69 Alternatives: Section 6 Right-of-Way Limits

Gray shaded cells indicate wetland polygons that are entirely or partially within the construction limits of the respective alternative

Wetland ID DATA	Alternative C1	Alternative C2	Alternative C3	Alternative C4	RPA

Indiana Community Type Abbreviations

B = bog

DM = deep marsh

F = fen

FF = floodplain forest SMF - sand/muck flat

SFB = seasonally flooded basin SM = sedge meadow

SHM = shallow marsh SOW = shallow open water

SC = scrub-carr SW = swamp forest

WM = wet meadow

WP = wet prairie

Cowardin et al. Classifications

PEM = palustrine emergent

PSS = palustrine scrub/shrub

PFO = palustrine forest

PAB = palustrine aquatic bed

Red Flag Indicators (for specific information regarding the nature of a red flag indicator designated by "Y", consult the InWRAP data sheets)

Y = yes

N = no

Note: USACE jurisdictional status is based on professional opinion only. Official corresdpondace on jurisdictional verification will be completed during permitting.

Gray shaded cells indicate wetland polygons that are entirely or partially within the construction limits of the respective alternative

I-69 EVANSVILLE TO INDIANAPOLIS TIER 2 STUDIES

Section 6—Final Environmental Impact Statement

APPENDIX E

USACE Wetland Delineation Data Forms

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: I-69 Section 6 Wetland S6W001A		City/County	/: Morgan		Sampling Date:	10/21/2015	
pplicant/Owner: INDOT/Lochumueller				State: Indiana	State: Indiana Sampling Point IC25A-1D1		
Investigator(s): Rusty Yeager, Kate Lucier Section, Township, Range: Sec 18-T11N-R1E							
Landform (hillslope, terrace, etc.): oxbow hillslope top Local relief (concave, convex, none): concave							
Slope (%): 6-12							
Soil Map Unit Name Genesee silt loam NWI classificat							
· -	ma of voor	2 Vaa	V No				
Are climatic/hydrologic conditions on the site typical for this tin		_					
Are Vegetation, Soil or Hydrologysignifi				Normal Circumstances" p		No:	
Are Vegetation, Soil or Hydrology natur	ally proble	matic?	If nee	ded, explain answers in F	Remarks.)		
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes X No							
Hydric Soils Present? Yes No	Х		he Sample				
Wetland Hydrology Present? Yes No	Х	with	hin a Wetla	nd? Yes	NoX	_	
Remarks Although predominant hydrophytic vegetation is p	resent, thi	s data poin	t lacks posit	tive hydrology and hydric	soil indicators.		
	,	·	·	, 0, ,			
VEGETATION - Use scientific names of plants							
(Plat O'res 00) and the		Dominant		Dominance Test work	sheet:		
Tree Stratum (Plot Size: 30' radius)		Species?	Status	Number of Dominant S	pecies		
1. Acer negundo 2. Juglans nigra	10	Yes Yes	FACU	That Are OBL, FACW,	or FAC: 3	(A)	
3. Acer saccharinum	10	Yes	FACW	Total Number of Domin		(D)	
A Tool Goodeniaman			17.00	Species Across All Stra	-	(B)	
5.				Percent of Dominant Sp That are OBL, FACW, of		(A/B)	
J	50 = Total Cover			111at aro 052, 17tovi, t		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Sapling/Shrub Stratum (Plot Size: 15' radius)		_ 10tal 00t	, 0.	Prevalence Index wor	ksheet:		
1.				Total % Cover of:	Multiply	y by:	
2.				OBL species	0 x 1 =	0	
3.				· —	30 x 2 =	60	
4.				· —		240	
5						140	
	0	= Total Cov	/er	UPL species Column Totals: 14	0 x 5 = 45 (A)	0 440 (B)	
Herb Stratum (Plot Size: 5' radius)						110 (D)	
Symphyotrichum lanceolatum	30	Yes	FAC	Prevalence Inde	x = B/A =3	3.03	
2. Sanicula canadensis	25	Yes	FACU	Hydrophytic Vegetation	n Indicators:		
3. Rudbeckia laciniata	10		FACW	1-Rapid Test for Hy		on:	
4. Ambrosia trifida	10		FAC	X 2-Dominance Test is		•	
5. Pilea pumila	5 		FACW FAC	3-Prevalence Index			
6. Viola sororia 7. Laportea canadensis	5		FACW	4-Morphological Ada	aptations (Provide	e supporting	
8. Smilax hispida	5		FAC	data in Remarks or Problematic Hydrop	•	•	
· · ·				_ `		` ' '	
9. 10.				¹ Indicators of hydric soi be present, unless distortion			
	95	= Total Cov	/er	be present, unless dist			
Vine Stratum (Plot Size: 30' radius)							
1				Hydrophytic Vegetation			
2.				Present?	es X No		
	0	= Total Cov	/er		·		
Remarks: (Include photo numbers here or on a separate sh	eet.)						
(,						

US Army Corp of Engineers Midwest Region - Version 2.0

SOIL Sampling Point IC25A-1D1

Profile Desc	ription: (Describe to	the depth n	eeded to documne	t the indi	cator or co	nfirm the	e absence of indica	ators.)
Depth	Matrix			ox Featu				
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10YR3/2	100					silty clay loam	
5-20	10YR4/3	100					silty clay loam	
		·			·			
		·						
¹ Type: C=C	Concentration, D= De	epletion, RM:	=Reduced Matrix, (CS=Cove	ered or Coa	ated San	nd Grains. ² Loc	cation: PL=Pore Lining, M=Matrix
Hydric Soi	I Indiactors:						Indiact	ors for Problematic Hydric Soils ³
Histoso	(A1)		Sandy	Gleved	Matrix (S4))	Coas	st Prairie Redox (A16)
	pipedon (A2)			Redox (Surface (S7)
Black H	istic (A3)		Strippe	ed Matrix	(S6)			-Manganese Masses (F12)
_	en Sulfide (A4)			-	Mineral (F1			Shallow Dark Surface (TF12)
_	d Layers (A5)			-	Matrix (F2))	Othe	er Soil (Explain in Remarks)
	uck (A10)	ο (Λ44)		ted Matri				
	d Below Dark Surfac ark Surface (A12)	e (A11)	_		urface (F6) Surface (F	7)	3 Indic	ators of hydrophytic vegetation and
_	Mucky Mineral (S1)				sions (F8)	7)		nd hydrology must be present, unless
	uck Peat or Peat (S3	3)		СВоргоо	310113 (1 0)			disturbed or problematic.
	Layer (If observed)							
Type:	.,							
Depth (ir	nches):		<u> </u>				Hydric Soil	I present? Yes No _X
Remarks:								
Redoximorp	hic indicators were r	not noted.						
HYDROLO	GY							
Wetland H	ydrology Indicators	s:						
Primary Inc	licators (minimum of	one is requi	red; check all that	apply)			Secon	dary Indicators (minimum of two required)
Surface	Water (A1)		Water Sta	ained Lea	aves (B9)		Sur	face Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic F	auna (B1	13)		Dra	inage Patterns (B10)
Saturati			True Aqua	atic Plan	ts (B14)		Dry	-Season Water Table (C2)
_	larks (B1)				Odor (C1)			yfish Burrows (C8)
	nt Deposits (B2)				neres on Li	_		ruration Visibile on Aerial Imagery (C9)
	posits (B3)				ced Iron (C			nted or Stressed Plants (D1)
_	at or Crust (B4) posits (B5)		Thin Mucl		ction in Tille	ea Soiis	• /	omorphic Postion (D2) C-Neutral Test (D5)
	ion Visible on Aerial	Imagery (B7						C-Neutral Test (D3)
_	y Vegetated Concav							
Field Obse		`	<u> </u>	<u>'</u>				
Surface Wa	ater Present? Y	es I	No X Depth ((inches):				
Water Tabl				(inches):				
Saturation				(inches):		<u> </u>	Wetland Hydrolog	gy Present? Yes No X
	apillary fringe)							<u> </u>
Describe Re	ecorded Data (stream	n gauge, mo	nitoring well, aerial	photos,	previous in	spection	ns), if available:	
Remarks:								
								conditions for the higher portions of this
rioodpiain re	gion represented by	tnis data po	inτ. Data point is 5	+ reet at	pove the bo	ottom of	ine adjacent oxbo	w wetland teature

Project/Site: I-69 Section 6 Wetland S6W001A	City/County: Morgan Sampling Date: 10/21/2015
Applicant/Owner: INDOT/Lochumueller	State: Indiana Sampling Point IC25A-1W1
Investigator(s): Rusty Yeager, Kate Lucier	Section, Township, Range: Sec 18-T11N-R1E
Landform (hillslope, terrace, etc.): floodplain oxbow	Local relief (concave, convex, none): concave
Slope (%): 0-2 Lat: 39.394294	Long: -86.459924 Datum: NAD83
Soil Map Unit Name Genesee silt loam	NWI classification: PFO1A
Are climatic/hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil or Hydrologysignificantly	
Are Vegetation, Soil or Hydrology naturally pro	
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soils Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	
Remarks Tthis data point represents the majority of this oxbow feat indicators of hydrology and hydric soils.	ture which generally lacks shrub and herbaceous vegetation, but exhibits primary
VEGETATION - Use scientific names of plants	
	te Dominant Indicator Dominance Test worksheet:
Tree Stratum (Plot Size: 30' radius) % Cov 50	er Species? Status Yes FACW Number of Dominant Species That Ass ORL FACW or FAC:
2 Acer negundo 25	Yes FAC That Are OBL, FACW, or FAC: 3 (A)
3. Platanus occidentalis 25	Yes FACW Total Number of Dominant Species Across All Strata: 3 (B)
4 Ulmus americana 10	No FACW Opecies Across All otilata.
5.	Percent of Dominant Species That are OBL, FACW, or FAC: 100 (A/B)
110	= Total Cover
Sapling/Shrub Stratum (Plot Size: 15' radius)	Prevalence Index worksheet:
1	Total % Cover of: Multiply by:
2.	OBL species0 x 1 =0
3	FACW species 85 x 2 = 170
4	FAC species 25 x 3 = 75
5	FACU species 0 x 4 = 0 UPL species 0 x 5 = 0
0	= Total Cover Column Totals: 110 (A) 245 (B)
Herb Stratum (Plot Size: 5' radius)	``
1	Prevalence Index = B/A = 2.23
2	Hydrophytic Vegetation Indicators:
3	1-Rapid Test for Hydrophytic Vegetation:
4	X 2-Dominance Test is >50%
	A 3-Prevalence Index is <=3
6	T TINOIDIIOIQUICAI AGADIALIOTIS II TOVIGE SUDDOILIIG
8.	
9.	-
10.	
	_ = Total Cover
Vine Stratum (Plot Size: 30' radius)	Hydrophytic
1	
2	Present? Yes X No
	_ = Total Cover
Remarks: (Include photo numbers here or on a separate sheet.) Trees were located around the periphery of this oxbow feature. The herbaceous vegetation due to extended period of deep inundation.	e central portion of the wetland represented by the data point is devoid of

SOIL Sampling Point IC25A-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0-20	10YR4/2	90	5YR4/6	10	С	М	silty clay lo	am	
	-								
	-								
· ·	Concentration, D= De	pletion, R	M=Reduced Matrix,	CS=Cove	red or Coa	ated Sand			=Pore Lining, M=Matrix oblematic Hydric Soils 3
Histoso			Sandy	Gleyed N	Matrix (S4))		Coast Prairie R	
Histic E	pipedon (A2)		Sandy	Redox (S	35)		_	Dark Surface (S7)
-	listic (A3)			ed Matrix					se Masses (F12)
	en Sulfide (A4)				/lineral (F1	•			Dark Surface (TF12)
-	d Layers (A5)				Matrix (F2))	_	Otner Soil (Exp	plain in Remarks)
•	uck (A10) ed Below Dark Surfac	e (A11)		ted Matrix					
-	ark Surface (A12)	C (ATT)			Surface (F	7)	3	Indicators of hy	drophytic vegetation and
•	Mucky Mineral (S1)			C Depress		,	W		y must be present, unless
-	uck Peat or Peat (S3)	_		` ,			disturbe	ed or problematic.
strictive	Layer (If observed)	:							
Type:	achae).						Hydric	Soil present?	Ves Y No
Depth (in	nches):	rmed base	ed on the presence o	of reddish	redoximor	phic feat	-	Soil present? out the soil ped	Yes X No _
Depth (in	matrix (F3) was confi	rmed base	ed on the presence o	f reddish	redoximor	phic feat	-	-	
Depth (in marks: depleted in DROLO	matrix (F3) was confi		ed on the presence o	of reddish	redoximor	phic feat	-	-	
Depth (in marks: lepleted in DROLO etland H	matrix (F3) was confi	.:			redoximor	phic feat	ures through	out the soil ped	don.
Depth (in marks: lepleted in DROLO etland Himary Incident)	matrix (F3) was confi GY ydrology Indicators	.:	uired; check all that			phic feat	ures through	out the soil ped	on. ators (minimum of two requ
Depth (in marks: lepleted in DROLO etland Himary Inc. Surface High W	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)	.:	uired; check all that	apply)	ves (B9)	phic feat	ures through	out the soil ped	ators (minimum of two requ
Depth (in marks: lepleted in DROLO etland Himary Inc Surface High W Saturati	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3)	.:	uired; check all that Water Sta Aquatic F True Aqu	apply) ained Leav auna (B13 atic Plants	ves (B9) 3) s (B14)	phic feat	ures through	econdary Indica Surface Soil C Drainage Patt Dry-Season W	ators (minimum of two requicacks (B6) erns (B10) Vater Table (C2)
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DROLO etland H imary Inc Surface High W Saturati Water M Sedime	matrix (F3) was confi GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2)	.:	uired; check all that Water Sta Aquatic F True Aqu Hydroger Oxidized	apply) ained Leav auna (B1: atic Plants a Sulfide C Rhizosph	ves (B9) 3) s (B14) Odor (C1) eres on Li	ving Roo	ures through	econdary Indica Surface Soil C Drainage Patt Dry-Season W Crayfish Burro Saturation Vis	ators (minimum of two requestracks (B6) erns (B10) //ater Table (C2) ows (C8) ibile on Aerial Imagery (C9
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Project/Site: I-69 Section 6 Wetland S6W002A		City/County	y: Morgan		Sampling Date: 10/16/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point IC02A-1W1
Investigator(s): Danika Fleck, Matt Brendel		Section, To	wnship, Ra	nge: Sec 8-T11N-R1E	
Landform (hillslope, terrace, etc.): shallow depression in	valley plain		Local reli	ef (concave, convex, noi	ne): concave
Slope (%): 0 Lat: 39.398577	L	ong: -86.4	- 152499		Datum: NAD83
Soil Map Unit Name Genesee silt loam		<u> </u>		NWI classif	fication: upland
Are climatic/hydrologic conditions on the site typical for th	is time of year	? Yes	X No		
Are Vegetation , Soil or Hydrology sig		_			present? Yes X No:
Are Vegetation, Soil or Hydrologyn				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show	ving sampli	ng point	locations,	transects, importan	t features, etc.
	No	la 4	ha Camania	1 A	
	No		he Sampled hin a Wetla		X No
Wetland Hydrology Present? Yes X	No	With	IIIII a Wella	165	
Remarks Data point represents small wooded depression	on adjacent to	gravel fron	itage road o	n south side of SR37.	
VEGETATION - Use scientific names of plants					
TEGETATION GOS SCIONANIO NAMICO OI PIANIO	Ahsoluta	Dominant	Indicator	Dominance Test wor	kohooti
Tree Stratum (Plot Size: 20' radius)		Species?	Status		
1. Acer saccharinum	40	Yes	FACW	Number of Dominant S That Are OBL, FACW,	
2. Celtis occidentalis	5	No	FAC	Total Number of Domi	nant
3. Cornus racemosa	5	No	FAC	Species Across All Str	rata: 6 (B)
4. Fraxinus pennsylvanica	35	Yes	FACW	Percent of Dominant S	
5. Ulmus americana		No	FACW	That are OBL, FACW,	or FAC: 100 (A/B)
Continue/Chrush Chrotum (Plot Sizo: 20' radius	95	= Total Cov	/er	Prevalence Index wo	rksheet:
Sapling/Shrub Stratum (Plot Size: 20' radius) 1. Cornus racemosa	20	No	FAC	Total % Cover of	
2.					$\frac{15}{15}$ x 1 = 15
3					35 x 2 = 270
4.				FAC species	50 x 3 = 150
5.				FACU species	0 x 4 = 0
	20	= Total Cov	/er	UPL species Column Totals: 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Herb Stratum (Plot Size: 5' radius)					
1. Toxicodendron radicans	20	Yes	FAC	Prevalence Ind	ex = B/A = 2.18
2. Carex cristatella	20	Yes	FACW	Hydrophytic Vegetati	ion Indicators:
3. Elymus virginicus	15	Yes	FACW		ydrophytic Vegetation:
Carex squarrosa Carex vulpinoidea	<u>15</u> 	Yes No	OBL FACW	X 2-Dominance Test	· · · · · ·
6. Carex grayi		No	FACW	X 3-Prevalence Index	x is <=3
7			17.000		daptation\$ (Provide supporting
8.			-		r on a separate sheet) phytic Vegetation ¹ (Explain)
9.				_	oil and wetland hydrology must
10.				be present, unless dis	
		= Total Cov	/er		
Vine Stratum (Plot Size: 20' radius)				Hydrophytic	
1				Vegetation	
2				Present? Y	es X No
	0	= Total Cov	/er		
Remarks: (Include photo numbers here or on a separate	sheet.)				

SOIL Sampling Point IC02A-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR6/2	85	10YR5/6	15	C	M	silt loam	
3-20	10YR6/2	70	10YR5/4	30		M	silt loam	
dric Soi Histoso Histic E Black H Hydrogo Stratifie	pipedon (A2) listic (A3) en Sulfide (A4) d Layers (A5)	epletion, F	Sand Sand Stripp Loam Loam	y Gleyed M y Redox (S ped Matrix y Mucky M y Gleyed I	Matrix (S4) S5) (S6) Mineral (F1 Matrix (F2))	India C D Ird V	Location: PL=Pore Lining, M=Matrix Cactors for Problematic Hydric Soils Coast Prairie Redox (A16) Cark Surface (S7) Con-Manganese Masses (F12) Cory Shallow Dark Surface (TF12) Cory Shallow Dark Surface (TF12) Cory Soil (Explain in Remarks)
Deplete Thick D Sandy I	uck (A10) of Below Dark Surfac ark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3		Redo Deple	eted Matrix x Dark Su eted Dark S x Depress	rface (F6) Surface (F	7)		dicators of hydrophytic vegetation and land hydrology must be present, unless disturbed or problematic.
strictive	Layer (If observed)	:						
Typo								
Type: Depth (in marks:	nches):						Hydric S	oil present? Yes X No _
Depth (in							Hydric S	oil present? Yes X No
Depth (in marks: DROLO	GY ydrology Indicators		puired: check all that	apply)				
Depth (in marks: DROLO etland H imary Incident	GY ydrology Indicators dicators (minimum of				was (RQ)		Sec	ondary Indicators (minimum of two requ
DROLO etland H imary Inc	GY ydrology Indicators dicators (minimum of		Water St	ained Lea	` '			ondary Indicators (minimum of two requ Surface Soil Cracks (B6)
DROLO etland H imary Inc Surface High W	GY ydrology Indicators dicators (minimum of		Water St Aquatic I		3)		<u>Sec</u> \$ \$	ondary Indicators (minimum of two requ
DROLO etland H imary Inc Surface High W Saturati Water M	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water St Aquatic I True Aqu Hydroge	ained Lea Fauna (B1: uatic Plants n Sulfide C	3) s (B14) Odor (C1)		Sec S 	ondary Indicators (minimum of two requestrace Soil Cracks (B6) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8)
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DROLO Cetland H imary Inc Surface High W Saturati Water N Sedime Drift De	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3)		Water St Aquatic I True Aqu Hydroge Oxidized Presence	ained Lear Fauna (B1) Jatic Plants In Sulfide (C Rhizosph	3) s (B14) Odor (C1) eres on Li ced Iron (C	(4)	Sec X C X C X C C(C3) S	ondary Indicators (minimum of two requ Surface Soil Cracks (B6) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9 Stunted or Stressed Plants (D1)
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4)		Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I	ained Lear Fauna (B1: Juatic Plants In Sulfide C Rhizosph In Geducton Reducton Reducton	3) s (B14) Odor (C1) eres on Lired Iron (C	-	Sec X C X C X C (C3) _ S - (6) _ C	ondary Indicators (minimum of two requestrace Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Drayfish Burrows (C8) Saturation Visibile on Aerial Imagery (CS) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3)	one is red	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc	ained Lear Fauna (B1) Jatic Plants In Sulfide (C Rhizosph	3) s (B14) Odor (C1) eres on Li ced Iron (C tion in Tille (C7) a (D9)	(4)	Sec X C X C X C (C3) _ S - (6) _ C	ondary Indicators (minimum of two requ Surface Soil Cracks (B6) Orainage Patterns (B10) Ory-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (CS
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is red	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduct ron Reduct k Surface r Well Data	3) s (B14) Odor (C1) eres on Li ced Iron (C tion in Tille (C7) a (D9)	(4)	Sec X C X C X C (C3) _ S - (6) _ C	ondary Indicators (minimum of two requisorface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav	one is red	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge o Other (E	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduct ron Reduct k Surface r Well Data	3) s (B14) Odor (C1) eres on Lir ced Iron (C tion in Tille (C7) a (D9) emarks)	(4)	Sec X C X C X C (C3) _ S - (6) _ C	ondary Indicators (minimum of two requisorface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial by Vegetated Concavervations: ater Present?	one is red	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge o (B8) Other (E	ained Lear Fauna (B1: latic Plants n Sulfide C Rhizosph e of Reduct on Reduct ck Surface r Well Data xplain in R	3) s (B14) Odor (C1) eres on Lir ced Iron (C tion in Tille (C7) a (D9) emarks)	(4)	Sec X C X C X C (C3) _ S - (6) _ C	ondary Indicators (minimum of two requisorface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse ater Tablaturation	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Ye Present?	Imagery (e Surface	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge o (B8) Other (E	ained Lear- ained Lear- auna (B1: atic Plants n Sulfide C Rhizosph e of Reduct ron Reduct ck Surface r Well Data xplain in R	3) s (B14) Odor (C1) eres on Lir ced Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (C	Sec X D X C X C S (C3) S 6) C	ondary Indicators (minimum of two requestrace Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Drayfish Burrows (C8) Saturation Visibile on Aerial Imagery (CS) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
DROLO Cetland H imary Inc Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface W ater Table aturation includes c	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav ervations: ater Present? Ye Present?	Imagery (e Surface	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge o (B8) Other (E	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduct on Reduct ck Surface r Well Data xplain in R (inches): (inches):	3) s (B14) Odor (C1) eres on Li ced Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (C	Sec S S S S S S S S S	ondary Indicators (minimum of two requestrace Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Postion (D2) FAC-Neutral Test (D5)
DROLO etland H imary Inc Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface W ater Table aturation includes c	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav ervations: ater Present? Present? You apillary fringe)	Imagery (e Surface	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge o (B8) Other (E	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduct on Reduct ck Surface r Well Data xplain in R (inches): (inches):	3) s (B14) Odor (C1) eres on Li ced Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (C	Sec S S S S S S S S S	ondary Indicators (minimum of two requisorface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Postion (D2) FAC-Neutral Test (D5)

Project/Site: I-69 Section 6 Wetland S6W002A		City/Count	y: Morgan		Sampling Date: 10/16/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point IC02B-1W1
Investigator(s): Danika Fleck, Matt Brendel		Section, To	ownship, Ra	nge: Sec 8-T11N-R1E	
Landform (hillslope, terrace, etc.): shallow depression in val	ley plain		Local reli	ef (concave, convex, nor	ne): concave
Slope (%): 0 Lat: 39.398490	L	ong: -86.	- 452368		Datum: NAD83
Soil Map Unit Name Genesee silt loam				NWI classif	fication: upland
Are climatic/hydrologic conditions on the site typical for this ti	me of year	·? Yes	No		
Are Vegetation X , Soil or Hydrology signifi		-			oresent? Yes X No:
Are Vegetation, Soil or Hydrology natur				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showin					
Hydrophytic Vegetation Present? Yes X No	<u> </u>		<u> </u>	<u> </u>	<u> </u>
Hydric Soils Present? Yes X No		ls t	the Sample	l Area	
Wetland Hydrology Present? Yes X No		wit	thin a Wetla	nd? Yes	X No
Remarks Data point represents extension of wooded wetland	nd to the v	west that is	used for ha	y production.	
l .					_
VEGETATION - Use scientific names of plants					
Tree Stratum (Plot Size: 10' radius)		Dominant Species?		Dominance Test wor	ksheet:
1	70 COVC 1			Number of Dominant S That Are OBL, FACW,	
2				Total Number of Domi	
3.	-	-	-	Species Across All Str	rata: 1 (B)
45	-	-	-	Percent of Dominant S That are OBL, FACW,	
5	0	= Total Co	ver	mat are obe, i now,	(/VD)
Sapling/Shrub Stratum (Plot Size: 10' radius)				Prevalence Index wo	rksheet:
1				Total % Cover of	f: Multiply by:
2.				·	15 x 1 = 15
3				'	10 x 2 = 20
4				FAC species FACU species	$ \frac{75}{0} $ $ x 3 = 225 $ $ x 4 = 0 $
5	-	-		UPL species	0
(5) (6)	0	= Total Co	ver		00 (A) 260 (B)
Herb Stratum (Plot Size: 5' radius)	70	Voc	EAC	Provalence Ind	
Symphyotrichum lanceolatum Juncus effusus	70 10	Yes No	FAC OBL	Prevalence Inde	ex = B/A = <u>2.60</u>
3. Carex vulpinoidea	10	No	FACW	Hydrophytic Vegetati	on Indicators:
4. Scirpus atrovirens	5	No	OBL	1-Rapid Test for Hy	ydrophytic Vegetation:
5. Rumex crispus	5	No	FAC	X 2-Dominance Test	
6.				X 3-Prevalence Index	x is <=3 daptations (Provide supporting
7					r on a separate sheet)
8				Problematic Hydro	phytic Vegetation ¹ (Explain)
9					oil and wetland hydrology must
10	400	Tatal Ca		be present, unless dist	turbed or problematic
Vine Stratum (Plot Size: 10' radius)	100	= Total Co	ver		
				Hydrophytic	
1			-	Vegetation Present?	es X No
	0	= Total Co	ver		
Remarks: (Include photo numbers here or on a separate sh	eet \				
Field mowed for hay.	<i>5)</i>				

SOIL Sampling Point IC02B-1W1

Profile Desc		the depth	n needed to documne			nfirm the a	bsence of indicato	ors.)
Depth (Inches)	Matrix Color (moist)	%		x Featur	res Type ¹	Loc ²	Tautuna	Remarks
(Inches)	· — · · · · · · ·		Color (moist)				Texture	Remarks
0-5	10YR6/2	80	10YR5/6	20	<u>C</u>	M	silt loam	
5-18	10YR6/2	60	10YR5/4	20	C	M	silt loam	
5-18	10YR6/2	60	10YR5/6	20	C	M	silt loam	
_								
					<u> </u>	·		
¹ Type: C=C	Concentration, D= De	pletion, R	M=Reduced Matrix, 0	CS=Cove	ered or Coa	ated Sand	Grains. ² Locat	ion: PL=Pore Lining, M=Matrix
Hydric Soi	I Indiactors:						Indiactor	s for Problematic Hydric Soils ³
Histoso	I (A1)		Sandy	Gleyed	Matrix (S4)		Coast	Prairie Redox (A16)
Histic E	pipedon (A2)		Sandy	Redox (S5)		Dark S	Surface (S7)
Black H	istic (A3)		Strippe	ed Matrix	(S6)			anganese Masses (F12)
Hydroge	en Sulfide (A4)			-	Mineral (F1			hallow Dark Surface (TF12)
Stratifie	d Layers (A5)				Matrix (F2))	Other S	Soil (Explain in Remarks)
	uck (A10)		X Deplet		. ,			
	d Below Dark Surfac	e (A11)			ırface (F6)			
	ark Surface (A12)				Surface (F	7)		ors of hydrophytic vegetation and
	Mucky Mineral (S1)		Redox	Depress	sions (F8)		wetiand	hydrology must be present, unless disturbed or problematic.
	uck Peat or Peat (S3							
_	Layer (If observed):	:						
Type:	I \						Hudria Sail n	recent? Vec V No
Depth (ir	ncnes):						Hydric Soil p	resent? Yes X No
Remarks:								
HYDROLO	GY							
Wetland H	ydrology Indicators	•						
			quired; check all that a	annly)			Cocondo	ny Indiantara (minimum of two required)
	·	0110 10 100			(5.5)			ry Indicators (minimum of two required)
	Water (A1)		Water Sta		` '			ce Soil Cracks (B6)
	ater Table (A2)		Aquatic F					age Patterns (B10)
Saturati	` '		True Aqua					eason Water Table (C2)
_	Marks (B1)		Hydrogen			da a Da ati		sh Burrows (C8)
	nt Deposits (B2)				neres on Li	-		ation Visibile on Aerial Imagery (C9)
_	posits (B3) at or Crust (B4)				ced Iron (C ction in Tille	,		ed or Stressed Plants (D1) orphic Postion (D2)
	posits (B5)		Thin Muck			ou sons (C		Neutral Test (D5)
	ion Visible on Aerial	lmagery (_ 1 70-1	vedital Test (D3)
_	y Vegetated Concave				. ,			
Field Obse				p.a		1		
			No V Donth	in ah a a\.				
				inches):				
Water Tabl				inches):				
Saturation (includes ca	Present?	es	No X Depth (inches):		We	tland Hydrology	Present? Yes X No
		gauge, n	nonitoring well, aerial	photos,	previous in	spections	, if available:	
Remarks:								

Project/Site: I-69 Section 6 Wetland S6W003A		City/Count	y: Morgan		Sampling Date: 10/16	8/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point IC01	A-1D1
Investigator(s): Danika Fleck, Matt Brendel		Section, T	ownship, Ra	nge: Sec 8-T11N-R1E		
Landform (hillslope, terrace, etc.): valley plain			Local reli	ef (concave, convex, no	ne): concave	
Slope (%): 0-1 Lat: 39.398679	L	_ong: -86.	- 452281		Datum: NAD83	
Soil Map Unit Name Genesee silt loam				NWI classif	fication: upland	
Are climatic/hydrologic conditions on the site typical for this	time of year	r? Yes	X No			
Are Vegetation , Soil or Hydrology signi		-		Normal Circumstances" p		√o:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in		
SUMMARY OF FINDINGS - Attach site map showing						
Hydrophytic Vegetation Present? Yes No			<u> </u>	· ·	<u> </u>	
Hydric Soils Present? Yes No		Is	the Sample	d Area		
Wetland Hydrology Present? Yes No	X	wi	thin a Wetla	ind? Yes	NoX	
Remarks None of the wetland criteria are meet at this point VEGETATION - Use scientific names of plants	nt. This poi	nt represer	nts the non-v	vetland conditions betwe	en two wetlands.	
VEGETATION - Ose scientific flames of plants	Absolute	Dominant	Indicator	Dominance Test wor	·kshoot·	
Tree Stratum (Plot Size: 30' radius)		Species?		Number of Dominant S		
1				That Are OBL, FACW,		(A)
2				Total Number of Domi		
3				Species Across All Str	rata: 1	_ (B)
4	<u> </u>	-		Percent of Dominant S That are OBL, FACW,		(A/B)
5	0	= Total Co		That are OBL, FACW,	OFAC. 0	_ (A/D)
Sapling/Shrub Stratum (Plot Size: 15' radius)		= 10tal 00	VCI	Prevalence Index wo	rksheet:	
1				Total % Cover o	f: Multiply by:	
2.	 ;	-		OBL species	0 x 1 = 0	<u> </u>
3.				FACW species	0 x 2 = 0	
4		-		FAC species	0 x 3 = 0	_
5				FACU species UPL species	$\frac{95}{5}$ $x 4 = \frac{380}{25}$	
	0	= Total Co	ver	· <u> </u>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	(B)
Herb Stratum (Plot Size: 5 'radius)		.,	=			—` ′
Schedonorus arundinaceus Trifolium pratense	85 10	Yes	FACU FACU	Prevalence Ind	ex = B/A = 4.05	_
3. Viola sp.	5	No No	UPL	Hydrophytic Vegetati	ion Indicators:	
4.		140		1-Rapid Test for H	ydrophytic Vegetation:	
5				2-Dominance Test		
6.				3-Prevalence Index		
7.					daptations (Provide sup r on a separate sheet)	porting
8.					phytic Vegetation ¹ (Expl	lain)
9				1Indicators of hydric so	oil and wetland hydrology	y must
10				be present, unless dis		,
Miss Otto (Plot Size 20) and in	100	= Total Co	ver			
Vine Stratum (Plot Size: 30' radius)				Hydrophytic		
1				Vegetation Present?	es No X	
2	0	= Total Co	ver	i icaciil!	140 X	_
		. 5.0.1				
Remarks: (Include photo numbers here or on a separate s Field mowed for hay.						

SOIL Sampling Point IC01A-1D1

rofile Desc Depth	Matri	X		Redo	ox Feature	es								
(Inches)	Color (moist)	%	Color (r		%	Type ¹	Loc ²	Text	ure		Ren	narks		
0-18	10YR5/3	100						silt lo						
								-						
								-						
									21 "	DI D				
	oncentration, D=	Depletion, R	M=Reduce	ı Matrix, C	JS=Cover	ed or Coa	ted Sand		² Location			<u> </u>		3
•	Indiactors:								Indiactors fo			-	Solis	3
_ Histosol	, ,				Gleyed M				Coast Pra			5)		
_	oipedon (A2)				Redox (S				Dark Surf			(540)		
_	stic (A3)		-		ed Matrix (`		Iron-Mang Very Shal) \	
	en Sulfide (A4) d Layers (A5)		-		/ Mucky M / Gleyed N	,	•		Other Soil			,	-)	
	ick (A10)		-		ted Matrix	. ,			Other Son	i (⊏xpiai	II III Ke	marks)		
_	d Below Dark Su	face (A11)	-		Dark Sur									
_	ark Surface (A12)		-		ed Dark S	. ,	7)		³ Indicators	of hvdro	ophytic v	veaetatio	on and	
	Mucky Mineral (S		-		Depressi	,	. ,		wetland hyd	łrology r	nust be	present		S
_	ick Peat or Peat		-	_		- (-,			dis	sturbed	or probl	ematic.		
estrictive	Layer (If observe	ed):												
Type:	,	•												
- · · ·								Hyd	ric Soil pres	ent?	Yes		No	Χ
Depth (in emarks:	ches):								·		100 _			<u> </u>
Depth (in emarks:														
Depth (in emarks:	GY										100 _			
Depth (in emarks:	GY ydrology Indicat		utired: chec	k all that s	anniu)						-			
Depth (in emarks: /DROLOG Vetland Hy	GY ydrology Indicat icators (minimum		-						Secondary I	ndicato	rs (minii		wo req	
Depth (in emarks: 'DROLOG Vetland Hy Primary Ind Surface	GY /drology Indicat icators (minimum Water (A1)			Water Sta	ined Leav				Secondary I	Indicato Soil Cra	rs (minii cks (B6)	wo req	
Depth (in emarks: /DROLOG Vetland Hyrimary Ind Surface High Wa	GY /drology Indicat icators (minimum Water (A1) ater Table (A2)		_	Water Sta Aquatic Fa	ined Leav auna (B13	3)			Secondary I Surface S Drainage	Indicato Soil Cra Patterr	rs (minii cks (B6 ns (B10))	wo req	
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface High Wa Saturation	GY /drology Indicat icators (minimum Water (A1) ater Table (A2) on (A3)			Water Sta Aquatic Fa True Aqua	nined Leav auna (B13 atic Plants	3) (B14)			Secondary I Surface S Drainage Dry-Seas	Indicato Soil Cra Patterr son Wat	rs (minin cks (B6 ns (B10) er Table)	wo req	
Depth (in emarks: 'DROLOG Vetland Hy Primary Ind Surface High Wa Saturatic Water M	ydrology Indicaticators (minimum Water (A1) ater Table (A2) on (A3) larks (B1)			Water Sta Aquatic Fa True Aqua Hydrogen	nined Leav auna (B13 atic Plants Sulfide O	(B14) dor (C1)	ving Root	re (C3)	Secondary I Surface S Drainage Dry-Seas Crayfish	Indicato Soil Cra Patterr son Wat Burrows	rs (minin cks (B6 ns (B10) er Table s (C8)) e (C2)		uired
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface High Wa Saturatic Water M Sedimer	ydrology Indicaticators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)			Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I	nined Leav auna (B13 atic Plants Sulfide O Rhizosphe	B) (B14) dor (C1) eres on Liv		ts (C3)	Secondary I Surface S Drainage Dry-Seas Crayfish Saturatio	Indicato Soil Cra Patterr son Wat Burrows in Visibi	rs (minir cks (B6 ns (B10) er Table s (C8) le on As) e (C2) erial Ima		uired
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface High Wa Saturatic Water M Sedimer Drift Dep	ydrology Indicaticators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)			Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I Presence	nined Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduce	B) (B14) dor (C1) eres on Lived Iron (C	4)		Secondary I Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicato Soil Cra Patterr son Wat Burrows in Visibi or Stres:	rs (minir cks (B6 ns (B10) er Table s (C8) de on Ae sed Plai) e (C2) erial Imag nts (D1)		uired
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface High Water M Saturation Water M Sedimer Drift Dep Algal Ma	ydrology Indicaticators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)			Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I Presence Recent Iro	ained Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduce	B) (B14) dor (C1) eres on Lived Iron (C	4)		Secondary I Surface S Drainage Dry-Seas Crayfish Saturatio Stunted G Geomorp	Indicato Soil Cra Patterr son Wat Burrows In Visibi or Stress	rs (minii cks (B6 ns (B10) er Table s (C8) le on Ae sed Plai) e (C2) erial Imag nts (D1)		uire
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep	ydrology Indicaticators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) posits (B5)	of one is rec		Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I Presence Recent Iro Thin Muck	nined Leave auna (B13 atic Plants Sulfide O Rhizosphe of Reduce on Reduct & Surface	(B14) dor (C1) eres on Lived Iron (C ion in Tille (C7)	4)		Secondary I Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicato Soil Cra Patterr son Wat Burrows In Visibi or Stress	rs (minii cks (B6 ns (B10) er Table s (C8) le on Ae sed Plai) e (C2) erial Imag nts (D1)		uire
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface High Water M Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati	ydrology Indicaticators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	of one is rec		Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I Presence Recent Iro	nined Leavauna (B13 atic Plants Sulfide O Rhizosphe of Reduct Surface Well Data	(B14) dor (C1) eres on Lived Iron (C ion in Tille (C7) (D9)	4)		Secondary I Surface S Drainage Dry-Seas Crayfish Saturatio Stunted G Geomorp	Indicato Soil Cra Patterr son Wat Burrows In Visibi or Stress	rs (minii cks (B6 ns (B10) er Table s (C8) le on Ae sed Plai) e (C2) erial Imag nts (D1)		uired
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface High Water M Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati	ydrology Indicaticators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aer	of one is rec		Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I Presence Recent Iro Thin Muck Gauge or	nined Leavauna (B13 atic Plants Sulfide O Rhizosphe of Reduct Surface Well Data	(B14) dor (C1) eres on Lived Iron (C ion in Tille (C7) (D9)	4)		Secondary I Surface S Drainage Dry-Seas Crayfish Saturatio Stunted G Geomorp	Indicato Soil Cra Patterr son Wat Burrows In Visibi or Stress	rs (minii cks (B6 ns (B10) er Table s (C8) le on Ae sed Plai) e (C2) erial Imag nts (D1)		uire
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Depth (in emarks: Depth (in emarks: Depth (in emarks: Depth (in emarks: Depth (in emarks: Depth (in emarks: Depth (in emarks: Depth (in emarks: Surface High Water Mage Mage Mage Mage Mage Mage Mage Mage	ydrology Indicaticators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aery Vegetated Concretions:	ial Imagery (cave Surface	X X 	Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I Presence Recent Iro Thin Muck Gauge or Other (Exp	nined Leave auna (B13 atic Plants Sulfide O Rhizosphe of Reduct Surface Well Data plain in References):	(B14) dor (C1) eres on Lived Iron (C ion in Tille (C7) (D9)	4) ed Soils (C6)	Secondary I Surface S Drainage Dry-Seas Crayfish Saturatio Stunted G Geomorp	Indicato Soil Cra Patterr son Wat Burrows In Visibi or Stress Ohic Pos utral Tes	rs (minii cks (B6 ns (B10) er Table s (C8) le on Ae sed Plai) e (C2) erial Imag nts (D1)		uire
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Project/Site: I-69 Section 6 Wetland S6W003A		City/County	: Morgan	Sampling Date: 10/16/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point IC01A-1W1
Investigator(s): Danika Fleck, Matt Brendel		Section, To	wnship, Ra	inge: Sec 8-T11N-R1E
Landform (hillslope, terrace, etc.): shallow depression in v	alley plain		Local reli	ief (concave, convex, none): concave
Slope (%): 0 Lat: 39.398731	L	ong: <u>-86.4</u>	52133	Datum: NAD83
Soil Map Unit Name Shoals silt loam				NWI classification: upland
Are climatic/hydrologic conditions on the site typical for this	time of year	? Yes	X No	(If no, explain Remarks.)
Are Vegetation X , Soil or Hydrology sign	nificantly dist	urbed?	Are "N	Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology nat	turally proble	matic?	If nee	eded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map show			ocations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	0			
Hydric Soils Present? Yes X No	0		ne Sample	
Wetland Hydrology Present? Yes X No	°	With	nin a Wetla	nd? Yes X No
Remarks Data point represents linear depression feature	in hay field t	hat collects	seasonal s	surface water and meets all three wetland criteria.
VEGETATION - Use scientific names of plants				
Tree Stratum (Plot Size: 10' radius)		Dominant Species?	Indicator Status	Dominance Test worksheet:
1			Status	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2.				That Are OBL, FACW, or FAC: (A) Total Number of Dominant
3.				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That are OBL, FACW, or FAC:(A/B)
Conline (Chrush Ctratum (Plot Size: 10' radius	0 :	= Total Cov	er	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot Size: 10' radius)				Total % Cover of: Multiply by:
1. 2.				OBL species 20 x 1 = 20
3.				FACW species 20 x 2 = 40
4.				FAC species 60 x 3 = 180
5				FACU species 0 x 4 = 0 UPL species 0 x 5 = 0
(5)	0 :	= Total Cov	er	Column Totals: 100 (A) 240 (B)
Herb Stratum (Plot Size: 5' radius) 1. Symphyotrichum lanceolatum	60	Voo	FAC	Prevalence Index = B/A = 2.40
Carex sp.	20	Yes Yes	FACW	Prevalence index = B/A =
3. Juncus effusus	15	No	OBL	Hydrophytic Vegetation Indicators:
4. Echinochloa muricata	5	No	OBL	1-Rapid Test for Hydrophytic Vegetation:
5				X 2-Dominance Test is >50% X 3-Prevalence Index is <=3
6				4-Morphological Adaptations (Provide supporting
7				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9	<u> </u>			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
10	100 :	= Total Cov	er	be present, unless disturbed of problematic
Vine Stratum (Plot Size: 10' radius)				Hydrophytic
1				Vegetation
2				Present? Yes X No
	0 :	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate	sheet.)			
Field mowed for hay.				

SOIL Sampling Point IC01A-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture		Rem	arks	
0-2	10YR6/2	70	10YR5/6	30			silt lo	oam				
	-											
			-									
ype: C=C	Concentration, D= De	pletion, R	M=Reduced Matrix,	CS=Cover	red or Coa	ated Sand	Grains.	² Loc	ation: PL=	Pore Linin	ng, M=M	latrix
dric Soi	I Indiactors:							Indiact	ors for Pro	blematic	Hydric	Soils ³
Histoso	` '			/ Gleyed M)			t Prairie R)	
	pipedon (A2) listic (A3)			/ Redox (Sed Matrix					Surface (S Manganes		/ E40)	
	en Sulfide (A4)			ed Matrix y Mucky M	. ,)			Shallow D			2)
	d Layers (A5)			y Gleyed N	•	•			r Soil (Exp			,
	uck (A10)			ted Matrix				_	` '		,	
Deplete	ed Below Dark Surfac	e (A11)		x Dark Sur	, ,							
	ark Surface (A12)			ted Dark S		7)			ators of hyd d hydrolog			
-	Mucky Mineral (S1) uck Peat or Peat (S3	1	Redox	x Depressi	ions (F8)			wellan		d or proble		, unicss
	Layer (If observed)	<i>'</i>										
Type: Depth (ir			<u> </u>				Hyd	dric Soil	present?	Yes _	X	No _
Type:	nches):						Нус	dric Soil	present?	Yes _	X	No _
Type:	GY						Нус	dric Soil	present?	Yes _	X	No _
Type:	nches):		uired; check all that	apply)			Нус		present?			_
Type:	GY ydrology Indicators			apply)_ ained Leav	ves (B9)		Нус	Second		tors (minin	num of t	
Type:	GY ydrology Indicators dicators (minimum of		Water Sta				Hyd	Second	dary Indica	tors (minin	num of t	
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Project/Site: I-69 Section 6 Wetland S6W004A		City/Count	y: Morgan		Sampling Date: 10/16/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point IC03A-1D1
Investigator(s): Danika Fleck, Matt Brendel		Section, To	ownship, Ra	ange: Sec 8-T11N-R1E	
Landform (hillslope, terrace, etc.): broad valley	_		Local reli	ief (concave, convex, no	ne): flat
Slope (%): 0-1 Lat: 39.399300	L	_ong: -86.	- 451438		Datum: NAD83
Soil Map Unit Name Shoals silt loam				NWI classif	fication: upland
Are climatic/hydrologic conditions on the site typical for thi	s time of year	r? Yes	X No		· ·
Are Vegetation , Soil or Hydrology sig		-			present? Yes X No:
Are Vegetation , Soil or Hydrology na				eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show			locations,	, transects, importan	t features, etc.
Hydrophytic Vegetation Present? Yes X N	lo				
	10 X	ls t	the Sample	d Area	
Wetland Hydrology Present? Yes N	lo X	wit	thin a Wetla	and? Yes	NoX
Remarks					
VECETATION. Has accontition names of plants					
VEGETATION - Use scientific names of plants	A la a a la séa	Daminant	la dia atau	T	
Tree Stratum (Plot Size: 30' radius)		Dominant Species?		Dominance Test wor	
1.				Number of Dominant S That Are OBL, FACW,	
2				Total Number of Domi	
3				Species Across All Str	
4				Percent of Dominant S	
5		Total Co		That are OBL, FACW,	or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Co	ver	Prevalence Index wo	orksheet:
<u> </u>				Total % Cover o	f: Multiply by:
1. 2.				OBL species	0 x 1 = 0
3.				FACW species	0 x 2 = 0
4				· —	$ \begin{array}{ccc} 80 & x & 3 = & 240 \\ 20 & x & 4 = & 80 \end{array} $
5				UPL species	$\frac{20}{0}$ $x = 4 = 80$ $x = 5 = 0$
(Dist O'rea El restina	0	= Total Co	ver		00 (A) 320 (B)
Herb Stratum (Plot Size: 5' radius) 1. Poa pratensis	75	Yes	FAC	Prevalence Ind	ex = B/A = 3.20
Trifolium pratense		No	FACU	Frevalence ind	ex = B/A = 3.20
3. Viola sororia		No	FAC	Hydrophytic Vegetati	on Indicators:
4. Plantago lanceolata	5	No	FACU		ydrophytic Vegetation:
5.				X 2-Dominance Test 3-Prevalence Index	
6				l —	daptations (Provide supporting
7					r on a separate sheet)
8				Problematic Hydro	phytic Vegetation ¹ (Explain)
9					oil and wetland hydrology must
10	100	= Total Co	ver	be present, unless dis	turbed or problematic
Vine Stratum (Plot Size: 15' radius)		. 5.0. 50			
1				Hydrophytic Vegetation	
2.					es X No
	0	= Total Co	ver		
Remarks: (Include photo numbers here or on a separate	sheet.)			<u> </u>	
Periodically mowed					

SOIL Sampling Point IC03A-1D1

rofile Descr	Matrix		Pos	dox Featur	·es					
Depth (Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-8	10YR4/3	100	Color (moist)		Турс		silt loam		Remarks	
	101114/0						- Silt loani			
								<u> </u>		
Type: C=Co	oncentration, D= De	pletion, RM	I=Reduced Matrix,	CS=Cove	red or Coa	ated Sand	I Grains. 2	² Location: PL=P	ore Lining, M=M	atrix
lydric Soil	Indiactors:						Ind	liactors for Prob	lematic Hydric	Soils 3
Histosol	(A1)		Sand	ly Gleyed I	Matrix (S4))		Coast Prairie Red	dox (A16)	
_	pipedon (A2)			y Redox (, ,			Dark Surface (S7		
Black His				oed Matrix			_	Iron-Manganese	Masses (F12)	
_	n Sulfide (A4)			ny Mucky N)	_	Very Shallow Da	rk Surface (TF12)
	Layers (A5)		_	ny Gleyed			_	Other Soil (Expla	in in Remarks)	
2 cm Mu	ck (A10)		X Deple	eted Matrix	(F3)		_			
Depleted	Below Dark Surfac	e (A11)	Redo	x Dark Su	rface (F6)					
Thick Da	rk Surface (A12)		Deple	eted Dark	Surface (F	7)		ndicators of hydr		
Sandy M	lucky Mineral (S1)		Redo	x Depress	ions (F8)		We	etland hydrology		unless
5 cm Mu	ck Peat or Peat (S3)						aisturbea	or problematic.	
estrictive L	ayer (If observed)									
Typo:										
Type:										NI- Y
Depth (inc	ches):						Hydric	Soil present?	Yes	No
	· -						Hydric	Soil present?	Yes	NO
Depth (included)	· -	:					Hydric	Soil present?	Yes	NO
Depth (included) Pemarks: YDROLOG Wetland Hy	GY .		ired; check all that	t apply)						
Depth (income per per per per per per per per per pe	GY rdrology Indicators cators (minimum of				ves (B9)			econdary Indicato	ors (minimum of t	
Depth (income property) YDROLOG Wetland Hy Primary India Surface N	GY rdrology Indicators cators (minimum of Water (A1)		Water St	tained Lea	` '			econdary Indicato Surface Soil Cra	ors (minimum of to	
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Project/Site: I-69 Section 6 Wetland S6W004A		City/Count	y: Morgan		Sampling Date: 10/16/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point IC03A-1W1
Investigator(s): Danika Fleck, Matt Brendel		Section, To	ownship, Ra	nge: Sec 8-T11N-R1E	
Landform (hillslope, terrace, etc.): broad valley	_		Local reli	ef (concave, convex, no	ne): flat
Slope (%): 0-1 Lat: 39.399140	I	Long: -86.4	<u> </u>		Datum: NAD83
Soil Map Unit Name Shoals silt loam				NWI classit	fication: upland
Are climatic/hydrologic conditions on the site typical for thi	s time of year	r? Yes	X No		
Are Vegetation , Soil or Hydrology sig		_			oresent? Yes X No:
Are Vegetation , Soil or Hydrology na				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show					
Hydrophytic Vegetation Present? Yes X N	No				
	No		he Sample		
Wetland Hydrology Present? Yes X	No	wit	hin a Wetla	nd? Yes	X No
Remarks		<u>.</u>			
VEGETATION - Use scientific names of plants					
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test wor	ksheet:
1	70 0010.	Орос.ос.	Ciaiao	Number of Dominant S That Are OBL, FACW,	
2.	·			Total Number of Domi	
3				Species Across All Str	
4				Percent of Dominant S	
5				That are OBL, FACW,	or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Co	ver	Prevalence Index wo	 orksheet:
				Total % Cover o	f: Multiply by:
1. 2.					45 x 1 = 45
3.					45 x 2 = 90
4.				· -	10 x 3 = 30
5				FACU species UPL species	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	0	= Total Co	ver		$\frac{0}{00}$ x 5 = $\frac{0}{165}$ (B)
Herb Stratum (Plot Size: 5' radius)	00	V	0.01	-	
Juncus effusus Carex sp.	30 30	Yes Yes	OBL FACW	Prevalence Ind	ex = B/A = 1.65
Scirpus atrovirens		No	OBL	Hydrophytic Vegetat	on Indicators:
4. Lysimachia nummularia	15	No	FACW		ydrophytic Vegetation:
5. Symphyotrichum lanceolatum	10	No	FAC	X 2-Dominance Test	
6.				X 3-Prevalence Index	x is <=3 daptations (Provide supporting
7					r on a separate sheet)
8				Problematic Hydro	phytic Vegetation ¹ (Explain)
9					oil and wetland hydrology must
10		= Total Co	ver	be present, unless dis	Turbea or problematic
Vine Stratum (Plot Size: 15' radius)					
1				Hydrophytic Vegetation	
2.					'es X No
	0	= Total Co	ver		
Remarks: (Include photo numbers here or on a separate	sheet.)				
	•				

SOIL Sampling Point IC03A-1W1

(Inches) Color (moist) % Color (moist) % Type* Loc 2 Texture Remarks Described Property Color (moist) % Towards (moist) % Type* Loc 2 Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Sitt loam Si	Depth	Matrix		Red	dox Feature							
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10YR5/6 20 silt loam	0-5	10YR6/2	80	-	20			silt lo	oam			
ype: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Location: PL=Pore Lining, M=Matrix ydric Soil Indiactors: Indiactors (PL=Pore Lining, M=Matrix Side (Poster) (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore Lining), M=Matrix (PL=Pore	5-18	10YR5/2	60	10YR5/4	20			silt lo	oam			
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PROLOGY Setland Hydrology Indicators: mary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Setlined Proposits (B2) Drainage Patterns (B10) Saturation (A3) Aguatic Fauna (B13) Drainage Patterns (B10) Saturation (A3) Water Marks (B1) Dry-Season Water Table (C2) Water Marks (B1) Proposits (B2) Oxidized Rhizospheres on Living Roots (C3) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Postion (D2) Iron Deposits (B5) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Setlined Present? Wetland Hydrology Present? Yes No Depth (inches): Sturtacd Hydrology Present? Yes No Depth (inches): Sturtacd Hydrology Present? Yes No Wetland Hydrology Present? Yes No Scribe Recorded Data (Stream gauge, monitoring well, aerial photos, previous inspections), if available:												
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Surface Water (A1)	marks:							Hyd	dric Soil	present?	Yes _>	<u>(No</u>
High Water Table (A2) Saturation (A3) Aquatic Fauna (B13) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Pother (Explain in Remarks) Algal Observations: Irface Water Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X No X Depth (inches): Inturation Present? Yes No X No X Depth (inches): Inturation Present? Yes No X No X Depth (inches): Inturation Present? Yes No X No X No X No X Depth (inches): Inturation Present? Yes No X No X No X No X No X No X No X No	DROLO	GY ydrology Indicators		united: about all that	conditi			Hyd				_
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Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Poph (inches): Index Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Postion (D2) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Presence of Reduced Iron (C4) Geomorphic Postion (D2) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Presence of Reduced Iron (C4) Geomorphic Postion (D2) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Presence of Reduced Iron (C4) Geomorphic Postion (D2) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Face Mater Test (D5) Depth (inches): Wetland Hydrology Present? Yes X No Specified Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLO etland H mary Ind Surface High Wa	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2)		Water St	ained Leav	3)		Нус	Second Surf. Drai	ary Indicato ace Soil Cra nage Patter	ors (minimu acks (B6) rns (B10)	m of two re
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Project/Site: I-69 Section 6 Wetland S6W005A		City/Count	y: Morgan		Sampling Date: 10/20/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point IC10A-1D1
Investigator(s): K. Lucier		Section, To	ownship, Ra	inge: Sec 8-T1N-R11E	
Landform (hillslope, terrace, etc.): broad valley			Local reli	ief (concave, convex, no	ne): concave
Slope (%): <u>0-1</u> Lat: <u>39.400002</u>	[_ong:86.4	452091		Datum: GCS NAD83
Soil Map Unit Name Shoals silt loam				NWI classif	fication: N/A
Are climatic/hydrologic conditions on the site typical for this	time of year	r? Yes	X No	(If no, explain Re	marks.)
Are Vegetation , Soil or Hydrology signi		-			oresent? Yes X No:
Are Vegetation , Soil or Hydrology natu				eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showing			locations,	, transects, importan	t features, etc.
Hydrophytic Vegetation Present? Yes X No					
Hydric Soils Present? Yes No			the Sample thin a Wetla		No. Y
Wetland Hydrology Present? Yes No	<u>X</u>	WIL	iiiii a vveiia	ind? Yes	NoX
Remarks					
VEGETATION - Use scientific names of plants					-
VEGETATION - Ose scientific flames of plants	Absolute	Dominant	Indicator	Deminence Test wer	lrah a atı
Tree Stratum (Plot Size: 30' radius)		Species?		Dominance Test wor	
1				Number of Dominant S That Are OBL, FACW,	
2				Total Number of Domi	nant
3				Species Across All Str	rata: 2 (B)
4				Percent of Dominant S That are OBL, FACW,	
5.		= Total Co	ver	That are OBL, I ACVV,	(A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)		- rotar 00	VOI	Prevalence Index wo	rksheet:
1				Total % Cover o	f: Multiply by:
2.				OBL species	0 x 1 = 0
3				· —	60 x 2 = 120
4				·	$\frac{25}{20}$ $\times 3 = \frac{75}{80}$
5				UPL species	$\frac{1}{0}$ $x = 0$
Herb Stratum (Plot Size: 5' radius)	0	= Total Co	ver	Column Totals: 1	05 (A) 275 (B)
1. Phalaris arundinacea	60	Yes	FACW	Prevalence Ind	ex = B/A = 2.62
2. Rubus argutus	25	Yes	FAC		
3. Chamaecrista nictitans	10	No	FACU	Hydrophytic Vegetati	
4. Cirsium arvense	5	No	FACU	_	ydrophytic Vegetation:
5. Asclepias syriaca	5	No	FACU	X 2-Dominance Test X 3-Prevalence Index	
6					daptations (Provide supporting
7				data in Remarks or	r on a separate sheet)
8				I —	phytic Vegetation ¹ (Explain)
9. 10.				¹ Indicators of hydric so be present, unless dis	oil and wetland hydrology must
	105	= Total Co	ver	be precent, amose are	- Idibod of problemate
Vine Stratum (Plot Size: 15' radius				Hydrophytic	
1				Vegetation	
2				Present? Y	es X No
	0	= Total Co	ver		
Remarks: (Include photo numbers here or on a separate si	heet.)				

SOIL Sampling Point IC10A-1D1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure		Remarks	
0-20	10YR5/4	95	10YR4/6	5	С	М	silty cla				
	-										
	-										
Гуре: С=0	Concentration, D= D	epletion. R	M=Reduced Matrix,	CS=Cover	ed or Coa	ted San	d Grains.	² Loc	ation: PL=	Pore Lining, M	=Matrix
	I Indiactors:	<u> </u>								blematic Hydr	
Histoso	` '			Gleyed M						edox (A16)	
_	pipedon (A2)			Redox (S					Surface (S		
_	listic (A3) en Sulfide (A4)			ed Matrix (y Mucky M	. ,)				e Masses (F12 ark Surface (TF	
-	d Layers (A5)			y Gleyed N	•	•				lain in Remarks	
_	uck (A10)			ted Matrix					` .		•
_	d Below Dark Surface	e (A11)		Dark Sur	, ,						
_	ark Surface (A12)			ted Dark S		7)				drophytic vegeta must be prese	
	Mucky Mineral (S1) uck Peat or Peat (S3	3)	Redox	c Depressi	ons (F8)			Wollan		d or problemation	
	Layer (If observed)	<i>'</i>									
311101110											
Туре:	\ .		<u></u>				Llve	dric Sail	nrocont?	Voc	No
Type: Depth (ir	nches):						Нус	dric Soil	present?	Yes	No _
Type: Depth (ir emarks:							Нус	dric Soil	present?	Yes	No _
Type:	GY						Нус	dric Soil	present?	Yes	No _
Type: Depth (in marks:	GY ydrology Indicators		juired; check all that	apply)			Нус			Yes	
Type:	GY ydrology Indicators		•	apply)_ ained Leav	ves (B9)		Нус	Second		tors (minimum c	
DROLO Vetland H rimary Inc Surface High W	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F	ained Leav auna (B13	3)		Нус	Second Surl	dary Indicat ace Soil Ci	tors (minimum oracks (B6)	
DROLO DROLO Surface High W. Saturati	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3)		Water Sta Aquatic F True Aqu	ained Leav auna (B13 atic Plants	3) s (B14)		Нус	Second Suri Dra Dry.	dary Indicat face Soil Ci inage Patte Season W	tors (minimum o racks (B6) erns (B10) ater Table (C2)	
DROLO Vetland H rimary Inc High Water IN	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water Sta Aquatic F True Aqu Hydroger	ained Leav auna (B13 atic Plants Sulfide O	B) s (B14) odor (C1)	ving Roo		Second Suri Dra Dry Cra	dary Indicat face Soil Ci finage Patte Season W yfish Burrov	tors (minimum oracks (B6) erns (B10) ater Table (C2) ws (C8)	of two requ
Type:	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2)		Water State	ained Leav auna (B13 atic Plants	3) s (B14) odor (C1) eres on Li	-		Second Suri Dra Dry Cra Sati	dary Indicat face Soil Ci inage Patte Season W yfish Burro uration Visi	tors (minimum oracks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial In	of two requ
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DROLO Vetland H rimary Inc Surface High Wa Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel vetland Character Wa vetland M Iron De Inundat Sparsel vetland Character Wa vetland Character Table atturation includes c	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Yersent? Yersent? Apillary fringe)	Imagery (Ie Surface	Water Standard Mater Standard Mater Standard Mater Standard Mater Standard Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material Material	ained Leav fauna (B13 atic Plants a Sulfide O Rhizosphe of Reduct on Reduct k Surface Well Data cplain in Re (inches): (inches):	B) s (B14) dor (C1) eres on Lived Iron (C cion in Tille (C7) a (D9) emarks)	4) ed Soils (ts (C3) C6)	Second Suri Dra Dry Cra Satu Stur FAC	dary Indicat face Soil Ci inage Patte Season W yfish Burror uration Visi inted or Stre imorphic Po C-Neutral To	tors (minimum of racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial In essed Plants (D ostion (D2) est (D5)	nagery (C9
DROLO Tetland H Timary Inc Surface High Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse durface Water Table aturation includes c	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Yersent? Yersent? Apillary fringe)	Imagery (Ie Surface	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc G7) Gauge or (B8) Other (Ex	ained Leav fauna (B13 atic Plants a Sulfide O Rhizosphe of Reduct on Reduct k Surface Well Data cplain in Re (inches): (inches):	B) s (B14) dor (C1) eres on Lived Iron (C cion in Tille (C7) a (D9) emarks)	4) ed Soils (ts (C3) C6)	Second Suri Dra Dry Cra Satu Stur FAC	dary Indicat face Soil Ci inage Patte Season W yfish Burror uration Visi inted or Stre imorphic Po C-Neutral To	tors (minimum of racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial In essed Plants (D ostion (D2) est (D5)	nagery (C9

Project/Site: I-69 Section 6 Wetland S6W005A	City/C	County: Morgan	Sampling Date: 10/20/2015
Applicant/Owner: INDOT/Lochumueller			State: Indiana Sampling Point IC10A-1W1
Investigator(s): K. Lucier	Section	on, Township, Ra	nge: Sec 8-T1N-R11E
Landform (hillslope, terrace, etc.): broad valley	<u> </u>	Local reli	ef (concave, convex, none): concave
Slope (%): 0-1 Lat: 39.400048	Long:	-86.451969	Datum: GCS NAD83
Soil Map Unit Name Shoals silt loam			NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this ti	me of year?	res X No	(If no, explain Remarks.)
Are Vegetation, Soil or Hydrologysignif	-		Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology natu			ded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin			,
Hydrophytic Vegetation Present? Yes X No Hydric Soils Present? Yes X No Wetland Hydrology Present? Yes X No	_	Is the Sample	
Remarks			
VEGETATION - Use scientific names of plants			
	Absolute Dom	inant Indicator	Dominance Test worksheet:
Tree Stratum (Plot Size: 30' radius) 1.	% Cover Spec		Number of Dominant Species That Are OBL, FACW, or FAC:4(A)
2. 3.			Total Number of Dominant Species Across All Strata: 4 (B)
4			Percent of Dominant Species
5			That are OBL, FACW, or FAC: 100 (A/B)
(Plat Cine 45) and the	0 = Tota	al Cover	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot Size: 15' radius) 1. Salix interior	25 Ye	es FACW	Total % Cover of: Multiply by:
-		es TACW	OBL species 50 x 1 = 50
2. 3.			FACW species 75 x 2 = 150
4.			FAC species 0 x 3 = 0
5.			FACU species 0 x 4 = 0
	25 = Tota	al Cover	UPL species 0 x 5 = 0 Column Totals: 125 (A) 200 (B)
Herb Stratum (Plot Size: 5' radius)			Column Totals: <u>125</u> (A) <u>200</u> (B)
1. Phalaris arundinacea		es FACW	Prevalence Index = B/A = 1.60
2. Typha latifolia		es OBL	Hydrophytic Vegetation Indicators:
3. Lemna minor		es OBL	1-Rapid Test for Hydrophytic Vegetation:
4			X 2-Dominance Test is >50%
5			X 3-Prevalence Index is <=3
6	- — — — — — — — — — — — — — — — — — — —		4-Morphological Adaptations (Provide supporting
8.			data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
9.			-
10.			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
	100 = Tota	al Cover	
Vine Stratum (Plot Size: 15' radius)			Hydrophytic
1			Vegetation
2	= Tota	al Cover	Present? Yes X No
Remarks: (Include photo numbers here or on a separate sh	neet.)		
·			

SOIL Sampling Point IC10A-1W1

Profile Desc	ription: (Describe to	the depth nee	eded to documne	t the indic	ator or co	nfirm the	ne absei	nce of indic	cators.)
Depth	Matrix			ox Featur			_		
(Inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc 2		exture	Remarks
0-20	5GY5/3	95 10)Yr4/6	5	C	M	silty	clay loam	
					-		=		
								-	
					-				
-									
- ''	concentration, D= De	oletion, RM=l	Reduced Matrix, (CS=Cove	red or Coa	ited Sar	nd Grai		cation: PL=Pore Lining, M=Matrix
	I Indiactors:								tors for Problematic Hydric Soils ³
Histosol	, ,			-	Matrix (S4)				ast Prairie Redox (A16) k Surface (S7)
	pipedon (A2) istic (A3)			Redox (Sed Matrix					i-Manganese Masses (F12)
_	en Sulfide (A4)				/lineral (F1)			y Shallow Dark Surface (TF12)
	d Layers (A5)			-	Matrix (F2))		Oth	er Soil (Explain in Remarks)
	uck (A10)	- (0.4.4)		ted Matrix					
	d Below Dark Surface ark Surface (A12)	e (A11)			rface (F6) Surface (F	7)		3 India	cators of hydrophytic vegetation and
	Mucky Mineral (S1)			Depress		')			nd hydrology must be present, unless
_	uck Peat or Peat (S3)	1	_	·	,				disturbed or problematic.
Restrictive	Layer (If observed):								
Type:	-L \							Uvdria Cai	il procent? Ves V No
Depth (in Remarks:	icnes):							nyuric 30i	il present? Yes X No
Nemarks.									
HYDROLO	GY								
Wetland H	ydrology Indicators								
Primary Ind	licators (minimum of	one is require	ed; check all that	apply)				Secor	ndary Indicators (minimum of two required)
Surface	Water (A1)		Water Sta	ined Lea	ves (B9)				rface Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic F	auna (B1	3)			Dra	ainage Patterns (B10)
Saturati			True Aqua						y-Season Water Table (C2)
_	farks (B1)		Hydrogen			vina Po	ooto (C3	_	ayfish Burrows (C8) turation Visibile on Aerial Imagery (C9)
	nt Deposits (B2) posits (B3)		_		eres on Lived Iron (C	_	ois (Ca		unted or Stressed Plants (D1)
	at or Crust (B4)				tion in Tille		s (C6)	_	comorphic Postion (D2)
_	posits (B5)		Thin Mucl				` ,	_	C-Neutral Test (D5)
_	on Visible on Aerial I		Gauge or						
Sparsely	y Vegetated Concave	Surface (B8	Other (Ex	plain in R	emarks)				
Field Obse	rvations:								
	ater Present? Ye			(inches):	16				
Water Table				(inches): _	0				
Saturation I (includes ca	Present? Ye apillary fringe)	s <u>X</u> N	o Depth ((inches):	0	\	Wetlan	d Hydrolo	gy Present? Yes X No
Describe Re	corded Data (stream	gauge, moni	toring well, aerial	photos, p	revious in	spectio	ons), if a	vailable:	
Remarks:									

Project/Site: I-69 Section 6 Wetland S6W007A		City/County	: Morgan		Sampling [Date: 10/20/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling F	Point IC07A-1D1
Investigator(s): K. Lucier, M. Brendel		Section, To	wnship, Ra	nge: Sec 8-T11N-R1E		
Landform (hillslope, terrace, etc.): broad valley	_		Local reli	ef (concave, convex, no	ne): concav	e
Slope (%): 2-6 Lat: 39.402384	L	ong: -83.4	45141		Datum: GCS	S NAD83
Soil Map Unit Name Whitaker loam				NWI classif	ication: N/A	
Are climatic/hydrologic conditions on the site typical for this ti	me of year	? Yes	X No	(If no, explain Re	marks.)	
Are Vegetation , Soil or Hydrology signifi	-	_		Iormal Circumstances" p		s X No:
Are Vegetation , Soil or Hydrology natur				ded, explain answers in		
SUMMARY OF FINDINGS - Attach site map showin				•	,	etc.
Hydrophytic Vegetation Present? Yes X No				<u> </u>		
Hydric Soils Present? Yes No	X	ls th	ne Sample	l Area		
Wetland Hydrology Present? Yes No	Χ	with	in a Wetla	nd? Yes	No _	X
Remarks						
VEGETATION - Use scientific names of plants						
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
1. Ulmus americana	30	Yes	FACW	Number of Dominant S That Are OBL, FACW,		3 (A)
2.	-					3 (A)
3.				Total Number of Domi Species Across All Str		4 (B)
4				Percent of Dominant S		
5				That are OBL, FACW,	or FAC:	75 (A/B)
(5) (6)	30	= Total Cov	er	Prevalence Index wo	rksheet:	
Sapling/Shrub Stratum (Plot Size: 15' radius)	10	Voo	FAC	Total % Cover o		Multiply by:
1. Morus alba		Yes	FAC	OBL species	0 x 1 =	
2					30 x 2 =	
3. 4.				FAC species	90 x 3 =	270
5.				· —	25 x 4 =	
	10	= Total Cov	er	UPL species Column Totals: 1	$\frac{0}{45}$ x 5 =	= <u>0</u> 430 (B)
Herb Stratum (Plot Size: 5' radius)						``
1. Poa pratensis	80	Yes	FAC	Prevalence Ind	ex = B/A =	2.97
2. Schedonorus pratensis	25	Yes	FACU	Hydrophytic Vegetati	on Indicator	s:
3 4.	. ———			1-Rapid Test for H	ydrophytic Ve	getation:
				X 2-Dominance Test	is >50%	
5				X 3-Prevalence Index		
7.				4-Morphological Addata in Remarks or		
8.				Problematic Hydro	•	,
9				¹ Indicators of hydric so	oil and wetland	d hydrology must
10				be present, unless dis		
Nr. O. (Dist Cine) 451 and Pro-	105	= Total Cov	er			
Vine Stratum (Plot Size: 15' radius)				Hydrophytic		
1				Vegetation Present?	es X	No
2	0	= Total Cov	 er	riesent:	<u>/ </u>	
Demontos (Include phate asset as a large and a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as a large as			-			
Remarks: (Include photo numbers here or on a separate sh	eet.)					

SOIL Sampling Point IC07A-1D1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure		Remarks	;
0-5	10YR4/3	100	,				silt lo			loose mate	rial
5-16	10YR4/3	100					silt lo			gravelly	
3-10	1011(4/3						311 10			graveny	
rdric Soi Histoso Histic E Black H Hydrogo Stratifie 2 cm M Deplete	Concentration, D= De I Indiactors: I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) uck (A10) d Below Dark Surface ark Surface (A12)		Sand Sand Stripp Loam Loam Deple Redo Deple	y Gleyed N y Redox (seed Matrix y Mucky N y Gleyed Seted Matrix x Dark Su	Matrix (S4) S5) (S6) Mineral (F1) Matrix (F2) (F3) rface (F6) Surface (F)		Coast Dark S Iron-M Very S Other 3	s for Prol Prairie Re surface (S anganese hallow Da Soil (Expla	Masses (F1 ark Surface (T ain in Remark rophytic vege	ric Soils 2) F12) s) tation and
Sandy I 5 cm M	Mucky Mineral (S1) uck Peat or Peat (S3	<u></u>		x Depress				wetland		must be pres I or problemate	
strictive	Layer (If observed)	:									
Typo: ro	• •										
Depth (ii	pad fill with gravel nches): 16 inches						Hyd	Iric Soil p	resent?	Yes	No
	nad fill with gravel naches): 16 inches						Hyd	Iric Soil p	resent?	Yes	_ No _
Depth (in marks:	and fill with gravel on the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the short of the sho		ired: check all that	annly)			Hyd				
Depth (in marks: DROLO etland H imary Inc	and fill with gravel niches): 16 inches GY ydrology Indicators dicators (minimum of		,	11 77	(P0)		Hyd	Seconda	ry Indicate	ors (minimum	
Depth (in marks: DROLO etland Himary Inc. Surface	and fill with gravel onches): 16 inches GY ydrology Indicators dicators (minimum of water (A1)		Water St	ained Lea			Hyd	Seconda Surfa	ry Indicate	ors (minimum acks (B6)	
Depth (in marks: DROLO etland Himary Inc. Surface	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water St Aquatic F	11 77	3)		Hyd	Seconda Surfa Draina	ry Indicato ce Soil Cra age Pattel	ors (minimum acks (B6)	of two req
DROLO etland H imary Inc Surface High W Saturati Water M	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) fon (A3) Marks (B1)		Water St Aquatic F True Aqu Hydroger	ained Lea Fauna (B1 latic Plant n Sulfide (3) s (B14) Odor (C1)			Seconda Surfa Draina Dry-S Crayfi	ry Indicate ce Soil Cra age Patter eason Wa sh Burrow	ors (minimum acks (B6) rns (B10) ater Table (C2 vs (C8)	of two requ
DROLO etland H imary Inc Surface High W Saturati Water N Sedime	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		Water St Aquatic F True Aqu Hydroger Oxidized	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Li	-		Seconda Surfa Draina Dry-S Crayfi Satura	ry Indicate ce Soil Cra age Patter eason Wa sh Burrow ation Visib	ors (minimum acks (B6) rns (B10) ater Table (C2 vs (C8) oile on Aerial I	of two requ
DROLO etland H imary Inc Surface High W Saturati Water N Sedime Drift De	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)		Water St Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Lived ced Iron (C	4)	s (C3)	Seconda Surfac Draina Dry-S Crayfi Satura	ry Indicate ce Soil Cra age Patter eason Wa sh Burrow ation Visib	ors (minimum acks (B6) rns (B10) ater Table (C2 vs (C8) oile on Aerial I ssed Plants (I	of two requ
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water St Aquatic F True Aqu Hydrogel Oxidized Presence Recent Is	ained Lea Fauna (B1 latic Plant of Sulfide (Rhizosph of Reduc	3) s (B14) Odor (C1) heres on Lived Iron (Cetion in Tille	4)	s (C3)	Seconda Surfa Draina Dry-S Crayfi Satura Stunta	ry Indicate ce Soil Cra age Patter eason Wa sh Burrow ation Visib ed or Stres	ors (minimum acks (B6) rns (B10) ater Table (C2 vs (C8) oile on Aerial I ssed Plants (I sstion (D2)	of two requ
Depth (in marks: DROLO etland H mary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)	one is requ	Water St Aquatic F True Aqu Hydrogei Oxidized Presence Recent II Thin Muc 7) Gauge o	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Lived Iron (C etion in Tille (C7) a (D9)	4)	s (C3)	Seconda Surfa Draina Dry-S Crayfi Satura Stunta	ry Indicate ce Soil Cra age Patter eason Wa sh Burrow ation Visib	ors (minimum acks (B6) rns (B10) ater Table (C2 vs (C8) oile on Aerial I ssed Plants (I sstion (D2)	of two requ
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Project/Site: I-69 Section 6 Wetland S6W007A	City/County: Morga	an Sampling Date: 10/20/2015
Applicant/Owner: INDOT/Lochumueller		State: Indiana Sampling Point IC07A-1W1
Investigator(s): K. Lucier, M. Brendel	Section, Township,	Range: Sec 8-T11N-R1E
Landform (hillslope, terrace, etc.): broad valley	Local	relief (concave, convex, none): concave
Slope (%): 0-2 Lat: 39.402367	Long: -86.445031	Datum: GCS NAD83
Soil Map Unit Name Whitaker loam	<u></u>	NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this	stime of year? Yes X N	
Are Vegetation , Soil or Hydrology sign		re "Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology na		needed, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map show		,
Hydrophytic Vegetation Present? Yes X No No No No No No No No No No No No No N	lo the Com	pled Area
Wetland Hydrology Present? Yes X N	within a W	etland? Yes X No
Remarks		
Kondino		
VEGETATION - Use scientific names of plants		
True Questions (Diet Circus 20) redicts	Absolute Dominant Indicate	Dominarios root workeriooti
Tree Stratum (Plot Size: 30' radius) 1. Acer negundo	% Cover Species? Status 5 No FAC	Number of Dominant Species
2. Acer saccharinum	$\frac{10}{10}$ $\frac{10}{\text{Yes}}$ $\frac{1}{\text{FACV}}$	That Are OBL, FACW, or FAC: 5 (A)
3. Fraxinus pennsylvanica	5 No FACV	— I Total Number of Dominant
4. Platanus occidentalis	25 Yes FACV	y Opecies Across Air Otrata.
5. Ulmus americana	5 No FACV	Percent of Dominant Species That are OBL, FACW, or FAC: 100 (A/B)
	50 = Total Cover	
Sapling/Shrub Stratum (Plot Size: 15' radius)		Prevalence Index worksheet:
1. Morus alba	10 Yes FAC	
2. Platanus occidentalis	5 Yes FACV	
3. Salix interior	5 Yes FACV	FACW species 55 x 2 = 110 FAC species 15 x 3 = 45
4		FACU species 0 x 4 = 0
5		UPL species 0 x 5 = 0
Herb Stratum (Plot Size: 5' radius)	20 = Total Cover	Column Totals: 70 (A) 155 (B)
,		Prevalence Index = B/A = 2.21
2.		
3.		Hydrophytic Vegetation Indicators:
4.		1-Rapid Test for Hydrophytic Vegetation:
5.		X 2-Dominance Test is >50% X 3-Prevalence Index is <=\$
6		3-Prevalence Index is <=3 4-Morphological Adaptation (Provide supporting)
7		data in Remarks or on a separate sheet)
8		Problematic Hydrophytic Vegetation ¹ (Explain)
9		Indicators of hydric soil and wetland hydrology must
10	O - Total Cover	be present, unless disturbed or problematic
Vine Stratum (Plot Size: 15' radius)	0 = Total Cover	
1		Hydrophytic
2.		Vegetation Present? Yes X No
	0 = Total Cover	
Remarks: (Include photo numbers here or on a separate		
Tronuna. (morado prioto númbero nere or on a separate	011006.)	

SOIL Sampling Point IC07A-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	9	Remark	S
0-12	10YR4/1	95	10YR4/6	5	С	М	silty clay lo		very dr	у
				· · .						
ydric Soi Histoso Histic E Black H Hydrogo Stratifie 2 cm M Deplete	I Indiactors:		Sandy Stripp Loam Loam X Deple	CS=Covered / Gleyed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Dark Steed Matrix (Steed Dark Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed Matrix (Steed M	atrix (S4) 5) S6) ineral (F1 latrix (F2) (F3) face (F6))	In	Coast Prairie Dark Surface Iron-Mangane Very Shallow Other Soil (Ex	(S7) ese Masses (F- Dark Surface (cplain in Reman	dric Soils ³ 12) TF12) ks)
Sandy I	Mucky Mineral (S1) uck Peat or Peat (S	3)		c Depressio		,		vetland hydrolo	gy must be pre ped or problema	sent, unless
	Layer (If observed	١•								
	Layer (II Observed	-								
Type: Depth (ir		•					Hydrid	Soil present	? Yes <u>X</u>	No
Type: Depth (ir marks:	nches):						Hydrid	c Soil present?	? Yes <u>X</u>	No
Type:	GY ydrology Indicator	3:	quired; check all that	apply)						
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Project/Site: I-69 Section 6 Wetland S6W008A		City/Count	y: Morgan		Sampling Date:	10/16/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point	IC05A-1D1
Investigator(s): Rusty Yeager, Lincoln Oliver		Section, To	ownship, Ra	nge: Sec 8-T11N-R1E		
Landform (hillslope, terrace, etc.): floodplain			Local reli	ef (concave, convex, nor	ne): undulating	
Slope (%): 0-2 Lat: 39.401163	L	ong: -86.	443755		Datum: NAD83	
Soil Map Unit Name Water				NWI classif	fication: PUBGx	
Are climatic/hydrologic conditions on the site typical for this	s time of year	? Yes	X No	(If no, explain Re	marks.)	
Are Vegetation , Soil or Hydrology sign		-		 lormal Circumstances" p		No:
Are Vegetation , Soil or Hydrology na				ded, explain answers in		
SUMMARY OF FINDINGS - Attach site map show				•	,	
Hydrophytic Vegetation Present? Yes X N	0					
Hydric Soils Present? Yes N		ls t	the Sample	l Area		
Wetland Hydrology Present? Yes N	o X	wit	thin a Wetla	nd? Yes	NoX	_
Remarks Although hydrophytic vegetation is present, suf hydric soil indicators.	fficient hydrol	ogy indicat	tors do not a	ppear evident to meet th	ne hydrology criteria	a or develop
VEGETATION - Use scientific names of plants						
Tree Stratum (Plot Size: 30' radius)		Dominant Species?		Dominance Test wor	ksheet:	
1. Acer saccharinum	76 COVE	Yes	FACW	Number of Dominant S		(4)
2. Platanus occidentalis	10	No	FACW	That Are OBL, FACW,	-	(A)
3. Salix nigra	40	Yes	OBL	Total Number of Domin Species Across All Str		(B)
4.				Percent of Dominant S		`` ` ′
5				That are OBL, FACW,		(A/B)
	65	= Total Co	ver	D la da	-lasta - 4	
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index wo		
1. Acer saccharinum	50	Yes	FACW	Total % Cover of OBL species		y by: 41
2						170
3				FAC species	$\frac{30}{0}$ $\times 3 =$	0
5				FACU species	0 x 4 =	0
<u> </u>	50	= Total Co	ver	UPL species	0 x 5 =	0
Herb Stratum (Plot Size: 5' radius)				Column Totals: 1	26 (A)	211 (B)
1. Pilea pumila	10	Yes	FACW	Prevalence Inde	ex = B/A =1	.67
2. Boehmeria cylindrica	1	No	OBL	Hydrophytic Vegetati	ion Indicators	
3				1-Rapid Test for Hy		on:
4				X 2-Dominance Test		OH.
5				X 3-Prevalence Index		
6				4-Morphological Ac		
7 8.				data in Remarks or Problematic Hydror	•	,
9.				_		
10.				¹ Indicators of hydric so be present, unless dist		
	11	= Total Co	ver		· · · · · · · · · · · · · · · · · · ·	
Vine Stratum (Plot Size: 30' radius)				Hydrophytic		
1				Vegetation		
2				Present? Y	es X No	
	0	= Total Co	ver			
Remarks: (Include photo numbers here or on a separate	sheet.)					

SOIL Sampling Point IC05A-1D1

							absence of indica	
Depth	Matrix		Red	ox Featu	res			
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-20	10YR4/3	99	5YR5/6	1	С	M	sandy loam	dry non-cohesive sand
	-							
-				-				
-				-				
	-			-				
								
¹ Type: C=C	Concentration, D= De	epletion, F	RM=Reduced Matrix,	CS=Cove	ered or Coa	ited Sand	d Grains. ² Loc	cation: PL=Pore Lining, M=Matrix
Hydric Soi	I Indiactors:						Indiact	ors for Problematic Hydric Soils ³
Histosol	I (A1)		Sandy	Gleved	Matrix (S4)		Coas	st Prairie Redox (A16)
_	pipedon (A2)			Redox				Surface (S7)
_	istic (A3)			ed Matrix			Iron-	Manganese Masses (F12)
Hydroge	en Sulfide (A4)		Loam	Mucky	Mineral (F1)	Very	Shallow Dark Surface (TF12)
_	d Layers (A5)				Matrix (F2))	Othe	er Soil (Explain in Remarks)
	uck (A10)			ted Matri	. ,			
_	d Below Dark Surfac	ce (A11)			urface (F6)	- \	2 lastin	-t of bdub. tit-tid
	ark Surface (A12)				Surface (F	7)		ators of hydrophytic vegetation and d hydrology must be present, unless
_	Mucky Mineral (S1) uck Peat or Peat (S3	8)	Redox	Depres	sions (F8)			disturbed or problematic.
	Layer (If observed)							
Type:	Layer (II Observed)) -						
Depth (ir	nches):						Hydric Soil	present? Yes No X
Remarks:	,							
Sandy soils	do not appear to rer	main wet f	or sufficient period of	time to o	develop red	oximorph	nic features.	
	• •		·		•	·		
	CV							
HYDROLO	GY							
	GY ydrology Indicators	s:						
Wetland H	ydrology Indicators		quired; check all that	apply)			Second	dary Indicators (minimum of two required)
Wetland H	ydrology Indicators		quired; check all that		aves (B9)		·	dary Indicators (minimum of two required) face Soil Cracks (B6)
Wetland H	ydrology Indicators dicators (minimum of		•	ained Lea			Sur	
Wetland H	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water Sta	ained Lea auna (B	13)		Suri	face Soil Cracks (B6)
Wetland H Primary Inc Surface High Wa Saturati Water M	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water Sta Aquatic F True Aqu Hydroger	ained Lea auna (B atic Plan Sulfide	13) ts (B14) Odor (C1)		Surl Dra Dry- Cra	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8)
Wetland H Primary Inc Surface High Wa Saturati Water M Sedime	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) nt Deposits (B2)		Water Sta Aquatic F True Aqu Hydroger Oxidized	ained Lea auna (Br atic Plan Sulfide Rhizosp	13) ts (B14) Odor (C1) heres on Li	_	Suri Dra Dry Cra ts (C3) Sati	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9)
Wetland H Primary Inc Surface High Wa Saturati Water M Sedime Drift De	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)		Water Sta Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea auna (B atic Plan Sulfide Rhizospl	ts (B14) Odor (C1) heres on Liveced Iron (C	4)	Suri Dra Dry Cra ts (C3) Satu	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) inted or Stressed Plants (D1)
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Project/Site: I-69 Section 6 Wetland S6W008A	(City/County:	Morgan	Sampling Date: 10/16/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point IC05A-1W1
Investigator(s): Rusty Yeager, Lincoln Oliver		Section, To	wnship, Ra	inge: Sec 8-T11N-R1E
Landform (hillslope, terrace, etc.): old oxbow channel			Local reli	ief (concave, convex, none): floodplain depression
Slope (%): <u>0-6</u> Lat: <u>39.401279</u>	L	ong: <u>-86.4</u> 4	43774	Datum: NAD83
Soil Map Unit Name Water		<u>-</u>		NWI classification: PUBGx
Are climatic/hydrologic conditions on the site typical for this time	e of year?	? Yes	X No	(If no, explain Remarks.)
Are Vegetation , Soil or Hydrology significan				Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology naturally			If nee	eded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing s			ocations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No				
Hydric Soils Present? Yes X No			ie Sampled in a Wetla	
Wetland Hydrology Present? Yes X No		With	III d VVeua	nd? Yes X No
Remarks Old oxbow feature meets all three wetland criteria.				
VEGETATION - Use scientific names of plants				
(m.) m.)		Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Acer saccharinum	10	Yes	FACW	Number of Dominant Species
2. Platanus occidentalis	10	Yes	FACW	That Are OBL, FACW, or FAC: 5 (A)
3. Salix nigra	10	Yes	OBL	Total Number of Dominant Species Across All Strata: 5 (B)
4.				Percent of Dominant Species
5.				That are OBL, FACW, or FAC: 100 (A/B)
	30 =	= Total Cove	er	
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index worksheet:
1. Acer negundo	5	Yes	FAC	Total % Cover of: Multiply by:
2				OBL species 11 x 1 = 11 FACW species 20 x 2 = 40
3				FAC species 10 x 3 = 30
4				FACU species 0 x 4 = 0
5	 5 =	= Total Cove		UPL species 0 x 5 = 0
Herb Stratum (Plot Size: 5' radius)		- 10101 0011	J1	Column Totals: (A) 81 (B)
1. Xanthium strumarium	5	Yes	FAC	Prevalence Index = B/A =1.98
2. Bidens tripartita	1	No	OBL	Hadronhada Vanatalian la disatan
3				Hydrophytic Vegetation Indicators:
4				1-Rapid Test for Hydrophytic Vegetation: X 2-Dominance Test is >50%
5				X 2-Dominance Test is >50% X 3-Prevalence Index is <=3
6				4-Morphological Adaptation (Provide supporting
7				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9. 10.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
	6 =	= Total Cove	er	be present, unless disturbed of problematio
Vine Stratum (Plot Size: 30' radius)				11d-anh, dia
1				Hydrophytic Vegetation
2				Present? Yes X No
	0 =	= Total Cove	er	
Remarks: (Include photo numbers here or on a separate sheet	t.)			
Central portion of this old oxbow features is completely devoid	of wood	y and herba	ceous veg	etation. Vegetation is confirned for periphery of wetland
boundary.				

SOIL Sampling Point IC05A-1W1

Indiactors for Problematic Hydric Histosol (A1)	Depth	Matrix		Red	lox Feature:	3			
Type: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Location: PL=Pore Lining, M=M ydric Soil Indiactors: Indiactors for Problematic Hydric Soil Indiactors for Problematic Hydric Soil Indiactors for Problematic Hydric Soil Indiactors for Problematic Hydric Soil Plack Histic (A) Sandy Redox (S5) Dark Surface (C3) Black Histic (A3) Stripped Matrix (S6) Dark Surface (F12) Loany Mucky Mineral (F1) Very Shallow Dark Surface (F12) Com Muck (A10) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F3) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Redox Dark Surface (A12) Depleted Dark Surface (F6) Redox Depressions (F8) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Surface (F7) Redox Dark Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F7) Surface (F	(Inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
Histosol (A1)	0-20	10YR4/1	90	2.5YR4/8	10	С	M	silt loam	
Histoso (A1) Histoso (A1) Histoso (A2) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Black Histo (A3) Beptied Matrix (F3) Beptied Matrix (F2) Beptied Matrix (F2) Beptied Matrix (F3) Beptied Matrix (F3) Beptied Below Dark Surface (A11) Beptied Below Dark Surface (A11) Beptied Below Dark Surface (A11) Beptied Below Dark Surface (A12) Beptied Dark Surface (F7) Bedox Depressions (F8) Bedox Depressions (F8) Brack Water (F1) Brack Water (F1) Brack Water (F1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Brack Water (A1) Bra					 				
Strictive Layer (If observed): Type: Type: Depth (inches): marks: Hydric Soil present? Yes _ X	Histoso Histic E Black H Hydroge Stratifie 2 cm Me Deplete Thick D	I Indiactors: I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) uck (A10) d Below Dark Surfa ark Surface (A12)		Sand Sand Stripp Loam Loam Deple Redo	y Gleyed May Redox (Stock Matrix (Stock Matrix (Stock Ming) Gleyed Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matrix (Stock Matri	atrix (S4) 5) S6) ineral (F1 latrix (F2) (F3) ace (F6) urface (F)	Indiac Cor Dan Iror Ven Oth	rk Surface (S7) n-Manganese Masses (F12) ry Shallow Dark Surface (TF12) ner Soil (Explain in Remarks) cators of hydrophytic vegetation and
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etland Hydrology Indicators: imary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Stained Leaves (B9) Aquatic Fauna (B13) Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imager (B7) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) eld Observations: urface Water Present? Yes X No Depth (inches): urface Water Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes No X Depth (inches): uttraction Present? Yes X No X Depth (inches): uttraction Present? Uttraction Present? Uttraction Present? Uttraction Present? Uttraction Pre								Hydric So	il present? Yes X No
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Surface Water (A1)	Depth (ir	nches):						Hydric So	il present? Yes X No
High Water Table (A2) Saturation (A3) Aquatic Fauna (B13) Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Peth Mo X Depth (inches): Indicate Table Present? Yes No X Depth (inches): Includes capillary fringe) Aquatic Fauna (B13) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (B7) Squaration Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Other (Explain in Remarks) Wetland Hydrology Present? Yes X Depth (inches): Includes capillary fringe) Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (ir	GY	,					Hydric So	il present? Yes X No
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ultiple aerial images in combination with the lack of vegetation indicate this area remains inundated for extended periods of time. Northe	Depth (in property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the prop	GY ydrology Indicato dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca ervations: ater Present? e Present? Present? apillary fringe)	I Imagery (Eve Surface	Water St Aquatic F True Aqu Hydroger Oxidized Presencer Recent In Thin Muc (B8) Other (E: No Depth No X Depth No X Depth	ained Leave Fauna (B13) uatic Plants in Sulfide Oc Rhizospher e of Reduce con Reductic ck Surface (in r Well Data xplain in Re (inches): (inches):	(B14) (B14) dor (C1) res on Lived Iron (Coon in Tille (C7) (D9) emarks)	4) d Soils (C	Seco St Dr Cr (C3)	ndary Indicators (minimum of two requ urface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) aturation Visibile on Aerial Imagery (Csunted or Stressed Plants (D1) ecomorphic Postion (D2) AC-Neutral Test (D5)

Project/Site: I-69 Section 6 Wetland S6W008C		City/County	: Morgan	Sampling Date: 10/16/2015			
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point IC05C-1D1			
Investigator(s): Rusty Yeager, Lincoln Oliver		Section, To	wnship, Ra	nge: Sec 8-T11N-R1E			
Landform (hillslope, terrace, etc.): excavated lake/pond hills				ef (concave, convex, none): concave			
Slope (%): 12+ Lat: 39.401992		ong: -86.4	42095	Datum: NAD83			
Soil Map Unit Name Water				NWI classification: PUBGx			
· ————————————————————————————————————	me of year	ear? Yes X No (If no, explain Remarks.)					
Are Vegetation , Soil X or Hydrology signifi				Normal Circumstances" present? Yes X No:			
				ded, explain answers in Remarks.)			
Are Vegetation, Soil or Hydrology nature SUMMARY OF FINDINGS - Attach site map showin				,			
Hydrophytic Vegetation Present? Yes X No							
Hydric Soils Present? Yes No	Х	ls th	ne Sampled	d Area			
Wetland Hydrology Present? Yes No	Χ	with	nin a Wetla	nd? Yes NoX			
Remarks The hillslope above the toe of slope represented to result in hydric soil features.	by this data	a point exhil	bits hydropl	hytic vegetation, but does not have sufficient hydrology			
VEGETATION - Use scientific names of plants							
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. Fraxinus pennsylvanica	20	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)			
2. Liriodendron tulipifera	10	No	FACU				
3. Salix nigra	15	Yes	OBL	Total Number of Dominant Species Across All Strata: 5 (B)			
4				Percent of Dominant Species			
5				That are OBL, FACW, or FAC:100 (A/B)			
	45	= Total Cov	er	Prevalence Index worksheet:			
Sapling/Shrub Stratum (Plot Size: 15' radius)	00	V	540				
1. Acer negundo 2. Acer saccharinum	20	Yes	FACW	Total % Cover of: Multiply by: OBL species 30 x 1 = 30			
2. Acer saccriamum 3. Cephalanthus occidentalis	10 15	Yes Yes	OBL	FACW species $35 \times 2 = 70$			
4. Ulmus americana	5	No	FACW	FAC species 32 x 3 = 96			
5.				FACU species 10 x 4 = 40			
	50	= Total Cov	er	UPL species 0 x 5 = 0			
Herb Stratum (Plot Size: 5' radius)				Column Totals: 107 (A) 236 (B)			
Toxicodendron radicans	10		FAC	Prevalence Index = B/A = 2.21			
2				Hydrophytic Vegetation Indicators:			
3				1-Rapid Test for Hydrophytic Vegetation:			
4				X 2-Dominance Test is >50%			
5				X 3-Prevalence Index is <=3			
6				4-Morphological Adaptation (Provide supporting			
7				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation 1 (Explain)			
8. 9.				-			
10.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic			
	10	= Total Cov	er				
Vine Stratum (Plot Size: 30' radius)				Hydrophytic			
1. Toxicodendron radicans	2			Vegetation			
2				Present? Yes X No			
	2	= Total Cov	er				
Remarks: (Include photo numbers here or on a separate sh Buttonbush was present on lower portion of hill slope with the	,	above toe o	of slope to w	vetland.			

SOIL Sampling Point IC05C-1D1

(Inches)	Color (moist)	%	Color (moist)	% Type ¹	Loc ²	Texture		Remarks	
0-3	10YR3/2	100	` '			silt loam			
3-20	10YR4/6	100				sand	-		
							_		
Гуре: С=0	Concentration, D= De	pletion, RM	l=Reduced Matrix,	CS=Covered or Coa	ated Sand	Grains. ² L	ocation: PL=F	Pore Lining, M=Ma	ıtrix
ydric So	I Indiactors:					India	ctors for Prol	blematic Hydric S	oils
Histoso	l (A1)		Sandy	Gleyed Matrix (S4))		oast Prairie Re		
-	pipedon (A2)			Redox (S5)			ark Surface (S		
-	istic (A3)			ed Matrix (S6)				Masses (F12)	
	en Sulfide (A4)			y Mucky Mineral (F			-	ark Surface (TF12)	
-	d Layers (A5)			y Gleyed Matrix (F2)	Ot	her Soil (Expla	ain in Remarks)	
-	uck (A10)	(*)		ted Matrix (F3)					
-	d Below Dark Surfac	e (A11)		Dark Surface (F6)	· - ·	2			
•	ark Surface (A12)			ted Dark Surface (F	·7)			rophytic vegetation must be present, i	
_	Mucky Mineral (S1) uck Peat or Peat (S3)	Redox	Depressions (F8)		WOU		or problematic.	unicoo
	Layer (If observed):								
	, ,								
Туре:								.,	
Type:						ace soils on th	pil present?	Yesnot represent natu	No _
Type:	e that defines the webil on the hillslope do					ace soils on th	•		
Type:	e that defines the well oil on the hillslope do	not stay sa				ace soils on th	•		
Type: Depth (ii marks: e hillslop tterial. S	e that defines the webil on the hillslope do	not stay sa	aturated and therefo	ore do not exhibit re		ace soils on th c features.	e hillslope do		ıral nat
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Project/Site: I-69 Section 6 Wetland S6W008C	City/County: Morgan	Sampling Date: 10/16/2015
Applicant/Owner: INDOT/Lochumueller		State: Indiana Sampling Point IC05C-1W1
Investigator(s): Rusty Yeager, Lincoln Oliver	Section, Township, Ra	nge: Sec 8-T11N-R1E
Landform (hillslope, terrace, etc.): excavated lake/pond	 Local reli	ef (concave, convex, none): concave
Slope (%): 0-2 Lat: 39.402036	Long: -86.442310	Datum: NAD83
Soil Map Unit Name Water	_	NWI classification: PUBGx
Are climatic/hydrologic conditions on the site typical for this time of	fyear? Yes X No	
Are Vegetation , Soil or Hydrology significantly		Normal Circumstances" present? Yes X No:
		eded, explain answers in Remarks.)
Are Vegetation, Soil or Hydrology naturally possible SUMMARY OF FINDINGS - Attach site map showing sar		,
<u> </u>	—	and society important router so; stor
Hydrophytic Vegetation Present? Yes X No Hydric Soils Present? Yes X No	Is the Sample	d Area
Wetland Hydrology Present?	within a Wetla	
	- Clarical Cartage	with the first and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of
Remarks Vegetation diversity is limited on this seasonally expose the dry season, surface/near surface saturation occurs		
VEGETATION - Use scientific names of plants		
	olute Dominant Indicator	Dominance Test worksheet:
1 Acer saccharinum	over Species? Status 0 Yes FACW	Number of Dominant Species
2. Salix nigra 4		That Are OBL, FACW, or FAC: 4 (A)
3.		Total Number of Dominant Species Across All Strata: 4 (B)
4.		Percent of Dominant Species
5.		That are OBL, FACW, or FAC:100(A/B)
50	60 = Total Cover	
Sapling/Shrub Stratum (Plot Size: 15' radius)		Prevalence Index worksheet:
1. Salix nigra	5 Yes OBL	Total % Cover of: Multiply by:
2		OBL species 55 x 1 = 55 FACW species 10 x 2 = 20
3		FACW species 10 x 2 = 20 FAC species 0
4		FACU species 0 x 4 = 0
5	5 = Total Cover	UPL species 0 x 5 = 0
Herb Stratum (Plot Size: 5' radius)		Column Totals:65
1. Justicia americana	0 Yes OBL	Prevalence Index = B/A = 1.15
2.		
3.		Hydrophytic Vegetation Indicators:
4		X 1-Rapid Test for Hydrophytic Vegetation: X 2-Dominance Test is >50%
5		X 3-Prevalence Index is <=3
6		4-Morphological Adaptations (Provide supporting
7	<u> </u>	data in Remarks or on a separate sheet)
8		Problematic Hydrophytic Vegetation ¹ (Explain)
9	— — —	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
	0 = Total Cover	be present, unless disturbed of problematic
Vine Stratum (Plot Size: 30' radius)		
1		Hydrophytic Vegetation
2.		Present? Yes X No
	0 = Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.)		
Other areas on the small peninsular island have greater cover of v	water willow than that repres	sented at this data point.

SOIL Sampling Point IC05C-1W1

Profile Desc	ription: (Describe t	o the depth	needed to documne	t the indi	cator or co	nfirm the	e absence of indic	ators.)
Depth	Matrix		Redo	x Featu	res		_	
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-20	10YR4/1	95	7.5YR4/6	5	C	М	silty clay loam	
-								
	-			-	· ——		· ——	
-								·
-				-			· ———	
¹ Type: C=C	concentration, D= D	epletion, R	M=Reduced Matrix, 0	CS=Cove	ered or Coa	ated San	nd Grains. ² Loc	cation: PL=Pore Lining, M=Matrix
Hydric Soi	I Indiactors:						Indiact	ors for Problematic Hydric Soils ³
Histosol	(Δ1)		Sandy	Gleved	Matrix (S4)			st Prairie Redox (A16)
_	pipedon (A2)			Redox (Surface (S7)
	istic (A3)			ed Matrix				-Manganese Masses (F12)
	en Sulfide (A4)				Mineral (F1)		Shallow Dark Surface (TF12)
	d Layers (A5)			-	Matrix (F2)			er Soil (Explain in Remarks)
	uck (A10)			ed Matri	, ,		_	, ,
	d Below Dark Surfa	ice (A11)			ırface (F6)			
	ark Surface (A12)	,			Surface (F	7)		ators of hydrophytic vegetation and
Sandy N	Mucky Mineral (S1)		Redox	Depress	sions (F8)		wetlan	d hydrology must be present, unless
5 cm Mi	uck Peat or Peat (S	3)						disturbed or problematic.
Restrictive	Layer (If observed	l):						
Type:								
Depth (ir	nches):						Hydric Soil	present? Yes X No
Remarks:								
saturation/in								
HYDROLO	GY							
Wetland H	ydrology Indicator	·c·						
			quired; check all that a	annly)			Sooon	dary Indicators (minimum of two required)
	,	7 0110 10 100	· · · · · · · · · · · · · · · · · · ·	,	(DO)			dary Indicators (minimum of two required)
	Water (A1) ater Table (A2)		Water Sta Aquatic F					face Soil Cracks (B6) inage Patterns (B10)
X Saturati			True Aqua					-Season Water Table (C2)
_	farks (B1)		Hydrogen					yfish Burrows (C8)
	nt Deposits (B2)				neres on Liv	vina Roc	_	uration Visibile on Aerial Imagery (C9)
_	posits (B3)				ced Iron (C	-		nted or Stressed Plants (D1)
	at or Crust (B4)				ction in Tille			omorphic Postion (D2)
	posits (B5)		Thin Mucl				· ·	C-Neutral Test (D5)
	on Visible on Aeria	l Imagery (I			. ,		_	, ,
	y Vegetated Conca			plain in F	Remarks)			
Field Obse	rvations:		<u> </u>			1		
		Voc.	No V Donth	inches).				
		Yes Yes X		inches):	10			
Water Table				inches):	0			
Saturation (includes ca	Present? apillary fringe)	Yes X	No Depth (inches):	0	— '	Wetland Hydrolog	gy Present? Yes X No
		m gauge, n	nonitoring well, aerial	photos,	previous in	spection	ns), if available:	
Remarks:								
	er present around t	he peripher	y of this vegetative is	land bas	ed on curre	ent wate	er conditions. Und	er wet season conditions the island area
	deated for extened							

Project/Site: I-69 Section 6 Wetland S6W009A	City/	County: Mo	organ	Sampling Date: 10/20/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point IC06A-1D1
Investigator(s): K. Lucier	Sect	ion, Townsł	nip, Range:	Sec 8-T11N-R1E
Landform (hillslope, terrace, etc.): broad valley		Lo	cal relief (c	oncave, convex, none): flat
Slope (%): 0-1 Lat: 39.403123	Long:	-86.44343	31	Datum: GCS NAD83
Soil Map Unit Name Princeton fine sandy loam				NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this tin	ne of year?	Yes X	No	(If no, explain Remarks.)
Are Vegetation , Soil X or Hydrology signific				al Circumstances" present? Yes No: X
Are Vegetation , Soil or Hydrology natura				explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing				
Hydrophytic Vegetation Present? Yes X No				
Hydric Soils Present? Yes No	X	Is the S	ampled Ar	ea
Wetland Hydrology Present? Yes No	X	within a	Wetland?	Yes NoX
Remarks Recently disturbed habitat lacks hydrology and hydrocentric names of plants	dric soil indica	tors.		
VEGETATION - Use scientific names of plants	Abaduta Dan	ninant Indi	ootor B	
/=- / =	Absolute Don % Cover Spe		atus	ominance Test worksheet:
1. Populus deltoides		res F		umber of Dominant Species lat Are OBL, FACW, or FAC: 5 (A)
2				otal Number of Dominant
3			Sp	pecies Across All Strata: 6 (B)
4				ercent of Dominant Species
5		tal Cover	I In	at are OBL, FACW, or FAC: 83 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	= 10	lai Covei	Pr	evalence Index worksheet:
1. Fraxinus pennsylvanica	١	res FA	ACW	Total % Cover of: Multiply by:
2. Populus deltoides		res F	AC OI	BL species 0 x 1 = 0
3. Salix interior		res FA		ACW species 0 x 2 = 0
4				AC species 0 x 3 = 0
5				ACU species $0 x 4 = 0$ PL species $0 x 5 = 0$
(5)	= To	tal Cover		olumn Totals: 0 (A) 0 (B)
Herb Stratum (Plot Size: 5' radius)	,	/aa ===		
Symphyotrichum lanceolatum Solidago altissima			ACU	Prevalence Index = B/A = #Num!
3. Medicago sativa				drophytic Vegetation Indicators:
4.			_	1-Rapid Test for Hydrophytic Vegetation:
5.			<u> </u>	2-Dominance Test is >50%
6.				3-Prevalence Index is <=3 4-Morphological Adaptations (Provide supporting
7				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9				dicators of hydric soil and wetland hydrology must
10		tal Cavar	be	present, unless disturbed or problematic
Vine Stratum (Plot Size: 15' radius)	0 = To	tal Cover		
1				ydrophytic
2.				egetation esent? Yes X No
	0 = To	tal Cover		
Remarks: (Include photo numbers here or on a separate she	eet.)		·	

SOIL Sampling Point IC06A-1D1

Profile Description: (Des							,	
Борин	latrix		dox Featur		1 2	- .	D	a ula
(Inches) Color (m		Color (moist)	%	Type ¹	Loc ²	Texture	Rem	larks
Type: C=Concentration Hydric Soil Indiactors: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4 Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Thick Dark Surface (A2) Sandy Mucky Minera 5 cm Muck Peat or P	Surface (A11) A12) I (S1)	Sanc Sanc Strip Loan Loan Depl Redc Depl	dy Gleyed Matrix any Mucky Matrix by Gleyed Matrix any Mucky Matrix by Gleyed I eted Matrix box Dark Sureted Dark Sox	Matrix (S4) S5) (S6) Mineral (F1 Matrix (F2 (F3) rface (F6) Surface (F)))	Indiact Coa Dark Iron- Very Othe	cation: PL=Pore Linin ors for Problematic st Prairie Redox (A16 s Surface (S7) Manganese Masses r Shallow Dark Surface or Soil (Explain in Ren ators of hydrophytic v d hydrology must be disturbed or proble	Hydric Soils ³) (F12) ie (TF12) narks) regetation and present, unless
Restrictive Layer (If obs Type: Depth (inches):	erved):					Hydric Soil	present? Yes _	No <u>X</u>
Remarks:								
YDROLOGY								
	num of one is re 2) 32) 4) Aerial Imagery	Water S Aquatic True Aq Hydroge Oxidized Presend Recent Thin Mu (B7) Gauge C	t apply) tained Lear Fauna (B1: uatic Plante n Sulfide C d Rhizosph e of Reduc ron Reduc ck Surface or Well Data explain in R	3) s (B14) Odor (C1) eres on Li ted Iron (C tion in Tille (C7) a (D9)	(4)	Sur Dra Dry Cra s (C3) Sat Stu Geo	dary Indicators (minin face Soil Cracks (B6) inage Patterns (B10) -Season Water Table yfish Burrows (C8) uration Visibile on Ae inted or Stressed Plan omorphic Postion (D2 C-Neutral Test (D5)	(C2) rial Imagery (C9) tts (D1)
Wetland Hydrology Ind Primary Indicators (minir Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Inundation Visible on	num of one is re 2) 32) 4) Aerial Imagery Concave Surface Yes Yes Yes Yes	Water S	tained Lear Fauna (B1: uatic Plants n Sulfide C d Rhizosph e of Reduct ron Reduct ck Surface or Well Data	3) s (B14) Odor (C1) eres on Li ced Iron (C tion in Tille (C7) a (D9) emarks)	C4) C4) C4) C6 C7	Sur Dra Dry Cra s (C3) Sat Stu Geo	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table yfish Burrows (C8) uration Visibile on Aented or Stressed Planomorphic Postion (D2 C-Neutral Test (D5)	(C2) rial Imagery (C9) tts (D1)
YDROLOGY Wetland Hydrology Ind Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B) Iron Deposits (B5) Inundation Visible on Sparsely Vegetated (C) Field Observations: Surface Water Present? Water Table Present?	2) 32) 4) Aerial Imagery Concave Surface Yes Yes Yes Yes	Water S Aquatic True Aq Hydroge Oxidized Presend Recent I Thin Mu (B7) Gauge of e (B8) Other (E	tained Lear Fauna (B1: uatic Plants In Sulfide C I Rhizosph I of Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron R	3) s (B14) Odor (C1) eres on Li ced Iron (C tion in Tille (C7) a (D9) emarks)	c4) ed Soils (C	Sur Dra Dry Cra s (C3) Sat Stu C6) Gec FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table yfish Burrows (C8) uration Visibile on Aented or Stressed Planomorphic Postion (D2 C-Neutral Test (D5)	(C2) rial Imagery (C9) its (D1))
YDROLOGY Wetland Hydrology Ind Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Sparsely Vegetated (C4) Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe	2) 32) 4) Aerial Imagery Concave Surface Yes Yes Yes Yes	Water S Aquatic True Aq Hydroge Oxidized Presend Recent I Thin Mu (B7) Gauge of e (B8) Other (E	tained Lear Fauna (B1: uatic Plants In Sulfide C I Rhizosph I of Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron Reduct Iron R	3) s (B14) Odor (C1) eres on Li ced Iron (C tion in Tille (C7) a (D9) emarks)	c4) ed Soils (C	Sur Dra Dry Cra s (C3) Sat Stu C6) Gec FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table yfish Burrows (C8) uration Visibile on Aented or Stressed Planomorphic Postion (D2 C-Neutral Test (D5)	(C2) rial Imagery (C9) tts (D1))

Project/Site: I-69 Section 6 Wetland S6W009A		City/County	r: Morgan		Sampling Date: 10/20/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point IC06A-1W1
Investigator(s): K. Lucier		Section, To	wnship, Ra	ange: Sec 8-T11N-R1E	
Landform (hillslope, terrace, etc.): broad valley			Local reli	ief (concave, convex, no	ne): concave
Slope (%): 0-1 Lat: 39.403227	L	.ong: -86.4	43461		Datum: GCS NAD83
Soil Map Unit Name Princeton fine sandy loam		-		NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for thi	is time of year	? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology sig		_			present? Yes X No:
Are Vegetation, Soil or Hydrologyna				eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show					
Hydrophytic Vegetation Present? Yes X	No				
	No	ls ti	ne Sample	d Area	
Wetland Hydrology Present? Yes X	No	with	nin a Wetla	and? Yes	X No
Remarks Data point represents vegetated shelf of linear	r excavated fe	ature adjac	ent to fields	3 .	
VEGETATION - Use scientific names of plants					
VEGETATION - Ose scientific fiames of plants	Absolute	Dominant	Indicator	Dominance Test wor	rkshoot:
Tree Stratum (Plot Size: 30' radius)		Species?	Status	Number of Dominant S	
1				That Are OBL, FACW,	
2				Total Number of Domi	
3.				Species Across All Str	rata: <u>4</u> (B)
4				Percent of Dominant S That are OBL, FACW,	
5		= Total Cov	er	That are OBL, I ACW,	, of 1 AC. 100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)		= Total Oov	Ci	Prevalence Index wo	orksheet:
1. Fraxinus pennsylvanica	5	Yes	FACW	Total % Cover o	of: Multiply by:
2. Salix interior	10	Yes	FACW	OBL species	0 x 1 = 0
3.				· · · · · · · · · · · · · · · · · · ·	50 x 2 = 100
4				FAC species	0 x 3 = 0
5				FACU species UPL species	$\begin{array}{ccc} 0 & x & 4 = & 0 \\ 0 & x & 5 = & 0 \end{array}$
	15	= Total Cov	er	· · · · · · · · · · · · · · · · · · ·	50 (A) 100 (B)
Herb Stratum (Plot Size: 5' radius)		.,	=		 ``
1. Phalaris arundinacea	<u>25</u> 10	Yes	FACW	Prevalence Ind	dex = B/A = 2.00
Juncus torreyi 3.		Yes	FACW	Hydrophytic Vegetat	ion Indicators:
				1-Rapid Test for H	lydrophytic Vegetation:
5				X 2-Dominance Test	
6.				X 3-Prevalence Index	
7.					daptations (Provide supporting r on a separate sheet)
8.					phytic Vegetation ¹ (Explain)
9				—	oil and wetland hydrology must
10				be present, unless dis	
Ni O (Diet Cies, 45) as live	35	= Total Cov	er		
Vine Stratum (Plot Size: 15' radius)				Hydrophytic	
1				Vegetation	res X No
2	0 :	= Total Cov	er	Present? Y	NO
		_ 10ta100V	U 1		
Remarks: (Include photo numbers here or on a separate	e sneet.)				
Also included Carex sp.					

SOIL Sampling Point IC06A-1W1

Depth	Matri				ox Feature						_	_	
(Inches)	Color (moist)	%	Color	(moist)	<u>%</u>	Type ¹	Loc ²	Text			Rer	narks	
0-6	10YR4/1	95	10YR4/6		5		M	silty cla	y loam		ver	y dry	
Histosol Histic Ep Black Hi Hydroge Stratified 2 cm Mu Depleted	oipedon (A2) stic (A3) on Sulfide (A4) d Layers (A5) lick (A10) d Below Dark Sur		RM=Reduce	Sandy Sandy Strippe Loamy Loamy Deplet Redox	Gleyed M Redox (Sed Matrix Mucky M Gleyed M red Matrix Dark Sur	Matrix (S4) (S5) (S6) Mineral (F1) Matrix (F2) (F3) face (F6))	d Grains.	Indiact Coar Dark Iron- Very Othe	cation: PL= ors for Pro st Prairie R s Surface (\$ Manganes Shallow D er Soil (Exp	edox (A10 S7) e Masses erk Surfa dain in Re	Hydric 6) (F12) ce (TF12 marks)	Soils ³
Sandy M	ark Surface (A12) lucky Mineral (S1 uck Peat or Peat (_	ed Dark S Depressi	Surface (Fi	7)			ators of hydrolog d hydrolog disturbe		present	
	Layer (If observe	ed):											
Type: Depth (in		ed):						Нус	dric Soil	present?	Yes _.	X	No _
Type: Depth (in marks:	ches):	d):						Нус	dric Soil	present?	Yes	X	No _
Type:	ches):	ors:	equired; che	ck all that a	apply)			Нус		present?			
DROLOG Wetland Hyrimary Ind Surface High Was Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation	ches): GY /drology Indicat icators (minimum Water (A1) ater Table (A2)	ors: of one is re	— — — — — — — — — — — —	ck all that a Water Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or Other (Exp	nined Leavauna (B13 atic Plants Sulfide C Rhizospho of Reduct on Reduct s Surface Well Data	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	ds (C3)	Secon Sur Dra Dry Cra Sat Stu X Geo		itors (mini Fracks (B6 Frns (B10) Fater Table Ws (C8) Fibile on Ae Fessed Pla Fostion (D2)	mum of)) e (C2) erial Ima	two requ
DROLOG Vetland Hyrimary Ind Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely	ches): /drology Indicaticators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aer Vegetated Concrvations:	ors: of one is re	(B7) e (B8)	Water Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or Other (Exp	ined Leavauna (B13 auna (B13 Sulfide C Rhizospho of Reduct on Reduct on Reduct on Surface Well Data plain in R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	ds (C3)	Secon Sur Dra Dry Cra Sat Stu X Geo	dary Indica face Soil C inage Patte -Season W yfish Burro uration Vis nted or Stre omorphic P	itors (mini Fracks (B6 Frns (B10) Fater Table Ws (C8) Fibile on Ae Fessed Pla Fostion (D2)	mum of)) e (C2) erial Ima	two requ
DROLOG Vetland Hyrimary Ind Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Seld Obse Vater Table aturation F	ches): ches): ches): ches drology Indicat icators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aer droved Vegetated Concervations: ater Present? Present?	ors: of one is re	— — — — — — — — — — — —	Water Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or Other (Exp	nined Leavauna (B13 atic Plants Sulfide C Rhizospho of Reduct on Reduct s Surface Well Data	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4) ed Soils (ts (C3)	Secon Sur Dra Dry Cra Sat Stu X Gec X FAC	dary Indica face Soil C inage Patte -Season W yfish Burro uration Vis nted or Stre omorphic P	tors (mini fracks (B6 erns (B10) fater Table ws (C8) fibile on Ae essed Pla fostion (D2) fest (D5)	mum of)) e (C2) erial Ima nts (D1) 2)	two requ
DROLOG Tetland Hyrimary Ind Surface High Was Saturation Vater M Sedimer Drift Dep Algal Ma Iron Dep Inundation Sparsely eld Obse attraction F includes ca	ches): ches): ches): ches drology Indicat icators (minimum water (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aer droved Vegetated Cond rvations: ater Present? ater Present?	al Imagery ave Surfac Yes Yes Yes	(B7) — e (B8) — No X No X	Water Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or Other (Exp	ined Leavanna (B13 atic Plants Sulfide CRhizosphor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reduct	3) s (B14) Odor (C1) eres on Liv ed Iron (C tion in Tille (C7) a (D9) emarks)	4) dd Soils (ds (C3) C6)	Secon Sur Dra Dry Cra Sat Stu X Geo	dary Indica face Soil C inage Patte -Season W yfish Burro uration Vis nted or Stro omorphic P C-Neutral T	tors (mini fracks (B6 erns (B10) fater Table ws (C8) fibile on Ae essed Pla fostion (D2) fest (D5)	mum of)) e (C2) erial Ima nts (D1) 2)	two requ
DROLOG Vetland Hyrimary Ind Surface High Wa Saturatio Vater M Sedimer Drift Dep Algal Ma Iron Dep Inundation Sparsely Vetland Obse Vater Table Saturation F Includes ca	ches): ches): ches): ches): chesis drology Indicat icators (minimum water (A1) iter Table (A2) on (A3) larks (B1) int Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aer of Vegetated Cond rvations: iter Present? che Present? chesis (B2) chesis (B3) chesis (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4) cost (B4)	al Imagery ave Surfac Yes Yes Yes	(B7) — e (B8) — No X No X	Water Sta Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or Other (Exp	ined Leavanna (B13 atic Plants Sulfide CRhizosphor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reduct	3) s (B14) Odor (C1) eres on Liv ed Iron (C tion in Tille (C7) a (D9) emarks)	4) dd Soils (ds (C3) C6)	Secon Sur Dra Dry Cra Sat Stu X Geo	dary Indica face Soil C inage Patte -Season W yfish Burro uration Vis nted or Stro omorphic P C-Neutral T	tors (mini fracks (B6 erns (B10) fater Table ws (C8) fibile on Ae essed Pla fostion (D2) fest (D5)	mum of)) e (C2) erial Ima nts (D1) 2)	two requ

Project/Site: I-69 Section 6 Wetland S6W021A	Cit	ty/County:	Morgan	Sampling Date: 04/06/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point IC16A-1D1
Investigator(s): R. Yeager, B. Reust	Se	ection, Tow	nship, Rar	nge: SEC 9, T11N, R1E
Landform (hillslope, terrace, etc.): hillslope			Local relie	ef (concave, convex, none): convex
Slope (%): 5% Lat: 39.40639	Lor	ng: <u>-86.42</u>	1373	Datum: GCS NAD83
Soil Map Unit Name Martinsville loam, 0 to 2 percent slopes				NWI classification: PSS1
Are climatic/hydrologic conditions on the site typical for this ti	me of year?	Yes	X No _	(If no, explain Remarks.)
Are Vegetation X, Soil or Hydrology signif	icantly disturb	bed?	Are "N	lormal Circumstances" present? Yes X No:
Are Vegetation, Soil or Hydrology natu	rally problema	atic?	If need	ded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin	g sampling	g point lo	cations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Х			
Hydric Soils Present? Yes X No			e Sampled	
Wetland Hydrology Present? Yes No	X	withi	n a Wetlar	nd? Yes NoX
Remarks This plot is in a mowed urban area.				
VEGETATION - Use scientific names of plants				
	Absolute D	ominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot Size:)	% Cover S		Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4. 5.	-			Percent of Dominant Species That are OBL, FACW, or FAC: 0 (A/B)
·	0 =	Total Cove	r	(',
Sapling/Shrub Stratum (Plot Size:)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species 0 x 1 = 0 FACW species 0 x 2 = 0
3				FACW species 0 x 2 = 0 FAC species 0 x 3 = 0
4				FACU species 40 x 4 = 160
5	0 =	Total Cove	r	UPL species 60 x 5 = 300
Herb Stratum (Plot Size:)		rotal Gove	'	Column Totals: (A) (B)
1. Festuca sp.	60	Yes	UPL	Prevalence Index = B/A = 4.60
2. Trifolium pratense	35	Yes	FACU	Hydrophytic Vegetation Indicators:
3. Taraxacum officinale	5	No	FACU	1-Rapid Test for Hydrophytic Vegetation:
4				2-Dominance Test is >50%
5				3-Prevalence Index is <=3
6				4-Morphological Adaptations (Provide supporting
7		· -		data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
8. 9.				_
10.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
	100 =	Total Cove	r	
Vine Stratum (Plot Size:)				Hydrophytic
1				Vegetation
2		Tatal Caus		Present? Yes No _X
		Total Cove	1	
Remarks: (Include photo numbers here or on a separate sh	neet.)			

SOIL Sampling Point IC16A-1D1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	ure		Rem	narks	
0-5	10YR4/3	100					silt lo	am				
5-24	10YR6/1	65	35	М	С		sandy	loam				
dric Soi Histoso Histic E Black H Hydrogo Stratifie 2 cm M Deplete Thick D Sandy I	Concentration, D= De la Indiactors: I (A1) pipedon (A2) listic (A3) en Sulfide (A4) d Layers (A5) uck (A10) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3	e (A11)	Sand Sand Strip Loar Loar Depl Redd Depl	dy Gleyed I dy Redox (i ped Matrix ny Mucky I ny Gleyed eted Matrix ox Dark Su eted Dark i ox Depress	Matrix (S4) S5) (S6) Mineral (F1) Matrix (F2) (F3) rface (F6) Surface (F)		Coas Dark Iron- Very Othe	ation: PL= ors for Pro the Prairie R Surface (S Manganes Shallow D r Soil (Exp ators of hyd d hydrolog disturbe	edox (A16 67) e Masses ark Surfac lain in Ren	Hydric (F12) ce (TF12 marks) vegetatic present	Soils ³ 2) on and
strictive	Layer (If observed)											
Type: Depth (ir							Hyd	Iric Soil	present?	Yes _	<u>X</u>	No _
Type:	nches):						Hyd	Iric Soil	present?	Yes _	X	No _
Type: Depth (in marks:	nches):	:	quired; check all tha	t apply)			Hyd		present?			
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)	:: one is rec	Water S Aquatic True Aq Hydroge Oxidized Presence Recent Thin Mu	t apply) tained Lea Fauna (B1 uatic Plant en Sulfide (d Rhizosph e of Reduc fron Reduc ck Surface or Well Dat explain in R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	(4)	s (C3)	Second Surf Drai Dry Cra Satu Stur		tors (minir racks (B6) erns (B10) ater Table ws (C8) bile on Ae essed Plar ostion (D2	mum of to	two requ
Type:	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) iposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations:	one is rec	Water S Aquatic True Aq Hydroge Oxidizer Presend Recent Thin Mu B7) Gauge 6 (B8) Other (E	tained Lea Fauna (B1 uatic Plant en Sulfide (d Rhizosph e of Reduc ron Reduc ck Surface or Well Dat explain in R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	(4)	s (C3)	Second Surf Drai Dry Cra Satu Stur	dary Indica ace Soil C nage Patte Season W rfish Burro uration Visi nted or Stre morphic P	tors (minir racks (B6) erns (B10) ater Table ws (C8) bile on Ae essed Plar ostion (D2	mum of to	two requ
Type:Depth (ir marks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav ervations: ater Present? Present? Yersent?	:: one is rec	Water S Aquatic True Aq Hydroge Oxidizee Presenc Recent Thin Mu B7) Gauge of (B8) Other (E	tained Lea Fauna (B1 uatic Plant en Sulfide (d Rhizosph e of Reduc Iron Reduc ck Surface	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	ed Soils (C	s (C3)	Second Surf Drai Dry- Cra Satu Stur Geo	dary Indica ace Soil C nage Patte Season W rfish Burro uration Visi nted or Stre morphic P	tors (minir racks (B6) erns (B10) fater Table ws (C8) bile on Ae essed Plar ostion (D2 fest (D5)	mum of to	two requ
Depth (ir narks: DROLO etland H mary Inc Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse rface Water Tabl turation cludes c	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Ye e Present? Ye	Imagery (I e Surface	Water S Aquatic True Aq Hydroge Oxidized Presenc Recent Thin Mu B7) Gauge of (B8) Other (E	tained Lea Fauna (B1 uatic Plant in Sulfide (d Rhizosph e of Reduc fron Reduc ck Surface or Well Dat explain in R in (inches): in (inches):	3) s (B14) Ddor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) temarks)	ed Soils (C	s (C3) C6)	Second Surf Drai Dry- Cra: Satu Stur FAC	dary Indica ace Soil C nage Patte Season W fish Burro uration Visi nted or Stre morphic P S-Neutral T	tors (minir racks (B6) erns (B10) fater Table ws (C8) bile on Ae essed Plar ostion (D2 fest (D5)	mum of to	two requ
Type:Depth (ir marks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav ervations: ater Present? Present? Present? y apillary fringe)	Imagery (I e Surface	Water S Aquatic True Aq Hydroge Oxidized Presenc Recent Thin Mu B7) Gauge of (B8) Other (E	tained Lea Fauna (B1 uatic Plant in Sulfide (d Rhizosph e of Reduc fron Reduc ck Surface or Well Dat explain in R in (inches): in (inches):	3) s (B14) Ddor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) temarks)	ed Soils (C	s (C3) C6)	Second Surf Drai Dry- Cra: Satu Stur FAC	dary Indica ace Soil C nage Patte Season W fish Burro uration Visi nted or Stre morphic P S-Neutral T	tors (minir racks (B6) erns (B10) fater Table ws (C8) bile on Ae essed Plar ostion (D2 fest (D5)	mum of to	two requ

Project/Site: I-69 Section 6 Wetland S6W021A		City/Coun	ity: Morgan		Sampling Date: 1	10/19/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point I	C16A-1W1
Investigator(s): K. Lucier, G. Quigg		Section, T	Township, Ra	inge: Sec 9-T11N-R1E		
Landform (hillslope, terrace, etc.): excavated depression	_		Local reli	ief (concave, convex, no	ne): concave	
Slope (%): 0-6 Lat: 39.474183	L	Long: -86	.369632		Datum: GCS NAD	83
Soil Map Unit Name Martinsville loam, 0 to 2 percent slopes				NWI classif	fication: N/A	
Are climatic/hydrologic conditions on the site typical for this t		r? Yes	X No	(If no, explain Re	marks.)	
Are Vegetation , Soil or Hydrology signi				Normal Circumstances" p		No:
Are Vegetation , Soil or Hydrology natu				eded, explain answers in		
SUMMARY OF FINDINGS - Attach site map showir						
Hydrophytic Vegetation Present? Yes X No						
Hydric Soils Present? Yes X No		Is	the Sample	d Area		
Wetland Hydrology Present? Yes X No		wi	ithin a Wetla	ind? Yes	X No	_
Remarks		•				
VEGETATION - Use scientific names of plants						
Tree Stratum (Plot Size: 30' radius)		Dominan Species?	t Indicator Status	Dominance Test wor	ksheet:	
1	70 00 001	Ороско	Ciaias	Number of Dominant S That Are OBL, FACW,		(A)
2.						(A)
3.				Total Number of Domi Species Across All Str		(B)
4				Percent of Dominant S		<u> </u>
5				That are OBL, FACW,	or FAC: 100	(A/B)
(8) (8)	0	= Total Co	over	Prevalence Index wo		
Sapling/Shrub Stratum (Plot Size: 15' radius)				Total % Cover o		, bv:
1						30
2						60
3. 4.	-	· -		FAC species	0 x 3 =	0
5.	_			FACU species		20
	0	= Total Co	over	UPL species Column Totals:	$\frac{0}{65}$ $x = \frac{1}{(A)}$	0 I10 (B)
Herb Stratum (Plot Size: 5' rdius)						10 (B)
1. Scirpus cyperinus	25	Yes	OBL	Prevalence Ind	ex = B/A = <u>1.</u>	69
2. Carex sp.	25 5	Yes	FACW	Hydrophytic Vegetati	ion Indicators:	
Typha angustifolia Packera glabella	<u>5</u>	No No	OBL FACW	1-Rapid Test for H	ydrophytic Vegetatic	on:
5. Acer saccharum	5	No	FACU	X 2-Dominance Test		
6.		-	=	X 3-Prevalence Index		
7.					daptations (Provide r on a separate shee	
8.					phytic Vegetation ¹ (•
9				1Indicators of hydric so		
10				be present, unless dis	turbed or problemat	ic
Vine Stratum (Plot Size: 30' radius)	65	= Total Co	over			
				Hydrophytic		
1		-		Vegetation Present?	'es X No	
-	0	= Total Co	over			
Remarks: (Include photo numbers here or on a separate sl				<u> </u>		
romaino. (include prioto numbero nere oi on a separate si	1001. <i>)</i>					

SOIL Sampling Point IC16A-1W1

Depth	Matrix			Redox Featur	es						
(Inches)	Color (moist)	%	Color (mo	ist) %	Type ¹	Loc ²	Texture	<u> </u>	Rer	marks	
0-6	10YR2/1	100					silty clay lo	oam			
6-10	10YR4/1	90	10YR3/6	10	С	М	silt loar	n			
10-18	10YR4/1	50	10YR4/6	50	С	М	loamy sa	ind			
Histoso Histic E Black H Hydrog Stratifie 2 cm M Deplete Thick D Sandy I	Concentration, D= D I Indiactors: I (A1) pipedon (A2) iistic (A3) en Sulfide (A4) d Layers (A5) uck (A10) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S	ce (A11)		Matrix, CS=Covers Sandy Gleyed I Sandy Redox (Stripped Matrix Loamy Mucky I Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress	Matrix (S4) S5) (S6) Mineral (F1) Matrix (F2) (F3) rface (F6) Surface (F))	In	Dark Surfac Iron-Mangar Very Shallov Other Soil (I	Problematic e Redox (A10 e (S7) nese Masses w Dark Surfa Explain in Re	c Hydric Soil 6) c (F12) ce (TF12) emarks) vegetation a	ls ³
Type:											
Type: Depth (in	nches):						Hydrid	c Soil preser	nt? Yes	X N	lo _
Depth (ii marks: DROLO			quired; check a	all that apply)							
DROLO Petland Hrimary Inc. Surface High W	GY ydrology Indicator dicators (minimum of Water (A1) ater Table (A2)		Wa Aqı	ater Stained Lea uatic Fauna (B1	3)			Secondary Inc Surface So Drainage P	dicators (mini iil Cracks (B6 Patterns (B10)	mum of two	
DROLO Petland Hrimary Inc Surface High W Saturat	GY ydrology Indicator dicators (minimum of Water (A1) ater Table (A2) on (A3)		Wa Aqı Tru	ater Stained Lea uatic Fauna (B1 ue Aquatic Plant	3) s (B14)			Secondary Inc Surface So Drainage P Dry-Seasor	dicators (mini iil Cracks (B6 Patterns (B10) n Water Table	mum of two	
Depth (in property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the prop	GY ydrology Indicator dicators (minimum of Water (A1) ater Table (A2) fon (A3) Marks (B1)		Wa Aqı Tru Hyo	ater Stained Lea uatic Fauna (B1 ue Aquatic Plant drogen Sulfide (3) s (B14) Odor (C1)	vina Roo	<u>§</u> - -	Secondary Inc Surface So Drainage P Dry-Seasor Crayfish Bu	dicators (mini iil Cracks (B6 Patterns (B10) n Water Table urrows (C8)	mum of two s)) e (C2)	requ
DROLO Vetland H rimary Inc Surface High W Saturat Water M Sedime	GY ydrology Indicator dicators (minimum of Water (A1) ater Table (A2) on (A3)		Wa Aqı Tru Hyo Oxi	ater Stained Lea uatic Fauna (B1 ue Aquatic Plant	3) s (B14) Odor (C1) eres on Li	_	<u>§</u> - -	Secondary Inc Surface So Drainage P Dry-Seasor Crayfish Bu Saturation	dicators (mini iil Cracks (B6 Patterns (B10) n Water Table	mum of two i) i) e (C2) erial Imagery	requ
DROLO Vetland H imary Inc Surface High W Saturat Water N Sedime Drift De	ydrology Indicator dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) nt Deposits (B2)		Wa Aqı Tru Hyo Oxi Pre	ater Stained Lea uatic Fauna (B1 ue Aquatic Plant drogen Sulfide (idized Rhizosph	3) s (B14) Odor (C1) eres on Li ced Iron (C	(4)		Secondary Inc Surface So Drainage P Dry-Seasor Crayfish Bu Saturation	dicators (mini iil Cracks (B6 Patterns (B10) n Water Table urrows (C8) Visibile on Ae Stressed Pla	mum of two i) e (C2) erial Imagery nts (D1)	requ
Depth (iii marks: DROLO etland H imary Inc Surface High W Saturat Water M Sedime Drift De Algal M	ydrology Indicator dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) posits (B3)		Wa Aqı Tru Hyv Oxi Pre Re	ater Stained Lea uatic Fauna (B1 ue Aquatic Plant drogen Sulfide (idized Rhizosph esence of Reduc	3) s (B14) Odor (C1) teres on Lired Iron (C	(4)	s (C3)	Secondary Inc Surface So Drainage P Dry-Seasor Crayfish Bu Saturation	dicators (mini iil Cracks (B6 Patterns (B10) n Water Table urrows (C8) Visibile on Ae Stressed Pla ic Postion (D2	mum of two i) e (C2) erial Imagery nts (D1)	requ
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Depth (iii emarks: DROLO Vetland H rimary Inc Surface High W Saturat Water M Sedime Drift De Algal M Iron De Inundat Sparsel Vater Tab aturation ncludes c	gy ydrology Indicator dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca ervations: ater Present? Present? apillary fringe)	I Imagery (we Surface /es /es	— Wa — Aqq — Tru — Hyd — Oxi — Pre — Red — Thi — Ga = (B8) — Oth	ater Stained Lea uatic Fauna (B1 ue Aquatic Plant drogen Sulfide (idized Rhizosph esence of Reduc cent Iron Reduc in Muck Surface uge or Well Dat ner (Explain in R	3) s (B14) Ddor (C1) eres on Li ced Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (s (C3)	Secondary Inc Surface So Drainage P Dry-Seasor Crayfish Bu Saturation Stunted or Geomorphi FAC-Neutra	dicators (mini iil Cracks (B6 Patterns (B10) n Water Table urrows (C8) Visibile on Ae Stressed Pla ic Postion (D2 al Test (D5)	mum of two i) e (C2) erial Imagery ints (D1) 2)	requ
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Project/Site: I-69 Section 6 Wetland S6W026A		City/County	y: Morgan		Sampling	g Date: 10/16/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling	g Point IC22A-1D1
Investigator(s): K. Lucier		Section, To	ownship, Ra	inge: Sec 3-T11N-R1E		
Landform (hillslope, terrace, etc.): broad valley			Local reli	ef (concave, convex, no	ne): conc	ave
Slope (%): 0-1 Lat: 39.413567	L	.ong: -86.4	- 411022		Datum: G	CS NAD83
Soil Map Unit Name Rensselaer clay loam				NWI classi	fication: N/	/A
Are climatic/hydrologic conditions on the site typical for thi	s time of year	? Yes	X No	(If no, explain Re	emarks.)	
Are Vegetation , Soil or Hydrology sig		_		Normal Circumstances"		res X No:
Are Vegetation , Soil or Hydrology na				ded, explain answers in		
SUMMARY OF FINDINGS - Attach site map show						
Hydrophytic Vegetation Present? Yes X N	1o			<u> </u>		
	lo X	ls t	he Sample	d Area		
Wetland Hydrology Present? Yes N	lo X	wit	hin a Wetla	ind? Yes	No	X
Remarks		<u> </u>				
VEGETATION - Use scientific names of plants						
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test wor	ksheet:	
1. Fraxinus pennsylvanica	10	Yes	FACW	Number of Dominant S That Are OBL, FACW		5 (A)
2. Populus deltoides	10	Yes	FAC		•	5 (A)
3. Salix nigra	25	Yes	OBL	Total Number of Domi Species Across All Str		6 (B)
4				Percent of Dominant S	Species	
5				That are OBL, FACW,	, or FAC:	83 (A/B)
(5) (6)	45	= Total Co	ver	Prevalence Index wo	orkshoot	
Sapling/Shrub Stratum (Plot Size: 15' radius)						Multiply by:
1.				Total % Cover of OBL species		1 = 25
2			-			2 = 20
3. 4.				FAC species	50 x 3	3 = 150
5.				· -		4 =
	0	= Total Co	ver	UPL species		5 = 0
Herb Stratum (Plot Size: 5' radius)				Column Totals:1	135 (A	A) <u>395</u> (B)
1. Solidago altissima	50	Yes	FACU	Prevalence Ind	lex = B/A =	2.93
2. Symphyotrichum lanceolatum	20	Yes	FAC	Hydrophytic Vegetat	ion Indicat	tors:
3. Poa pratensis		Yes	FAC	1-Rapid Test for H		
4				X 2-Dominance Test		vogotation.
5				X 3-Prevalence Inde		
6						(Provide supporting
7 8.				data in Remarks o Problematic Hydro		•
9.				l -		
10.				¹ Indicators of hydric so be present, unless dis		
		= Total Co	ver			
Vine Stratum (Plot Size: 15' radius)				Hydrophytic		
1.				Vegetation	/ V	NI-
2		= Total Co		Present?	res X	No
		= 10(a) 00	vel			
Remarks: (Include photo numbers here or on a separate	sheet.)					

SOIL Sampling Point IC22A-1D1

rofile Descrip	Matrix		D	edox Featur	es					
Depth _ (Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
	10YR2/2	100	Color (molor)		1700		silty clay loan		rtomanto	
	1011(2/2						only olay loan	<u> </u>		
										
Type: C=Cor	ncentration, D= De	pletion, RM	=Reduced Matrix	, CS=Cove	red or Coa	ated Sand			ore Lining, M=Matrix	
lydric Soil Ir	ndiactors:						India	ctors for Prob	lematic Hydric Soil	s 3
Histosol (A	A1)		San	dy Gleyed I	Matrix (S4))	C	oast Prairie Red	dox (A16)	
Histic Epip	pedon (A2)			dy Redox (, ,			ark Surface (S7)		
Black Histi				ped Matrix			Iro	on-Manganese I	Masses (F12)	
Hydrogen	Sulfide (A4)		Loa	my Mucky N	Mineral (F1)	Ve	ery Shallow Dar	k Surface (TF12)	
Stratified L	Layers (A5)		Loa	my Gleyed	Matrix (F2))	_ 0	ther Soil (Explai	in in Remarks)	
2 cm Mucl	k (A10)		Dep	leted Matrix	(F3)					
_ Depleted E	Below Dark Surfac	e (A11)	Red	ox Dark Su	rface (F6)					
Thick Dark	k Surface (A12)		Dep	leted Dark	Surface (F	7)			ophytic vegetation ar	
Sandy Mu	ıcky Mineral (S1)		Red	ox Depress	sions (F8)		wetl		must be present, unlo or problematic.	ess
_ 5 cm Mucl	k Peat or Peat (S3)						disturbed	or problematic.	
estrictive La	ayer (If observed):									
Type: hard	d packed soil									
							I I I C		\/ NI	
Depth (inchemarks:	hes): <u>12 inches</u>						Hydric S	oil present?	Yes Ne	o <u> </u>
emarks:							nyaric S	oil present?	Yes No	0
emarks:	Y						nyaric S	oil present?	Yes No	0
emarks: /DROLOGY	Y drology Indicators		ired; check all the	at apply)						
emarks: 'DROLOG' Vetland Hyd Primary Indica	Y drology Indicators ators (minimum of						Sec	ondary Indicator	rs (minimum of two r	
Primary Indica	Y drology Indicators ators (minimum of Vater (A1)		Water S	Stained Lea	` ,		SecS	ondary Indicator	rs (minimum of two r	
OROLOGY Vetland Hyd Primary Indica Surface W High Wate	Y drology Indicators eators (minimum of Vater (A1) er Table (A2)		Water S Aquatio	Stained Lea Fauna (B1	3)		S S	ondary Indicato Surface Soil Cra Orainage Patterr	rs (minimum of two r cks (B6) ns (B10)	
OROLOGY Vetland Hyd Primary Indica Surface W High Wate Saturation	Y drology Indicators eators (minimum of Vater (A1) er Table (A2) n (A3)		Water \$ Aquatio True Ad	Stained Lea Fauna (B1 quatic Plant	3) s (B14)		Sec S C	ondary Indicato Surface Soil Cra Orainage Patterr Ory-Season Wat	rs (minimum of two r cks (B6) ns (B10) er Table (C2)	
OROLOGY Vetland Hyd Primary Indica Surface W High Wate Saturation Water Mar	Y Irology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) rks (B1)		Water S Aquatio True Ad Hydrog	Stained Lea Fauna (B1 quatic Plant en Sulfide (3) s (B14) Odor (C1)		Sec S C C	ondary Indicator Surface Soil Cra Orainage Patterr Ory-Season Wat Crayfish Burrows	rs (minimum of two r cks (B6) ns (B10) er Table (C2) s (C8)	requi
Primary Indica Surface W High Wate Saturation Water Mar Sediment	Y Irology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)		Water S Aquatic True Ac Hydrog Oxidize	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph	3) s (B14) Odor (C1) eres on Li	_	Sec S C C C	ondary Indicator Surface Soil Cra Orainage Patterr Ory-Season Wat Crayfish Burrows Saturation Visibil	rs (minimum of two rocks (B6) ns (B10) er Table (C2) s (C8) le on Aerial Imagery	requi
Primary Indica Surface W High Wate Saturation Water Mar Sediment Drift Depo	Y Irology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3)		Water S Aquatic True Ac Hydrog Oxidize Presen	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Reduc	3) s (B14) Odor (C1) eres on Li ced Iron (C	(4)	Sec S C C C C S	ondary Indicator Surface Soil Cra Orgainage Patterr Org-Season Wat Crayfish Burrows Saturation Visibil Stunted or Stress	rs (minimum of two rocks (B6) ns (B10) er Table (C2) s (C8) le on Aerial Imagery sed Plants (D1)	requi
Primary Indication Wetland Hyde Primary Indication Surface W High Wate Saturation Water Mar Sediment Drift Depo-	Y Irology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)		Water S Aquatic True Ac Hydrog Oxidize Present	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc	3) s (B14) Odor (C1) teres on Li ced Iron (C	(4)	Sec S C C C S S S	ondary Indicator Surface Soil Cra Ory-Season Wat Crayfish Burrows Saturation Visibil Stunted or Stress Geomorphic Pos	rs (minimum of two rocks (B6) ns (B10) eer Table (C2) s (C8) le on Aerial Imagery sed Plants (D1) stion (D2)	requi
Pemarks: Population Wetland Hyd Primary Indication Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mate Iron Depos	Y Irology Indicators eators (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5)	one is requ	Water S Aquatic True Ac Hydrog Oxidize Present Recent Thin Mo	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc uck Surface	3) s (B14) Odor (C1) peres on Li ced Iron (C tion in Tille	(4)	Sec S C C C S S S	ondary Indicator Surface Soil Cra Orgainage Patterr Org-Season Wat Crayfish Burrows Saturation Visibil Stunted or Stress	rs (minimum of two rocks (B6) ns (B10) eer Table (C2) s (C8) le on Aerial Imagery sed Plants (D1) stion (D2)	requi
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Primary Indica Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mate Iron Depos Inundation Sparsely W Surface Wate Vater Table F Saturation Preincludes capi	Y Irology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Vegetated Concave vations: er Present? Present? Ye resent? Ye resent? Ye resent? Ye resent? Ye resent? Ye resent? Ye resent? Ye resent?	magery (B7 e Surface (E	Water S	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc uck Surface or Well Dat Explain in R h (inches): h (inches):	3) s (B14) Ddor (C1) eres on Li ced Iron (C tion in Tille (C7) a (D9) Remarks)	ed Soils (Sec S S S S S S S S S	ondary Indicator Surface Soil Cra Orainage Patterr Ory-Season Wat Crayfish Burrows Saturation Visibil Stunted or Stress Geomorphic Pos FAC-Neutral Tes	rs (minimum of two rocks (B6) ns (B10) her Table (C2) s (C8) le on Aerial Imagery sed Plants (D1) stion (D2) st (D5)	requi

Project/Site: I-69 Section 6 Wetland S6W026A		City/County	/: Morgan	Sampling Date: 10/16/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point IC22A-1W1
Investigator(s): K. Lucier		Section, To	wnship, Ra	inge: Sec 3-T11N-R1E
Landform (hillslope, terrace, etc.): broad valley			Local reli	ief (concave, convex, none): concave
Slope (%): 0-1 Lat: 39.413311	L	_ong: <u>-86.4</u>	10829	Datum: GCS NAD83
Soil Map Unit Name Rensselaer clay loam	_			NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this ti	me of year	r? Yes	X No	(If no, explain Remarks.)
Are Vegetation , Soil or Hydrology signifi	icantly dist	urbed?	Are "I	Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology natur	ally proble	ematic?	If nee	eded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin			locations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soils Present? Yes X No		ls t	he Sample	d Area
Wetland Hydrology Present? Yes X No			hin a Wetla	
Remarks		l		
VEGETATION - Use scientific names of plants				
		Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot Size: 30' radius) 1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:4 (A)
2. 3.				Total Number of Dominant Species Across All Strata: 4 (B)
4				Percent of Dominant Species
5		T-1-1-0		That are OBL, FACW, or FAC:100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Cov	er er	Prevalence Index worksheet:
1 Salix interior	15	Yes	FACW	Total % Cover of: Multiply by:
2.				OBL species 65 x 1 = 65
3.				FACW species65 x 2 =130
4		·		FAC species 0 x 3 = 0
5				FACU species 0 x 4 = 0 UPL species 0 x 5 = 0
	15	= Total Cov	/er	Column Totals: 130 (A) 195 (B)
Herb Stratum (Plot Size: 5' radius)	50	V	EAC)A/	Dravalance Index D/A 4.50
Persicaria maculosa Echinochloa muricata	50 40	Yes Yes	FACW OBL	Prevalence Index = B/A = 1.50
3. Typha angustifolia	25	Yes	OBL	Hydrophytic Vegetation Indicators:
4.	·			1-Rapid Test for Hydrophytic Vegetation:
5.				X 2-Dominance Test is >50% X 3-Prevalence Index is <=3
6				4-Morphological Adaptation (Provide supporting
7				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9				¹ Indicators of hydric soil and wetland hydrology must
10	115	= Total Cov	/er	be present, unless disturbed or problematic
Vine Stratum (Plot Size: 15' radius)				Hydrophytic
1. 2.				Vegetation Present? Yes X No
	0	= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate sh	eet.)			

SOIL Sampling Point IC22A-1W1

		the depth	needed to documne			nfirm the	absence of indi	cators.)
Depth (Inches)	Matrix Color (moist)	%		ox Featu %	res Type ¹	Loc ²	Tandona	Remarks
(Inches)	· — · · · · · · ·		Color (moist)	70	туре	LOC 2	Texture	
0-3	10YR3/2	100	10) (5 = 10				silty clay loam	· · · · · · · · · · · · · · · · · · ·
3-14	10YR4/1	80	10YR5/8	20	C	М	silty clay loam	<u> </u>
14-18	10YR2/1	95	10YR3/6	5	С	PL	sandy loam	
					·			
	·		-					
								•
¹ Type: C=C	Concentration, D= De	pletion, R	M=Reduced Matrix, 0	CS=Cove	ered or Coa	ted San	d Grains. ² Lo	ocation: PL=Pore Lining, M=Matrix
Hydric Soi	I Indiactors:						Indiad	ctors for Problematic Hydric Soils ³
Histoso	I (A1)		Sandy	Gleyed	Matrix (S4)	1	Co	ast Prairie Redox (A16)
Histic E	pipedon (A2)			Redox (rk Surface (S7)
Black H	istic (A3)		Strippe	ed Matrix	(S6)		Iro	n-Manganese Masses (F12)
Hydroge	en Sulfide (A4)		Loamy	Mucky I	Mineral (F1)	Ve	ry Shallow Dark Surface (TF12)
Stratifie	d Layers (A5)		Loamy	Gleyed	Matrix (F2))	Oth	ner Soil (Explain in Remarks)
2 cm M	uck (A10)		X Deplet	ed Matri	x (F3)			
Deplete	d Below Dark Surfac	e (A11)	Redox	Dark Su	ırface (F6)			
	ark Surface (A12)				Surface (F	7)		icators of hydrophytic vegetation and
Sandy N	Mucky Mineral (S1)		Redox	Depress	sions (F8)		wetla	and hydrology must be present, unless disturbed or problematic.
5 cm Mi	uck Peat or Peat (S3)						disturbed of problematic.
Restrictive	Layer (If observed):							
Type:								
Depth (ir	nches):						Hydric So	oil present? Yes X No
Remarks:								
HYDROLO	GY							
Wetland H	ydrology Indicators	:						
Primary Inc	licators (minimum of	one is red	quired; check all that a	apply)			Seco	andary Indicators (minimum of two required)
Surface	Water (A1)		Water Sta	ined Lea	aves (B9)		Sı	urface Soil Cracks (B6)
	ater Table (A2)		Aquatic F		` '		_	rainage Patterns (B10)
X Saturati			True Aqua				_	ry-Season Water Table (C2)
_	/arks (B1)		Hydrogen					rayfish Burrows (C8)
	nt Deposits (B2)				neres on Liv	vina Roc		aturation Visibile on Aerial Imagery (C9)
	posits (B3)				ced Iron (C	_		cunted or Stressed Plants (D1)
_	at or Crust (B4)				ction in Tille	,		eomorphic Postion (D2)
_	posits (B5)		Thin Mucl			ou oons		AC-Neutral Test (D5)
	ion Visible on Aerial	lmagery (_		, ,		<u> </u>	-to-Neutral Test (D3)
_	y Vegetated Concave	0 , (, _					
Field Obse		- Gariago		piaiii iii i	(cinanto)			
	ater Present? Ye			inches):				
Water Tabl	e Present? Ye	es	No Depth ((inches):				
Saturation (includes c	Present? Ye apillary fringe)	es X	No Depth (inches):	14	v	Vetland Hydrolo	ogy Present? Yes X No
		gauge, r	nonitoring well, aerial	photos,	previous in	spection	s), if available:	
Remarks:								

Project/Site: I-69 Section 6 Wetland S6W028A	Ci	ty/County: I	Morgan		Sampling Da	ate: 10/28/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Po	oint IC32A-1D1
Investigator(s): Jeremy Kiefner, Matt Riehle	Se	ection, Towr	nship, Range:	Sec 2-T11N-R1E		
Landform (hillslope, terrace, etc.): hillside			Local relief (c	oncave, convex, no	ne): concave	
Slope (%): 2-3 Lat: 39.422963	Lor	ng: -86.397	417		Datum: NAD8	33
Soil Map Unit Name Princeton fine sandy loam		-		NWI classi	fication: uplan	d
Are climatic/hydrologic conditions on the site typical for this ti	me of vear?	Yes X	No			
Are Vegetation X , Soil or Hydrology signif				nal Circumstances"		X No:
Are Vegetation , Soil or Hydrology natur				explain answers in	•	
SUMMARY OF FINDINGS - Attach site map showin						tc.
	<u>у</u>					
Hydrophytic Vegetation Present? Yes No Hydric Soils Present? Yes No	<u>X</u>	Is the	Sampled Are	ea		
Wetland Hydrology Present? Yes No		withir	a Wetland?	Yes	No	X
		l hotuso	n novement	and ditab		
Remarks Point represensts non-wetland conditions of road	isiae rigni-oi-	way betwee	n pavement	and ditch.		
VEGETATION - Use scientific names of plants						
	Absolute D	ominant In	dicator D o	ominance Test wor	ksheet:	
Tree Stratum (Plot Size: 5' radius)	% Cover S	•	Status Nu	umber of Dominant	Species	
1				at Are OBL, FACW		0 (A)
2.				otal Number of Dom		(5)
3.	-			pecies Across All St		1 (B)
45				ercent of Dominant state are OBL, FACW		0 (A/B)
5		Total Cover				(,,,
Sapling/Shrub Stratum (Plot Size: 5' radius)				evalence Index wo	orksheet:	
1.			l_	Total % Cover of	of: Mu	ultiply by:
2.				BL species	0 x 1 =	0
3				ACW species	0 x 2 =	
4				AC species ACU species	0	
5	 -		l ui	PL species	0	
(Dist O'rea El restina	0 =	Total Cover		. · 	100 (A)	400 (B)
Herb Stratum (Plot Size: 5' radius)	100	Voo	FACU	Prevalence Inc	lov - B/A -	4.00
Schedonorus arundinaceus 2.	-	Yes	PACO_	Frevalence inc	EX = D/A =	4.00
3.			Hy	drophytic Vegetat	ion Indicators	:
4.			_	1-Rapid Test for H	-	etation:
5.				2-Dominance Test		
6				3-Prevalence Inde4-Morphological A		ovide supporting
7				data in Remarks o		
8				Problematic Hydro	phytic Vegetati	on ¹ (Explain)
9.				dicators of hydric so		
10				present, unless dis	turbed or probl	ematic
Vine Stratum (Plot Size: 5' radius)	100 =	Total Cover				
				drophytic		
1. 2.				egetation esent?	⁄es	No X
-		Total Cover				
Demorker (Include photo numbers have as a constant						
Remarks: (Include photo numbers here or on a separate sh	10 0 1.)					

SOIL Sampling Point IC32A-1D1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc 2	Texture)	Remarks
0-8	10YR3/1	98	10YR3/4	2	C	M	silt loam		
8-10	10YR2/1						silt loam	n	
10-24	10YR2/1	95	10YR3/4	5		M	sandy loa		
1021			101110/1				odildy loc		
· ·	Concentration, D= De	pletion, RI	M=Reduced Matrix,	CS=Cove	red or Coa	ated Sand			Pore Lining, M=Matrix
•	I Indiactors:						Inc		oblematic Hydric Soils
Histoso				-	Matrix (S4))	_	Coast Prairie R	
	pipedon (A2) listic (A3)			y Redox (ed Matrix			_	Dark Surface (S	e Masses (F12)
_	en Sulfide (A4)				(30) ⁄lineral (F1	1	_		ark Surface (TF12)
-	d Layers (A5)				Matrix (F2)	•	_		lain in Remarks)
_	uck (A10)			ted Matrix		,	_	, o.i.o. oo (=xp	
_	ed Below Dark Surfac	e (A11)			rface (F6)				
_	ark Surface (A12)	, ,			Surface (F	7)			drophytic vegetation and
Sandy I	Mucky Mineral (S1)		Redo	x Depress	ions (F8)		W		y must be present, unless
5 cm M	uck Peat or Peat (S3)						disturbe	d or problematic.
strictive	Layer (If observed):								
Type:							Hydric	Soil present?	Yes No
Type: Depth (ii emarks:							Hydric	Soil present?	Yes No _
Type: Depth (in emarks:	nches):						Hydric	Soil present?	Yes No _
Type:	GY	:					Hydric	Soil present?	Yes No _
Type:	nches):		uired; check all that	apply)					Yes No _
Type: Depth (ii marks:	GY ydrology Indicators dicators (minimum of			apply)_ained Lea	ves (B9)		<u>s</u>	econdary Indica	tors (minimum of two requ
Type: Depth (ii marks:	GY ydrology Indicators		Water St		` ,		<u>s</u>	econdary Indica Surface Soil C	tors (minimum of two requ
DROLO Surface High W	GY ydrology Indicators dicators (minimum of		Water St Aquatic F	ained Lea	3)		<u>s</u>	econdary Indica Surface Soil C Drainage Patte	tors (minimum of two requ
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water St Aquatic F True Aqu	ained Lea auna (B1	3) s (B14)		<u>s</u>	econdary Indica Surface Soil C Drainage Patte	tors (minimum of two requ racks (B6) erns (B10) /ater Table (C2)
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3)		Water St Aquatic F True Aqu Hydrogel Oxidized	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Li	_	<u>s</u>	econdary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi	tors (minimum of two requested (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (C5
Depth (ii emarks: DROLO Vetland H rimary Inc Surface High W Saturat Water N Sedime Drift De	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3)		Water St Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Li ced Iron (C	(4)	<u>S</u> s (C3)	Secondary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi	tors (minimum of two requiracks (B6) erns (B10) fater Table (C2) ws (C8) sibile on Aerial Imagery (Csessed Plants (D1)
DROLO Vetland H rimary Inc Surface High W Saturat Water M Sedime Drift De Algal M	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water St Aquatic F True Aqu Hydroget Oxidized Presencet Recent In	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc	3) s (B14) Odor (C1) teres on Li ced Iron (C	(4)	<u>S</u> s (C3)	econdary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre Geomorphic P	tors (minimum of two requiracks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (Csessed Plants (D1) ostion (D2)
DROLO Tetland H Timary Inc Surface High W Saturat Water M Sedime Drift De Algal M Iron De	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is req	Water St Aquatic F True Aqu Hydrogel Oxidized Presence Recent It	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc ron Reduc	3) s (B14) Odor (C1) peres on Li ced Iron (C stion in Tille	(4)	<u>S</u> s (C3)	Secondary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi	tors (minimum of two requiracks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (Csessed Plants (D1) ostion (D2)
DROLO etland H imary Inc Surface High W Saturat Water M Sedime Drift De Algal M Iron De Inundat	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	one is req	Water St Aquatic F True Aqu Hydroger Oxidized Presencer Recent In Thin Muc	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc	3) s (B14) Ddor (C1) heres on Li ced Iron (C tion in Tille (C7) a (D9)	(4)	<u>S</u> s (C3)	econdary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre Geomorphic P	tors (minimum of two requiracks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (Csessed Plants (D1) ostion (D2)
DROLO Wetland H Commany Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsei	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is req	Water St Aquatic F True Aqu Hydroger Oxidized Presencer Recent In Thin Muc	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc on Reduc k Surface	3) s (B14) Ddor (C1) heres on Li ced Iron (C tion in Tille (C7) a (D9)	(4)	<u>S</u> s (C3)	econdary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre Geomorphic P	tors (minimum of two requiracks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (Csessed Plants (D1) ostion (D2)
DROLO Vetland H rimary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial by Vegetated Concave	one is req Imagery (E e Surface	Water St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc 37) Gauge o (B8) Other (E:	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc ron Reduc ck Surface r Well Dat kplain in R	3) s (B14) Ddor (C1) heres on Li ced Iron (C tion in Tille (C7) a (D9)	(4)	<u>S</u> s (C3)	econdary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre Geomorphic P	tors (minimum of two requiracks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (Csessed Plants (D1) ostion (D2)
Type:	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave	one is required in the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second	Water St Aquatic F True Aqu Hydroger Oxidized Presencer Recent In Thin Muc 37) Gauge o (B8) Other (Ex	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc on Reduc k Surface	3) s (B14) Ddor (C1) heres on Li ced Iron (C tion in Tille (C7) a (D9)	(4)	<u>S</u> s (C3)	econdary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre Geomorphic P	tors (minimum of two requiracks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (Csessed Plants (D1) ostion (D2)
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present?	Imagery (Ee Surface	Water St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge o (B8) Other (Ex	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc on Reduc sk Surface r Well Dat kplain in R	3) s (B14) Odor (C1) leres on Li ced Iron (C tion in Tille (C7) a (D9) Remarks)	ed Soils (C	s (C3)	econdary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre Geomorphic P	tors (minimum of two requiracks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (Csessed Plants (D1) ostion (D2) fest (D5)
DROLO Petland H Imary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse eld Obse urface W dater Table aturation ncludes c	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Present? Ye Present? Ye Present?	Imagery (Ee Surface	Water St Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gar) Gauge o (B8) Other (E: No X Depth No Depth	ained Lea Fauna (B1 latic Plant of Sulfide (Rhizospher of Reduction Reduction of Reduction Reduction of Well Date (splain in Reduction Reduction (inches): (inches):	3) s (B14) Odor (C1) heres on Li ced Iron (C tion in Tille (C7) a (D9) Remarks)	ed Soils (0	s (C3) C6)	Secondary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre Geomorphic P FAC-Neutral T	tors (minimum of two requiracks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (Csessed Plants (D1) ostion (D2) fest (D5)
DROLO etland H imary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse eld Obse urface W ater Table aturation includes c	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Present? Present? Ye apillary fringe)	Imagery (Ee Surface	Water St Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gar) Gauge o (B8) Other (E: No X Depth No Depth	ained Lea Fauna (B1 latic Plant of Sulfide (Rhizospher of Reduction Reduction of Reduction Reduction of Well Date (splain in Reduction Reduction (inches): (inches):	3) s (B14) Odor (C1) heres on Li ced Iron (C tion in Tille (C7) a (D9) Remarks)	ed Soils (0	s (C3) C6)	Secondary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre Geomorphic P FAC-Neutral T	tors (minimum of two requiracks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (Csessed Plants (D1) ostion (D2) fest (D5)

Project/Site: I-69 Section 6 Wetland S6W028A		City/Count	y: Morgan		Sampling Date: 10/28/2015
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point IC32A-1W1
Investigator(s): Jeremy Kiefner, Matt Riehle		Section, To	ownship, Ra	ange: Sec 2-T11N-R1E	
Landform (hillslope, terrace, etc.): hillside ditch along roa	d		Local reli	ief (concave, convex, no	ne): concave
Slope (%): 3.5 Lat: 39.422989	I	Long: -86.3	- 397419		Datum: NAD83
Soil Map Unit Name Princeton fine sandy loam				NWI classif	fication: upland
Are climatic/hydrologic conditions on the site typical for this	s time of year	r? Yes	X No		
Are Vegetation , Soil or Hydrology sig		_			present? Yes X No:
Are Vegetation , Soil or Hydrology na				eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show					
Hydrophytic Vegetation Present? Yes X N	lo				
	lo		he Sample		
Wetland Hydrology Present? Yes X N	lo	wit	hin a Wetla	and? Yes	X No
Remarks		<u>.</u>			
VEGETATION - Use scientific names of plants					
Tree Stratum (Plot Size: 5' radius)		Dominant Species?	Indicator Status	Dominance Test wor	ksheet:
1	70 0010.	Орос.ос.	Ciaiao	Number of Dominant S That Are OBL, FACW,	
2.				Total Number of Domi	
3				Species Across All Str	
4				Percent of Dominant S	
5				That are OBL, FACW,	, or FAC: <u>50</u> (A/B)
Sapling/Shrub Stratum (Plot Size: 5' radius)	0	= Total Co	ver	Prevalence Index wo	 orksheet:
				Total % Cover o	of: Multiply by:
1. 2.					70 x 1 = 70
3.		·		FACW species	5 x 2 = 10
4.				FAC species	0 x 3 = 0
5				FACU species UPL species	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
(5) (6) (7)	0	= Total Co	ver		75 (A) 80 (B)
Herb Stratum (Plot Size: 5' radius) 1. Leersia oryzoides	50	Yes	OBL	Prevalence Ind	lex = B/A = 1.07
2. Eleocharis sp.	20	Yes	OBL	i revalence ind	ex = b/A = 1.07
3. Typha latifolia	10	No	OBL	Hydrophytic Vegetati	ion Indicators:
4. Nasturtium officinale	10	No	OBL	X 1-Rapid Test for H	
5. Carex sp.	5	No	FACW	X 2-Dominance Test X 3-Prevalence Index	
6					daptations (Provide supporting
7.				data in Remarks or	r on a separate sheet)
8				Problematic Hydro	phytic Vegetation ¹ (Explain)
9. 10.	<u> </u>			¹ Indicators of hydric so be present, unless dis	oil and wetland hydrology must
	95	= Total Co	ver	be present, unless dis	
Vine Stratum (Plot Size: 5'radius)				Hadaas bed	
1				Hydrophytic Vegetation	
2		-			'es X No
	0	= Total Co	ver		
Remarks: (Include photo numbers here or on a separate	sheet.)				

SOIL Sampling Point IC32A-1W1

Depth	Matrix			dox Featur						_	
Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	re		Rema	rks
0-6	10YR3/1	95	10YR4/4	5	С	М	sandy lo	oam			
6-24	10YR4/1	80	10YR4/4		C	M	silty clay	loam			
dric Soi Histoso Histic E Black H Hydrog Stratifie 2 cm M	Concentration, D= Do I Indiactors: I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) uck (A10) d Below Dark Surface		Sand Sand Strip Loar Loar X Depl	dy Gleyed My Redox (Sped Matrix Mucky Mucky More Matrix My Gleyed I eted Matrix Dark Sur	Matrix (S4) S5) (S6) Mineral (F1) Matrix (F2))	- - - - -	ndiacto Coas Dark Iron-I Very Othe	t Prairie Re Surface (S Manganese Shallow Da	edox (A16) 7) • Masses (I ark Surface ain in Rema	ydric Soils F12) (TF12) arks)
Sandy I	ark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3	3)		eted Dark S ox Depress		7)			d hydrology		getation and resent, unle natic.
	Layer (If observed)	:									
Typo:											
Depth (in	nches):						Hydr	ic Soil	present?	Yes	X No
Depth (in							Hydr	ic Soil	present?	Yes	X No
			quired; check all tha	t apply)							
DROLO Vetland H rimary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundati	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)	one is red	Water S Aquatic True Aq Hydroge Oxidized Presend Recent Thin Mu	t apply) tained Lear Fauna (B1: uatic Plants en Sulfide C d Rhizosph e of Reduc lron Reduc ck Surface or Well Data	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	ts (C3)	Second Surf Drai Dry- Cray Satu Stur Geo	lary Indicate ace Soil Cranage Patter Season Warfish Burrov rration Visit	ors (minimu acks (B6) rns (B10) ater Table (vs (C8) bile on Aeria ssed Plants sstion (D2)	um of two re C2)
Depth (in marks: DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) fon (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations:	Imagery (Water S Aquatic True Aq Hydroge Oxidized Presend Recent Thin Mu B7) Gauge 6 (B8) Other (E	tained Lear Fauna (B1: uatic Plants en Sulfide C d Rhizosph e of Reduc Iron Reduc ck Surface or Well Data explain in R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	4)	ts (C3)	Second Surf Drai Dry- Cray Satu Stur Geo	lary Indicate ace Soil Cranage Pattel Season Warfish Burrov rration Visib ted or Stremorphic Po	ors (minimu acks (B6) rns (B10) ater Table (vs (C8) bile on Aeria ssed Plants sstion (D2)	um of two re C2)
DROLO Petland H Imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface Water Table aturation	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) fon (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concaverations: ater Present? Present? Y	one is red	Water S Aquatic True Aq Hydroge Oxidized Presend Recent Thin Mu B7) Gauge of (B8) Other (E	tained Lear Fauna (B1: uatic Plants en Sulfide C d Rhizosph e of Reduc iron Reduc ck Surface or Well Data	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4) ed Soils (ts (C3)	Second Surf Drai Dry- Cray Satu Stur Geo FAC	lary Indicate ace Soil Cranage Pattel Season Warfish Burrov rration Visib ted or Stremorphic Po	ors (minimu acks (B6) rns (B10) ater Table (vs (C8) bile on Aeria ssed Plants ostion (D2) est (D5)	um of two re C2)
DROLO Vetland H rimary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse vater Table aturation ncludes c	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) fon (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concaverations: ater Present? Yee Present?	Imagery (re Surface res res	Water S Aquatic True Aq Hydroge Oxidized Presenc Recent Thin Mu B7) Gauge 0 (B8) Other (E	tained Lear Fauna (B1: uatic Plants en Sulfide C d Rhizosph e of Reduc lron Reduc ck Surface or Well Data explain in R in (inches): in (inches):	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	4) ed Soils (ts (C3) C6)	Second Surf Drai Dry- Cray Satu Stur Geo FAC	lary Indicate ace Soil Cranage Patter Season Warfish Burrov rration Visib ted or Stremorphic Po -Neutral Te	ors (minimu acks (B6) rns (B10) ater Table (vs (C8) bile on Aeria ssed Plants ostion (D2) est (D5)	um of two re C2) al Imagery (s (D1)
Depth (in marks: DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface Water Table attraction icludes c scribe Re	gy ydrology Indicator: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Present? y Present? apillary fringe)	Imagery (re Surface res res	Water S Aquatic True Aq Hydroge Oxidized Presenc Recent Thin Mu B7) Gauge 0 (B8) Other (E	tained Lear Fauna (B1: uatic Plants en Sulfide C d Rhizosph e of Reduc lron Reduc ck Surface or Well Data explain in R in (inches): in (inches):	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	4) ed Soils (ts (C3) C6)	Second Surf Drai Dry- Cray Satu Stur Geo FAC	lary Indicate ace Soil Cranage Patter Season Warfish Burrov rration Visib ted or Stremorphic Po -Neutral Te	ors (minimu acks (B6) rns (B10) ater Table (vs (C8) bile on Aeria ssed Plants ostion (D2) est (D5)	um of two re C2) al Imagery (s (D1)
DROLO etland H imary Inc Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface W ater Table aturation includes c	gy ydrology Indicator: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Present? y Present? apillary fringe)	Imagery (re Surface res res	Water S Aquatic True Aq Hydroge Oxidized Presenc Recent Thin Mu B7) Gauge 0 (B8) Other (E	tained Lear Fauna (B1: uatic Plants en Sulfide C d Rhizosph e of Reduc lron Reduc ck Surface or Well Data explain in R in (inches): in (inches):	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	4) ed Soils (ts (C3) C6)	Second Surf Drai Dry- Cray Satu Stur Geo FAC	lary Indicate ace Soil Cranage Patter Season Warfish Burrov rration Visib ted or Stremorphic Po -Neutral Te	ors (minimu acks (B6) rns (B10) ater Table (vs (C8) bile on Aeria ssed Plants ostion (D2) est (D5)	um of two re C2) al Imagery (s (D1)

Project/Site: I-69 Section 6 Wetland S6W037A	City/	County: Morgan		Sampling Date: 04/07/2017
Applicant/Owner: INDOT/Lochumueller			State: Indiana	Sampling Point CL03A-1D1
Investigator(s): R. Yeager, B. Reust	Sect	ion, Township, Ra	nge: SEC 26, T12N, R1	1E
Landform (hillslope, terrace, etc.): roadside		Local reli	ef (concave, convex, no	ne): flat
Slope (%): 1% Lat: 39.444677	Long:	-86.386898		Datum: GCS NAD83
Soil Map Unit Name Elkinsville silt loam, 6 to 12 percent slop	oes		NWI classif	fication: upland
Are climatic/hydrologic conditions on the site typical for this ti		Yes X No	(If no, explain Re	emarks.)
Are Vegetation X , Soil X or Hydrology signifi				present? Yes X No:
Are Vegetation, Soil or Hydrology natur			ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showin			transects, importan	nt features, etc.
Hydrophytic Vegetation Present? Yes No	Х			
Hydric Soils Present? Yes No	X	Is the Sampled		No. V
Wetland Hydrology Present? Yes No	<u>X</u>	within a Wetla	ind? Yes	NoX
Remarks				
VEGETATION - Use scientific names of plants				
VEGETATION - Use scientific flames of plants	Abaduta Dan	ainant Indiantar	<u> </u>	
Tree Stratum (Plot Size: 30' radius)	% Cover Spe	ninant Indicator ecies? Status	Dominance Test wor	
1			Number of Dominant S That Are OBL, FACW,	
2			Total Number of Domi	
3			Species Across All Str	rata: 1 (B)
4			Percent of Dominant S	
5	0 = To	tal Cover	That are OBL, FACW,	, or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	=10	iai Covei	Prevalence Index wo	orksheet:
1.			Total % Cover o	of: Multiply by:
2.	- 		OBL species	0 x 1 = 0
3.			FACW species	0 x 2 = 0
4			FAC species FACU species	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
5				$\frac{0}{100}$ $x = 500$
Herb Stratum (Plot Size: 5' radius)	<u> </u>	tal Cover	Column Totals: 1	100 (A) 500 (B)
Herb Stratum (Plot Size: 5' radius) 1. Festuca sp.	100 Y	res UPL	Prevalence Ind	dex = B/A = 5.00
2.				
3.			Hydrophytic Vegetati	
4			1-Rapid Test for Hy 2-Dominance Test	lydrophytic Vegetation:
5			3-Prevalence Index	
6			4-Morphological Ac	daptations (Provide supporting
7				r on a separate sheet)
8. 9.			-	ophytic Vegetation ¹ (Explain)
10.			¹ Indicators of hydric so be present, unless dis	oil and wetland hydrology must
	100 = To	tal Cover	, , , , , , , , , , , , , , , , , , , ,	
Vine Stratum (Plot Size: 30' radius)			Hydrophytic	
1			Vegetation	
2			Present? Y	/es No _X_
	<u>0</u> = To	tal Cover		
Remarks: (Include photo numbers here or on a separate sh	eet.)			

SOIL Sampling Point CL03A-1D1

Profile Desc	ription: (Describe to	the depth n	eeded to documne	t the indic	cator or cor	nfirm the	abse	nce of i	indicators.)		
Depth	Matrix		Redo	x Featur	es						
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture		Remarks	
0-4	10YR3/2						S	ilt loam	1		
4-20	10YR5/6	60 1	0YR5/2	40			S	silt loam	<u> </u>		
¹ Type: C=C	Concentration, D= De	oletion, RM=	=Reduced Matrix, 0	CS=Cove	red or Coa	ted San	d Grai	ins. ²	² Location: PL	=Pore Lining, M=	Matrix
Hydric Soi	I Indiactors:							Inc	diactors for Pr	oblematic Hydri	c Soils 3
Histoso	I (A1)		Sandy	Gleyed N	Matrix (S4)				Coast Prairie F	Redox (A16)	
Histic E	pipedon (A2)			Redox (Dark Surface (S7)	
	istic (A3)			ed Matrix						se Masses (F12)	
	en Sulfide (A4)			-	/lineral (F1				•	Dark Surface (TF	•
	d Layers (A5)			-	Matrix (F2)			_	Other Soil (Exp	olain in Remarks)	
	uck (A10)	(4.44)		ed Matrix							
	d Below Dark Surface	e (A11)			rface (F6)	7)		3 1	Indicators of by	dranhutia vagata	tion and
_	ark Surface (A12) Mucky Mineral (S1)				Surface (F7 ions (F8)	()				drophytic vegeta y must be prese	
	uck Peat or Peat (S3)		Redux	Debless	10115 (1-0)					ed or problemation	
_	Layer (If observed):										
Type:	Layer (ii observeu).										
Depth (ir	nches):							Hydric	Soil present?	Yes	No X
Remarks:											
Access road	gravel encountered	at 4 inches.									
HYDROLO	GV.										
HIDROLO	<u> </u>										
	ydrology Indicators										
Primary Inc	licators (minimum of	one is requi	red; check all that a	apply)				<u>S</u>	econdary Indica	ators (minimum o	f two required)
Surface	Water (A1)		Water Sta	ined Lea	ves (B9)				Surface Soil C	Cracks (B6)	
High Wa	ater Table (A2)		Aquatic F	auna (B1	3)				Drainage Patt	erns (B10)	
Saturati	on (A3)		True Aqua	atic Plant	s (B14)			_	Dry-Season V	Vater Table (C2)	
_	/larks (B1)		Hydrogen					_	Crayfish Burro		
_	nt Deposits (B2)				eres on Liv	_	ots (C3	3)	-	sibile on Aerial Im	
_	posits (B3)				ed Iron (C		(0.0)	_	-	essed Plants (D1)
	at or Crust (B4)				tion in Tille	d Soils ((C6)	_	Geomorphic F		
	posits (B5)	maganı (P7	Thin Muck) Gauge or		. ,				FAC-Neutral	lest (D5)	
	ion Visible on Aerial I y Vegetated Concave				, ,						
		, Garrage (B	Other (EX	piaiii iii iv	.cmarks)						
Field Obse	ervations:										
Surface Wa	ater Present? Ye	s I	No X Depth (inches):							
Water Tabl	e Present? Ye	s I	No X Depth (inches):							
Saturation		s I	No X Depth (inches):		v	Vetlan	nd Hydr	rology Present	t? Yes	No X
	apillary fringe)		-iti				-\ :¢ -				
Describe Re	ecorded Data (stream	gauge, mo	nitoring well, aerial	pnotos, p	previous in	spection	18), II 8	avallabi	e:		
Remarks:											

Project/Site: I-69 Section 6 Wetland S6W037A	City/Cour	nty: Morgan		Sampling Date: 04/06/2017
Applicant/Owner: INDOT/Lochumueller			State: Indiana	Sampling Point CL03A-1W1
Investigator(s): R. Yeager, B. Reust	Section, 7	Γownship, Ra	ange: SEC 26, T12N, R1	1E
Landform (hillslope, terrace, etc.): roadside	<u> </u>	Local reli	ief (concave, convex, no	ne): flat
Slope (%): 1% Lat: 39.444666	Long: -86	5.386939		Datum: GCS NAD83
Soil Map Unit Name Elkinsville silt loam, 6 to 12 percent s	lopes, eroded		NWI classi	fication: PEM1
Are climatic/hydrologic conditions on the site typical for thi	•	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology sig	•			present? Yes X No:
Are Vegetation , Soil or Hydrology na			eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show				
Hydrophytic Vegetation Present? Yes X N	lo			
	lo Is	the Sample		
Wetland Hydrology Present? Yes X	lo w	ithin a Wetla	and? Yes	X No
Remarks	•			
VEGETATION - Use scientific names of plants				
VEGETATION - Use scientific fiames of plants	Absolute Dominar	nt Indicator	Deminence Test was	droh ook
Tree Stratum (Plot Size: 30' radius)	% Cover Species		Dominance Test wor	
1. Fraxinus pennsylvanica	20 Yes	FACW	Number of Dominant S That Are OBL, FACW,	
2			Total Number of Domi	inant
3			Species Across All Str	rata: <u>3</u> (B)
4			Percent of Dominant S That are OBL, FACW,	
5	20 = Total C		That are OBL, FACW,	, or FAC:100(A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)		ovei	Prevalence Index wo	orksheet:
1. Salix interior	30 Yes	FACW	Total % Cover o	of: Multiply by:
2.			OBL species	0 x 1 = 0
3.			· —	150 x 2 = 300
4			FAC species FACU species	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
5			UPL species	0
Hart Otratura (Diet Sizer El redine	30 = Total C	over		150 (A) 300 (B)
Herb Stratum (Plot Size: 5' radius) 1. Equisetum hyemale	100 Yes	FACW	Prevalence Ind	lex = B/A = 2.00
2.		1701	T TO VAICHOO III A	2.00
3.		-	Hydrophytic Vegetati	ion Indicators:
4.				ydrophytic Vegetation:
5			X 2-Dominance Test X 3-Prevalence Index	
6				daptations (Provide supporting
7			data in Remarks or	r on a separate sheet)
8			<u> </u>	phytic Vegetation ¹ (Explain)
9			¹ Indicators of hydric so be present, unless dis	oil and wetland hydrology must
16.	100 = Total C	over	be present, unless dis	numbed of problematic
Vine Stratum (Plot Size: 30' radius)			Hadaar bod -	
1			Hydrophytic Vegetation	
2				'es X No
	0 = Total C	over		
Remarks: (Include photo numbers here or on a separate	sheet.)			

SOIL Sampling Point CL03A-1W1

	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR3/2	100					silt loam	
3-20	10YR4/2	95	10YR4/6	5	С	М	silty clay loa	m
	Concentration, D= De	pletion, R	M=Reduced Matrix,	CS=Cove	red or Coa	ated Sand		Location: PL=Pore Lining, M=Matrix
Black H Hydroge Stratifie 2 cm M	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) uck (A10)	(A.4.1)	Sand Stripp Loam Loam X Deple	y Redox (eed Matrix y Mucky M y Gleyed eted Matrix	(S6) Mineral (F1 Matrix (F2) k (F3))		toast Prairie Redox (A16) Park Surface (S7) Pon-Manganese Masses (F12) Pery Shallow Dark Surface (TF12) Pother Soil (Explain in Remarks)
Thick D Sandy I	d Below Dark Surfac ark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3		Deple		rface (F6) Surface (F sions (F8)	7)		dicators of hydrophytic vegetation and land hydrology must be present, unless disturbed or problematic.
	Layer (If observed):							
Type: Depth (ir marks:	nches):						Hydric S	Soil present? Yes X No
Depth (ir							Hydric S	Soil present? Yes X No
Depth (in marks: DROLO	GY ydrology Indicators		uired: check all that	annly)				
DROLO Petland Hrimary Inc. Surface High W. Saturati Water M. Sedime Drift De Algal M. Iron De Inundat	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)	one is red	Water St Aquatic F True Aqu Hydrogel Oxidized Presence Recent II Thin Muc	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph	3) Is (B14) Odor (C1) Interes on Liviced Iron (C Ottion in Tille Is (C7) In (C9)	(4)	Sec 	condary Indicators (minimum of two requestrace Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C8) Stunted or Stressed Plants (D1) Geomorphic Postion (D2) FAC-Neutral Test (D5)
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave	one is red magery (I e Surface	Water St Aquatic F True Aqu Hydroger Oxidized Presencer Recent In Thin Muc 37) Gauge o Other (E:	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc ron Reduc ck Surface r Well Dat kplain in R	3) Is (B14) Odor (C1) Interes on Liviced Iron (C Ottion in Tille Is (C7) In (C9)	(4)	Sec 	condary Indicators (minimum of two requestrates Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Drayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C8) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface Wa ater Tabla aturation	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Ye Present? Ye Present?	magery (I e Surface	Water St Aquatic F True Aqu Hydroger Oxidized Presence Recent It Thin Muc Gauge o (B8) Other (Ex	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc on Reduc k Surface r Well Dat	3) s (B14) Odor (C1) heres on Lived Iron (C tion in Tille (C7) a (D9) Remarks)	ed Soils (Sec 	condary Indicators (minimum of two requestrates Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Drayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C8) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface Wa ater Tabl ituration cludes c	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Ye e Present?	magery (I	Water St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc G7) Gauge o (B8) Other (Ex No X Depth No Depth No Depth	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc on Reduc ck Surface r Well Dat kplain in R (inches): (inches):	3) s (B14) Odor (C1) heres on Liv ced Iron (C stion in Tille c (C7) ha (D9) Remarks)	ed Soils (Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec	condary Indicators (minimum of two requestrace Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C8) Stunted or Stressed Plants (D1) Geomorphic Postion (D2) FAC-Neutral Test (D5)
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface Wa ater Tabl aturation acludes c	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Present? Present? ye apillary fringe)	magery (I	Water St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc G7) Gauge o (B8) Other (Ex No X Depth No Depth No Depth	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc on Reduc ck Surface r Well Dat kplain in R (inches): (inches):	3) s (B14) Odor (C1) heres on Liv ced Iron (C stion in Tille c (C7) ha (D9) Remarks)	ed Soils (Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec	condary Indicators (minimum of two requestrace Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C8) Stunted or Stressed Plants (D1) Geomorphic Postion (D2) FAC-Neutral Test (D5)

Project/Site: I-69 Section 6 Wetland S6W040A		City/Coun	ty: Morgan		Sampling Date: 11/3/2016
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point CL06A-1D1
Investigator(s): L. Barnhart, A. Grisel		Section, T	ownship, Ra	ange: Sec 26-T12N-R1E	<u> </u>
Landform (hillslope, terrace, etc.): roadside	_		Local reli	ief (concave, convex, no	ne): convex
Slope (%): 6-12 Lat: 39.448905	L	Long: -86.	.386854		Datum: GCS NAD83
Soil Map Unit Name Wakeland silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this t	ime of year	r? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology signif					present? Yes X No:
Are Vegetation , Soil or Hydrology natu				eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showir				•	•
Hydrophytic Vegetation Present? Yes X No					
Hydric Soils Present? Yes No	X	Is	the Sample	d Area	
Wetland Hydrology Present? Yes No	X	wi	ithin a Wetla	and? Yes	NoX
Remarks Data point is located approximately 68 feet west	of SR 37.				
VEGETATION - Use scientific names of plants	Absolute	Dominan	t Indicator	Dominance Test wor	
Tree Stratum (Plot Size: 30' radius)		Species?			
1				Number of Dominant S That Are OBL, FACW,	
2				Total Number of Domi	inant
3				Species Across All Str	rata: 1 (B)
4				Percent of Dominant S	
5		T-1-1-0		That are OBL, FACW,	, or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Co	over	Prevalence Index wo	orksheet:
				Total % Cover o	of: Multiply by:
1. 2.	-	-		OBL species	0 x 1 = 0
3.	⇒ . .			FACW species	5 x 2 = 10
4.	-			FAC species	0 x 3 = 0
5.				· -	80 x 4 = 320
	0	= Total Co	over	l 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Herb Stratum (Plot Size: 5' radius)					· · · · <u></u> · · ·
1. Solidago canadensis	80	Yes	FACU	Prevalence Ind	lex = B/A = 4.05
2. Securigeria varia	15	No No	UPL	Hydrophytic Vegetat	ion Indicators:
3. Phalaris arundinacea	5	No	FACW	1-Rapid Test for H	ydrophytic Vegetation:
4 5.	= 	-		2-Dominance Test	
				3-Prevalence Index	
6					daptations (Provide supporting r on a separate sheet)
8					phytic Vegetation ¹ (Explain)
9.				—	oil and wetland hydrology must
10	_			be present, unless dis	
	100	= Total Co	over		
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1.				Vegetation	/
2		T-/-10		Present? Y	/es <u>X</u> No
	0	= Total Co	over		
Remarks: (Include photo numbers here or on a separate sh	neet.)				

SOIL Sampling Point CL06A-1D1

rofile Desci Depth	Matri	(Redo	ox Feature	es								
(Inches)	Color (moist)	%	Color (r		%	Type ¹	Loc ²	Text	ıre		Rer	narks		
0-20	10YR4/3	100						clay lo						
			-											
T 0 0			M. Dadasa	d Marketon A		- 1 0		1.0	21 1'	DI D			1 - 1 - 1	
	oncentration, D=	Depletion, R	M=Reduce	J Matrix, C	S=Cover	ed or Coa	ited Sand		² Location			U .		3
•	Indiactors:											-	SUIIS	
_ Histosol	, ,		-		Gleyed M			•	Coast Pra			5)		
	pipedon (A2)		-		Redox (S			•	Dark Surf			(540)		
Black Hi			-		ed Matrix (`	•	Iron-Mano Very Shal) \	
	n Sulfide (A4)		-		/ Mucky M / Gleyed N	,	•		Other Soi			,	-)	
_	d Layers (A5) ick (A10)		-		ted Matrix	, ,		•	Other Soi	і (Ехріа	III III Ke	marks)		
_	d Below Dark Sur	face (A11)	-		Dark Sur									
_	ark Surface (A12)	ace (ATT)	-		ted Dark S	. ,	7)		3 Indicators	of hydro	onhytic	venetatio	n and	
	lucky Mineral (S1)	-		Depressi	`	')		wetland hyd					S
-	ick Peat or Peat (-	\\\	Depressi	0113 (1 0)			dis	sturbed	or probl	ematic.		
_	Layer (If observe													
Type:														
								Hyd	ric Soil pres	ent?	Yes		No	Χ
Depth (in emarks:	ches):													
Depth (in	· <u></u>													
Depth (in emarks:	GY	ors:												
Depth (in emarks:	· <u></u>		uired; chec	k all that a	apply)				Secondary	Indicato	rs (mini	mum of t	wo rea	uired
Depth (in emarks: /DROLOG Vetland Hy	GY vdrology Indicate icators (minimum		-			res (B9)			Secondary Surface S		•		wo req	uirec
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface	GY vdrology Indicaticators (minimum Water (A1)			Water Sta	ined Leav				Surface	Soil Cra	cks (B6)	wo req	uired
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface High Wa	GY vdrology Indicate icators (minimum Water (A1) iter Table (A2)		_	Water Sta Aquatic Fa	ained Leav auna (B13	3)			Surface : Drainage	Soil Cra Patterr	cks (B6 ns (B10))	wo req	uirec
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface High Wa Saturatio	ordrology Indicate icators (minimum Water (A1) ater Table (A2) on (A3)			Water Sta Aquatic Fa True Aqua	nined Leav auna (B13 atic Plants	3) (B14)			Surface Surface Drainage Dry-Seas	Soil Cra Patterr son Wat	cks (B6 ns (B10) er Tabl)	wo req	uired
Depth (in emarks: ODROLOG Vetland Hy Primary Ind Surface High Wa Saturatic Water M	GY vdrology Indicate icators (minimum Water (A1) iter Table (A2)			Water Sta Aquatic Fa True Aqua Hydrogen	ained Leav auna (B13 atic Plants Sulfide O	B) (B14) dor (C1)	ving Roo	ts (C3)	Surface : Drainage	Soil Cra Patterr son Wat Burrows	cks (B6 ns (B10) er Table s (C8))) e (C2)		
Depth (in emarks: /DROLOG Vetland Hy Primary Ind Surface High Wa Saturatic Water M Sedimer	rdrology Indicaticators (minimum Water (A1) ter Table (A2) on (A3) arks (B1)			Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I	ained Leav auna (B13 atic Plants Sulfide O Rhizosphe	8) (B14) dor (C1) eres on Liv		ts (C3)	Surface : Drainage Dry-Seas Crayfish	Soil Cra Patterr son Wat Burrows on Visibi	cks (B6 ns (B10) er Table s (C8) le on Ae)) e (C2) erial Ima		
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Project/Site: I-69 Section 6 Wetland S6W040A		City/County	y: Morgan		Sampling Date: 11/3/2016
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point CL06A-1W1
Investigator(s): L. Barnhart, A. Grisel		Section, To	wnship, Ra	nge: Sec 26-T12N-R1E	<u> </u>
Landform (hillslope, terrace, etc.): roadside	·		Local reli	ef (concave, convex, no	ne): concave
Slope (%): 6-12 Lat: 39.449382	L	ong: -86.3	- 38632		Datum: GCS NAD83
Soil Map Unit Name Wakeland silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this ti	ime of vear	? Yes	X No	(If no. explain Re	emarks.)
Are Vegetation , Soil or Hydrology signif	-	_			present? Yes X No:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showin				•	,
Hydrophytic Vegetation Present? Yes X No					
Hydric Soils Present? Yes X No		ls t	he Sample	d Area	
Wetland Hydrology Present? Yes X No		wit	hin a Wetla	nd? Yes	X No
Remarks Data point is located approximately 48 feet west	of SR 37.	•			
VEGETATION - Use scientific names of plants					
·	Absolute	Dominant	Indicator	Dominance Test wor	ksheet:
Tree Stratum (Plot Size: 30' radius)	% Cover	Species?	Status	Number of Dominant S	
1				That Are OBL, FACW	
2.				Total Number of Domi	
3				Species Across All Str	
5.				Percent of Dominant S That are OBL, FACW,	
	0 :	= Total Cov	/er		
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index wo	orksheet:
1				Total % Cover o	
2				OBL species FACW species	$ \begin{array}{ccccccccccccccccccccccccccccccccc$
3.				FAC species	$\frac{90}{0}$ $x = 180$ $x = 0$
4				FACU species	0 x 4 = 0
5	0 :	= Total Cov	/er	UPL species	0 x 5 = 0
Herb Stratum (Plot Size: 5' radius)				Column Totals: 1	100 (A) 190 (B)
Phalaris arundinacea	90	Yes	FACW	Prevalence Ind	lex = B/A = 1.90
2. Eupatorium perfoliatum	10	No	OBL	Hydrophytic Vegetat	ion Indicators:
3				, , ,	ydrophytic Vegetation:
4				X 2-Dominance Test	
5				X 3-Prevalence Inde	
6					daptations (Provide supporting r on a separate sheet)
8.					phytic Vegetation ¹ (Explain)
9.				_	oil and wetland hydrology must
10				be present, unless dis	
(a) (a) (a) (b) (a) (a) (b) (a) (a) (a) (a) (a) (a) (a) (a) (a) (a	100	= Total Cov	/er		
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1				Vegetation	'es X No
2	0 :	= Total Cov	/er	Present? Y	NU
		. 5.6.1	. 5.		
Remarks: (Include photo numbers here or on a separate sh	ieet.)				

SOIL Sampling Point CL06A-1W1

nches)	Color (moist)	%	Color (moist)	% Type ¹	Loc ²	Texture	Remarks
0-20	10YR3/3	80	10YR5/6	20 C	PL	clay loam	distinct redox concentrations
dric Soi Histoso Histic E Black H Hydroge Stratifie 2 cm M Deplete	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) uck (A10) d Below Dark Surfac		Sandy Sandy Stripp Loam Loam Deple Redo:	/ Gleyed Matrix (S / Redox (S5) ed Matrix (S6) y Mucky Mineral (I y Gleyed Matrix (F ted Matrix (F3) x Dark Surface (F6	4) =1) :2)	Indiac Coa Dari Iron Ven	cation: PL=Pore Lining, M=Matrix tors for Problematic Hydric Soils ast Prairie Redox (A16) k Surface (S7)Manganese Masses (F12) y Shallow Dark Surface (TF12) er Soil (Explain in Remarks)
Sandy M	ark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3))		ted Dark Surface x Depressions (F8	` '		cators of hydrophytic vegetation and nd hydrology must be present, unless disturbed or problematic.
strictive	Layer (If observed):						
	oches):					Hydric Soi	Inresent? Yes X No
Type: Depth (ir marks:	nches):		<u> </u>			Hydric Soi	I present? Yes X No
Depth (ir						Hydric Soi	I present? Yes X No
Depth (ir marks:	GY ydrology Indicators		uired: check all that	anniv)			
Depth (ir marks: DROLO etland H mary Inc	GY ydrology Indicators licators (minimum of					Secon	ndary Indicators (minimum of two requ
Depth (ir marks: DROLO etland H mary Inc	GY ydrology Indicators		Water Sta Aquatic F	ained Leaves (B9) auna (B13)		Secor Su	
DROLO DROLO Surface High Was	gy ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3)		Water Sta Aquatic F True Aqu	ained Leaves (B9) Fauna (B13) atic Plants (B14)		Secor Su Dra Dry	ndary Indicators (minimum of two requ rface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2)
DROLO Petland H mary Inc Surface High Was Saturati Water M	gy ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)		Water Sta Aquatic F True Aqu Hydroger	ained Leaves (B9) Fauna (B13) atic Plants (B14) Sulfide Odor (C1)	Secor Su Dra Dry Cra	ndary Indicators (minimum of two requirace Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
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Project/Site: I-69 Section 6 Wetland S6W041A		City/Count	ty: Morgan C	County	Sampling Date: 9/20/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point CL07A-1D1
Investigator(s): R. Hook, C. Meador, A. Grisel		Section, T	ownship, Ra	nge: Sec 26-T12N-R1E	<u> </u>
Landform (hillslope, terrace, etc.): roadside			Local reli	ef (concave, convex, no	ne): none
Slope (%): 6-12 Lat: 39.453677	L	ong: -86.	- 384022		Datum: GCS NAD 1983
Soil Map Unit Name Parke silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this ti	me of year	? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology signif		-			present? Yes X No:
Are Vegetation, Soil or Hydrology natur				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showin					
Hydrophytic Vegetation Present? Yes X No					-
Hydric Soils Present? Yes X No			the Sample		
Wetland Hydrology Present? Yes X No		Wi	thin a Wetla	nd? Yes	X No
Remarks This data point was taken on a slope in a mowed	open field	. This data	point lacks i	indicators of a wetland a	ind can be considered upland.
VEGETATION - Use scientific names of plants			-		
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test wor	ksheet:
1				Number of Dominant That Are OBL, FACW	
2.				Total Number of Domi	
3				Species Across All St	
4				Percent of Dominant S	
5				That are OBL, FACW,	, or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Co	ver	Prevalence Index wo	 orksheet:
				Total % Cover o	of: Multiply by:
1. 2.		-		OBL species	$0 \qquad x = 0$
3	·	-		FACW species	5 x 2 = 10
4.				FAC species	0 x 3 = 0
5.				· -	95 x 4 = 380
	0	= Total Co	ver	UPL species Column Totals: 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Herb Stratum (Plot Size: 5' radius)					<u> </u>
1. Poa annua	45	Yes	FACU	Prevalence Ind	lex = B/A = 3.90
2. Schedonorus arundinaceus	40	Yes	FACU	Hydrophytic Vegetat	ion Indicators:
Trifolium pratense Leersia virginica	<u>10</u> 5	No No	FACU FACW	1-Rapid Test for H	ydrophytic Vegetation:
		INO	TACV	2-Dominance Test	· · · · · · · · · · · · · · · · · · ·
				3-Prevalence Inde	
6					daptations (Provide supporting r on a separate sheet)
8.					phytic Vegetation ¹ (Explain)
9.			·	-	oil and wetland hydrology must
10				be present, unless dis	
	100	= Total Co	ver		
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1.			·	Vegetation	/a-a V Na
2		- Total Ca		Present?	/es <u>X</u> No
		= Total Co	ver		
Remarks: (Include photo numbers here or on a separate sh	eet.)				

SOIL Sampling Point CL07A-1D1

Depth	Matrix		Red	lox Featur	es				
Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remai	rks
0-2	10YR3/2	100		-			silty clay loam		
2-20	10YR4/4	60	10YR4/6	40	С	М	clay loam	Distinct redox co	ncentrations
Histoso Histic E Black H Hydroge Stratifie 2 cm Mi Deplete Thick D Sandy M	I Indiactors:	ce (A11)	Sand Stripp Loam Loam Deple Redo	y Gleyed I y Redox (S ped Matrix y Mucky I y Gleyed pted Matrix x Dark Su	Matrix (S4) S5) (S6) Mineral (F1) Matrix (F2) (F3) rface (F6) Surface (F)	Indiad Co Da Iroi Ve Oth	pocation: PL=Pore Lining etors for Problematic Heast Prairie Redox (A16) rk Surface (S7) n-Manganese Masses (Fry Shallow Dark Surface her Soil (Explain in Remains cators of hydrophytic veg and hydrology must be prodisturbed or problem	ydric Soils =12) (TF12) arks) getation and esent, unless
Type: Depth (ir marks:	nches):		<u> </u>				Hydric So	il present? Yes _>	K No _
Depth (ir marks: s data po	pint has no indicator		soils and can be co	nsidered u	pland.		Hydric So	il present? Yes <u>)</u>	K No _
Depth (ir marks: s data po	GY ydrology Indicator	s:	soils and can be con		pland.			il present? Yes _>	
Depth (ir marks: s data po DROLO etland H imary Inc Surface High Wa	GY ydrology Indicator licators (minimum of Water (A1) ater Table (A2)	s:	quired; check all that Water St Aquatic l	apply) ained Lea Fauna (B1	ves (B9) 3)		<u>Seco</u> Si Di	ndary Indicators (minimu ırface Soil Cracks (B6) ainage Patterns (B10)	ım of two requ
Depth (ir marks: s data po DROLO etland H imary Inc Surface High Wa Saturati	GY ydrology Indicator licators (minimum of Water (A1) ater Table (A2) on (A3)	s:	quired; check all that Water Si Aquatic I True Aqu	apply) ained Lea Fauna (B1 atic Plant	ves (B9) 3) s (B14)		<u>Seco</u> Si Di Di	ndary Indicators (minimu Irface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (ım of two requ
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Project/Site: I-69 Section 6 Wetland S6W041A		City/County	r: Morgan C	County	Sampling Date: <u>9/20/2016</u>
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point CL07A-1W1
Investigator(s): R. Hook, C. Meador, A. Grisel		Section, To	wnship, Ra	nge: Sec 26-T12N-R1E	_
Landform (hillslope, terrace, etc.): hillside			Local reli	ef (concave, convex, no	ne): concave
Slope (%): 6-12 Lat: 39.453378	L	ong: -86.3	84123		Datum: GCS NAD 1983
Soil Map Unit Name Parke silt loam				NWI classif	fication: N/A
Are climatic/hydrologic conditions on the site typical for this tin	ne of year	? Yes	X No	(If no, explain Re	marks.)
Are Vegetation , Soil or Hydrology signific					present? Yes X No:
Are Vegetation , Soil or Hydrology natura				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showing			ocations,	transects, importan	t features, etc.
Hydrophytic Vegetation Present? Yes X No					
Hydric Soils Present? Yes X No			he Sample		V
Wetland Hydrology Present? Yes X No		Witi	hin a Wetla	ind? Yes	X No
Remarks This data point was taken on a slope in a mowed of data point can be considered to be within a wetlan		. This site h	as hydroph	ytic vegetation, hydric so	oils, and wetland hydrology. This
VEGETATION - Use scientific names of plants					
		Dominant Species?	Indicator Status	Dominance Test wor	ksheet:
1.	70 COV CI	орсоюз.	Otatas	Number of Dominant S That Are OBL, FACW,	
2.				Total Number of Domi	
3.				Species Across All Str	
4				Percent of Dominant S	
5				That are OBL, FACW,	or FAC: 100 (A/B)
O II (O) I O (O) (O) (O) (O) (O) (O) (O) (O) (O) (0	= Total Cov	er	Prevalence Index wo	orksheet:
Sapling/Shrub Stratum (Plot Size: 15' radius)					
1		-		Total % Cover of OBL species	$\frac{1}{40} = \frac{1}{x} \frac{1}{1} = \frac{40}{1}$
2		-		· -	49 x 2 = 98
3. 4.				FAC species	15 x 3 = 45
5				FACU species	0 x 4 = 0
	0	= Total Cov	er	UPL species	$0 \times 5 = 0$
Herb Stratum (Plot Size: 5' radius)				Column Totals: 1	04 (A) <u>183</u> (B)
1. Carex lurida	40	Yes	OBL	Prevalence Ind	lex = B/A = 1.76
2. Leersia virginica	34	Yes	FACW	Hydrophytic Vegetati	ion Indicators:
3. Juncus tenuis	15	No	FAC	X 1-Rapid Test for Hy	
4. Cyperus esculentus	15	No	FACW	X 2-Dominance Test	
5.				X 3-Prevalence Index	
6					daptations (Provide supporting
7 8.					r on a separate sheet) phytic Vegetation 1 (Explain)
9.				l —	
10.				'Indicators of hydric so be present, unless dist	oil and wetland hydrology must turbed or problematic
	104	= Total Cov	er	, , , , , , , , , , , , , , , , , , , ,	
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1				Vegetation	
2				Present? Y	'es X No
	0	= Total Cov	er		
Remarks: (Include photo numbers here or on a separate she This data point passes tests for hydrophytic vegetation and c	,	nsidered to	be within a	wetland.	

SOIL Sampling Point CL07A-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	e Remarks
0-20	10YR4/2	60	10YR4/6	40	С	PL/M	silt loar	m
	Concentration, D= De	pletion, RN	M=Reduced Matrix,	CS=Cove	red or Coa	ated Sand		² Location: PL=Pore Lining, M=Matrix
	I Indiactors:		0 1	. 0111	4-1/04		In	diactors for Problematic Hydric Soils
Histoso	i (A1) pipedon (A2)			/ Gleyed N / Redox (S)	_	Coast Prairie Redox (A16) Dark Surface (S7)
•	listic (A3)			ed Matrix			_	Iron-Manganese Masses (F12)
-	en Sulfide (A4)			y Mucky N		1)	_	Very Shallow Dark Surface (TF12)
Stratifie	d Layers (A5)			y Gleyed I)	_	Other Soil (Explain in Remarks)
	uck (A10)			ted Matrix	. ,			
_	d Below Dark Surfac	e (A11)		x Dark Su			2	Ladiantes of hadronic discount discount
-	ark Surface (A12) Mucky Mineral (S1)			ted Dark s x Depress		-7)		Indicators of hydrophytic vegetation and vetland hydrology must be present, unless
	uck Peat or Peat (S3)	Redo.	x Depress	10115 (F6)			disturbed or problematic.
	Layer (If observed):	•						
Type:							11	- 0-!!
Depth (ir emarks:	nches):	or status D	epleted Matrix (F3)	and can b	oe conside	ered to be		c Soil present? Yes X No etland.
Depth (ir emarks: is data po	oint meets the indicat	or status D	epleted Matrix (F3)	and can b	oe conside	ered to be		
Depth (ir marks: is data po	oint meets the indicat		epleted Matrix (F3)	and can b	oe conside	ered to be		
Depth (ir marks: is data po	oint meets the indicat				oe conside	ered to be	within a we	
Depth (ir marks: is data po	GY ydrology Indicators dicators (minimum of		uired; check all that	apply)		ered to be	within a we	etland. Secondary Indicators (minimum of two requ
Depth (ir marks: is data po	oint meets the indicat GY ydrology Indicators		uired; check all that		ves (B9)	ered to be	within a we	etland.
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Project/Site: I-69 Section 6 Wetland S6W046A		City/Count	ty: Morgan		Sampling Date: 9/21/2016
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point CL24A-1D1
Investigator(s): R. Connolly, A. Grisel		Section, T	ownship, Ra	nge: Sec 26-T12N-R1E	<u> </u>
Landform (hillslope, terrace, etc.): roadside			Local reli	ef (concave, convex, no	ne): none
Slope (%): 12-18 Lat: 39.45551	L	_ong: -86.			Datum: GCS NAD83
Soil Map Unit Name Parke silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this	time of year	r? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology signi					present? Yes X No:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in:	
SUMMARY OF FINDINGS - Attach site map showing					•
Hydrophytic Vegetation Present? Yes No	Х				
Hydric Soils Present? Yes No		Is	the Sample	d Area	
Wetland Hydrology Present? Yes No	X	wi	thin a Wetla	ind? Yes	NoX
Remarks Data point is located approximately 120 feet wes	st of SR 37.				
VEGETATION - Use scientific names of plants	Absoluto	Dominant	t Indicator	Daminana Taat	drah a at-
Tree Stratum (Plot Size: 30' radius)		Species?		Dominance Test wor	
1				Number of Dominant S That Are OBL, FACW	
2			<u> </u>	Total Number of Domi	nant
3				Species Across All Str	rata: 2 (B)
4		-		Percent of Dominant S	
5		Total Ca		That are OBL, FACW,	, or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Co	ivei	Prevalence Index wo	orksheet:
· · · · · · · · · · · · · · · · · · ·				Total % Cover o	of: Multiply by:
1. 2.			-	OBL species	0 x 1 = 0
3.		-	-	FACW species	0 x 2 = 0
4.				FAC species	0 x 3 = 0
5				FACU species1 UPL species	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	0	= Total Co	over	· <u> </u>	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Herb Stratum (Plot Size: 5' radius)					· · · · <u></u> · · · ·
1. Solidago canadensis	80	Yes	FACU	Prevalence Ind	lex = B/A = 4.00
2. Schedonorus arundinaceus		Yes	FACU	Hydrophytic Vegetat	ion Indicators:
3		-		1-Rapid Test for H	ydrophytic Vegetation:
5		-	· ———	2-Dominance Test	
6.			· ——	3-Prevalence Inde	
7.					daptations (Provide supporting r on a separate sheet)
8.					phytic Vegetation ¹ (Explain)
9				l -	oil and wetland hydrology must
10				be present, unless dis	
Ni Or (Diet Cies COles dies	100	= Total Co	over		
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1		-		Vegetation	'es No _X_
2	0	= Total Co	over	Present? Y	NO
		- 10tal 00			_
Remarks: (Include photo numbers here or on a separate s	neet.)				

SOIL Sampling Point CL24A-1D1

Depth (Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc 2	Text	ture		Remarks	
0-4	10YR3/2	100	, ,	· ——			clay l				
4-20	10YR4/4	100					clay l				
1 20	1011(1)1						olay I	- Iouiii			
	Concentration, D= De	pletion, RM	=Reduced Matrix,	CS=Cove	red or Coa	ited Sand	Grains.			Pore Lining, Ma	
Histoso			Sand	v Gleved N	Matrix (S4)					edox (A16)	
	pipedon (A2)			y Redox (S					Surface (S		
•	istic (A3)			ed Matrix						Masses (F12)
Hydroge	en Sulfide (A4)				∕lineral (F1)				ark Surface (TF	
Stratifie	d Layers (A5)		Loam	y Gleyed I	Matrix (F2))		Othe	r Soil (Expl	ain in Remarks)
2 cm M	uck (A10)		Deple	eted Matrix	(F3)						
Deplete	d Below Dark Surfac	e (A11)	Redo	x Dark Su	rface (F6)						
Thick D	ark Surface (A12)				Surface (F	7)				Irophytic vegeta	
-	Mucky Mineral (S1)		Redo	x Depress	ions (F8)			wetland		must be presed or problemation	
	uck Peat or Peat (S3	,									
	Layer (If observed)	:									
	nches):						Нус	dric Soil	present?	Yes	No _
Type: _ Depth (ir emarks:	nches):						Нус	dric Soil	present?	Yes	No _
Depth (ir	nches):						Hye	dric Soil	present?	Yes	No _
Depth (in marks:		::					Hyd	dric Soil	present?	Yes	No _
Depth (in marks:	GY		ired; check all that	apply)			Нус			Yes	
Depth (ir marks: DROLO etland H imary Inc	GY ydrology Indicators dicators (minimum of				ves (B9)		Нус	Second	lary Indicat	ors (minimum c	
Depth (ir marks: DROLO etland H imary Inc. Surface	GY ydrology Indicators		Water St	apply) ained Lea Fauna (B1:			Hyd	Second	lary Indicat	cors (minimum o	
Depth (in marks: DROLO Setland Herimary Inc. Surface	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water St Aquatic F	ained Lea	3)		Нус	Second Surf Drai	lary Indicat ace Soil Cr nage Patte	cors (minimum o	
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Project/Site: I-69 Section 6 Wetland S6W046A		City/County	y: Morgan		Sampling Date: 9/21/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point CL24A-1W1
Investigator(s): R. Connolly, A. Grisel		Section, To	wnship, Ra	inge: Sec 26-T12N-R1E	<u> </u>
Landform (hillslope, terrace, etc.): roadside			Local reli	ief (concave, convex, no	ne): concave
Slope (%): 12-18 Lat: 39.455549	L	ong: -86.3	- 381739		Datum: GCS NAD83
Soil Map Unit Name Parke silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this	time of year	? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology sign		_			present? Yes X No:
Are Vegetation , Soil or Hydrology nat				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showi					,
Hydrophytic Vegetation Present? Yes X No		T		<u> </u>	
Hydric Soils Present? Yes X No		ls t	he Sample	d Area	
Wetland Hydrology Present? Yes X No) <u> </u>	wit	hin a Wetla	ind? Yes	X No
Remarks Data point was taken approximately 112 feet we	est of SR 37	in a depres	ssional area	l.	
VEGETATION - Use scientific names of plants	Absolute	Dominant	Indicator	Daminana Taat wax	ulsa ha a t
Tree Stratum (Plot Size: 30' radius)		Species?	Status	Dominance Test wor	
1				Number of Dominant S That Are OBL, FACW,	
2				Total Number of Domi	inant
3				Species Across All Str	rata: 1 (B)
4				Percent of Dominant S	
5		= Total Cov		That are OBL, FACW,	, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)		= Total Cov	/ei	Prevalence Index wo	orksheet:
1				Total % Cover o	of: Multiply by:
2.				OBL species	0 x 1 = 0
3.				· -	100 x 2 = 200
4				FAC species	0 x 3 = 0
5				FACU species UPL species	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	0	= Total Cov	/er		100 (A) 200 (B)
Herb Stratum (Plot Size: 5' radius)	00	V	E40)4/	Dravalanas Ind	
Phalaris arundinacea Impatiens capensis	<u>80</u>	Yes No	FACW FACW	Prevalence Ind	lex = B/A = 2.00
Cyperus esculentus	10	No	FACW	Hydrophytic Vegetat	ion Indicators:
A				X 1-Rapid Test for H	ydrophytic Vegetation:
5.				X 2-Dominance Test	
6.				X 3-Prevalence Index	
7.					daptations (Provide supporting r on a separate sheet)
8					phytic Vegetation ¹ (Explain)
9					oil and wetland hydrology must
10				be present, unless dis	turbed or problematic
Vine Stratum (Plot Size: 30' radius)	100	= Total Cov	/er		
				Hydrophytic	
1 2				Vegetation Present?	'es X No
	0	= Total Cov	/er		
Remarks: (Include photo numbers here or on a separate s					
romano. (moiddo prioto numbers nere or on a separate s	<i></i>				

SOIL Sampling Point CL24A-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10RY4/3	80	7.5YR4/6	20	RM	PL/M	clay loam	
6-20	10YR4/4	80	7.5YR4/6	20	RM	PL/M	clay loam	
ydric So Histoso Histic E Black F Hydrog Stratifie 2 cm M Deplete Thick D Sandy	pipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5) uck (A10) ed Below Dark Surface eark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3	ce (A11)	Sand Sand Stripp Loam Loam Redo Deple	y Gleyed My Redox (Speed Matrix Mucky Mucky My Gleyed I Matrix xx Dark Sureted Dark Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard	Matrix (S4 S5) (S6) Mineral (F ² Matrix (F2 (F3) rface (F6) Surface (F6)) 1))	Indiac Co _ Da Irou Ve Ott	cocation: PL=Pore Lining, M=Matrix ctors for Problematic Hydric Soils ast Prairie Redox (A16) rk Surface (S7) n-Manganese Masses (F12) ry Shallow Dark Surface (TF12) her Soil (Explain in Remarks) icators of hydrophytic vegetation and and hydrology must be present, unless disturbed or problematic.
strictive	Layer (If observed)	:						
Type:							Hydria Sa	ail present? Voc. V No.
Type: _ Depth (i	nches):						Hydric So	oil present? Yes X No _
Depth (i							Hydric Sc	oil present? Yes <u>X</u> No <u></u>
Depth (in the marks:	GY ydrology Indicators		nuired: check all that	apply)				
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Project/Site: I-69 Section 6 Wetland S6W047A	City/County: Mor	gan County Sampling Date: 9/20/2016
Applicant/Owner: INDOT/HNTB		State: Indiana Sampling Point CL10A-1D1
Investigator(s): R. Hook, C. Meador, A, Grisel	Section, Townshi	p, Range: Sec 25-T12N-R1E
Landform (hillslope, terrace, etc.):	Loc	al relief (concave, convex, none):
Slope (%): 0-1% Lat:	Long:	Datum: GCS NAD 1983
Soil Map Unit Name Banlic silt loam		NWI classification: N/A
Are climatic/hydrologic conditions on the site typical fo	r this time of year? Yes X	No (If no, explain Remarks.)
Are Vegetation , Soil or Hydrology	significantly disturbed?	Are "Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology		If needed, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map sl	_	ions, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No X	
Hydric Soils Present? Yes X	110	mpled Area
Wetland Hydrology Present? Yes	No X within a V	Wetland? Yes No X
Remarks This data point is taken in the maintained hydrology and hydrophytic vegetation. It can be seen that the second second second second second second second second second second second second second second second sec	an be considered upland.	drainage. This data point meets hydric soils but lacks wetland
	Absolute Dominant Indica	ator Dominance Test worksheet:
Tree Stratum (Plot Size:)	% Cover Species? Star	
1		That Are OBL, FACW, or FAC: 0 (A)
2		Total Number of Dominant
3		Species Across All Strata: 2 (B)
4. 5.		Percent of Dominant Species That are OBL, FACW, or FAC: 0 (A/B)
	0 = Total Cover	
Sapling/Shrub Stratum (Plot Size:		Prevalence Index worksheet:
1		Total % Cover of: Multiply by:
2		OBL species 0 x 1 = 0 FACW species 0 x 2 = 0
3		FACW species 0 x 2 = 0 FAC species 0 x 3 = 0
4		FACU species 25 x 4 = 100
5	0 = Total Cover	UPL species 0 x 5 = 0
Herb Stratum (Plot Size:)		Column Totals:25 (A)100 (B)
1. Poa annua	15 Yes FAC	CU Prevalence Index = B/A = 4.00
2. Glechoma hederacea	10 Yes FA	Hydrophytic Vegetation Indicators:
3		1-Rapid Test for Hydrophytic Vegetation:
4		2-Dominance Test is >50%
56.		3-Prevalence Index is <=\$
7.		4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
8.		Problematic Hydrophytic Vegetation ¹ (Explain)
9.		Indicators of hydric soil and wetland hydrology must
10		be present, unless disturbed or problematic
(T) . T)	= Total Cover	
Vine Stratum (Plot Size:)		Hydrophytic
1		Vegetation Present? Yes No X
2	0 = Total Cover	
Remarks: (Include photo numbers here or on a sepa		L
Tromains. (molado prioto numbers nere oi on a sepa	iato siloot.j	

SOIL Sampling Point CL10A-1D1

Depth	Matrix			Redox Featur	- C3					
(Inches)	Color (moist)	%	Color (mois	st) %	Type ¹	Loc ²	Texture		Remarks	
0-4	10YR3/2	80	10YR4/4	20	С	D	silty clay loam	distin	ct redox conce	ntrations
4-20	10YR4/2	70	10YR4/6		C	M	silty clay loam	promin	ent redox conc	entrations
Histosol Histosol Histic Ep Black Hi Hydroge Stratified 2 cm Mu Depleted Thick Da Sandy M 5 cm Mu	Indiactors: (A1) Dipedon (A2) Stic (A3) En Sulfide (A4) Dick (A10) Dise Below Dark Surfarark Surface (A12) Mucky Mineral (S1) Lick Peat or Peat (S Layer (If observed)	ce (A11)		atrix, CS=Cove Sandy Gleyed I Sandy Redox (: Stripped Matrix Loamy Mucky I Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress	Matrix (S4) S5) (S6) Mineral (F1) Matrix (F2) (F3) rface (F6) Surface (F))	Indiac CoDaIroiVeiOth	ettors for Prokast Prairie Reck Surface (Sin-Manganese by Shallow Dater Soil (Explaitations of hydrod hydrology		tion and
Depth (in	<u></u>	ric soil inc	licatore but lack	e hydrophytic y	vegetation	and wette	1	il present?	Yes X	No _
Depth (in marks: s data po	int meets three hyd		licators but lack	s hydrophytic v	regetation	and wetla		-		No _
DROLOG	int meets three hyd	s:			regetation	and wetla	and hydrology. I	can be consi	idered upland.	
Depth (in marks: s data po	int meets three hyd GY ydrology Indicator	s:	quired; check al			and wetla	and hydrology. I	can be consi	idered upland.	
Depth (in marks: s data po	GY ydrology Indicator icators (minimum o	s:	quired; check al	ll that apply)	ves (B9)	and wetla	and hydrology. I	can be consi	ors (minimum o	
Depth (in marks: s data po	int meets three hyd GY ydrology Indicator icators (minimum o Water (A1) ater Table (A2)	s:	quired; check al War Aqu	Il that apply) ter Stained Lea	ves (B9) 3)	and wetla	Seco	ndary Indicate	ors (minimum o	
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Aerial Imposed Plants (D1) ost (D5)	agery (CS

Project/Site: I-69 Section 6 Wetland S6W047A			City/County	: Morgan C	County	Sampling Date: <u>9/20/2016</u>
Applicant/Owner: INDOT/HNTB					State: Indiana	Sampling Point CL10A-1W1
Investigator(s): R. Hook, C. Meador, A. Grisel		5	Section, To	wnship, Ra	nge: Sec 25-T12N-R1E	<u>:</u>
Landform (hillslope, terrace, etc.):				Local reli	ef (concave, convex, no	ne): Concave
Slope (%): 0-1% Lat: 39.4564			ong: -86-3	808		Datum: GCS NAD 1983
Soil Map Unit Name Banlic silt loam					NWI classit	fication: N/A
Are climatic/hydrologic conditions on the site typic	al for this time	of vear	2 Vec	Y No		
						present? Yes X No:
Are Vegetation, Soil or Hydrology _						
Are Vegetation, Soil or Hydrology _	naturali	y probler	matic?	If nee	ded, explain answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing :	samplir	ng point l	ocations,	transects, importan	nt features, etc.
Hydrophytic Vegetation Present? Yes	X No					
Hydric Soils Present? Yes	X No			ne Sample		
Wetland Hydrology Present? Yes	X No _		with	nin a Wetla	ind? Yes	X No
Remarks						
VEGETATION - Use scientific names of pl	ants					
Tree Stratum (Plot Size:)			Dominant Species?	Indicator Status	Dominance Test wor	ksheet:
			•	Status	Number of Dominant S	
1 2.					That Are OBL, FACW,	
2. 3.					Total Number of Domi Species Across All Str	
4.					Percent of Dominant S	
5.					That are OBL, FACW,	
		0 =	= Total Cov	er		
Sapling/Shrub Stratum (Plot Size:)	,			Prevalence Index wo	orksheet:
1. Populus heterophylla		5	Yes	OBL	Total % Cover o	
2					·	35 x 1 = 35
3					FACW species FAC species	$\frac{55}{5}$ $\times 2 = \frac{110}{15}$
4					FACU species	5
5					UPL species	0 x = 0
Heath Christian (Diot Size:	_	5 =	= Total Cov	er	Column Totals: 1	100 (A) 180 (B)
Herb Stratum (Plot Size:) 1. Euthamia graminifolia		25	Yes	FACW	Prevalence Ind	dex = B/A = 1.80
Typha angustifolia		20	Yes	OBL	i revalence ind	1.00
3. Bidens frondosa		15	Yes	FACW	Hydrophytic Vegetat	ion Indicators:
4. Persicaria pensylvanica		10	No	FACW	X 1-Rapid Test for H	ydrophytic Vegetation:
5. Marrubium vulgare		5	No	FAC	X 2-Dominance Test	
6. Euthamia caroliniana		5	No	FACW	X 3-Prevalence Index	
7. Eupatorium perfoliatum		5	No	OBL		daptations (Provide supporting r on a separate sheet)
8. Carex lurida		5	No	OBL		phytic Vegetation ¹ (Explain)
9. Ambrosia artemisiifolia		5	No	FACU	Indicators of hydric so	oil and wetland hydrology must
10.					be present, unless dis	
10.		95 =	= Total Cov	er		
Vine Stratum (Plot Size:)	_					
1					Hydrophytic Vegetation	
2.						'es X No
			= Total Cov	er		
Remarks: (Include photo numbers here or on a s	eparate shee	et.)				
The data point meets hydrophytic vegetation and	•	,	be within a	wetland.		
, , , , , , , , , , , , , , , , , , , ,						

SOIL Sampling Point CL10A-1W1

Depth Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-3	10YR3/2	100	Color (moist)		Турс		silty clay loam	-	Remarks	
3-12	10YR4/2	70	10YR4/6	30		M	silty clay loam	promin	ent redox conc	entrations
12-20	10YR5/1	60	10YR4/6	40		M	silty clay loam		ent redox conc	
		pletion, R	M=Reduced Matrix,	CS=Cove	red or Coa	ted Sand			Pore Lining, M=	
	I Indiactors:		0 1	. 0111	A-1-:- (O.4)				-	c Solis °
Histoso	pipedon (A2)			/ Gieyed ii / Redox (S	Matrix (S4)			st Prairie Re k Surface (Sī		
	listic (A3)			ed Matrix					Masses (F12)	
	en Sulfide (A4)				/lineral (F1)			rk Surface (TF1	12)
	d Layers (A5)			-	Matrix (F2)		_		ain in Remarks)	,
	uck (A10)			ted Matrix			_	` '	,	
Deplete	d Below Dark Surfac	e (A11)	Redo	x Dark Su	rface (F6)					
Thick D	ark Surface (A12)		Deple	ted Dark S	Surface (F	7)			ophytic vegetat	
	Mucky Mineral (S1)		Redo	x Depress	ions (F8)		wetlar		must be preser or problematic	
	uck Peat or Peat (S3								- F. Joseffiado	
	Layer (If observed)	:								
Type: Depth (ir narks:	nches):	ors Deple	ted Below Dark Surfa	ace (A11) :	and Deplet	ted Matri	Hydric Soi	-	Yes X within a wetlan	No _
Type: Depth (in marks: s data po	nches):	ors Deple	ted Below Dark Surfa	ace (A11) ;	and Deplet	ted Matri		-		_
Type:	onches): Dint meets the indcate GY ydrology Indicators	· ·			and Deplet	ted Matri	x (F3) and can b	e considered	within a wetlar	nd.
Type:	oriches): Dint meets the indcate GY ydrology Indicators dicators (minimum of	· ·	quired; check all that	apply)		ted Matri	x (F3) and can b	e considered	within a wetlan	d.
Type:	GY ydrology Indicators dicators (minimum of	· ·	quired; check all that	apply) ained Lea	ves (B9)	ted Matri	x (F3) and can b	e considered adary Indicator	ors (minimum of	nd.
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)	· ·	quired; check all that X Water Sta	apply) ained Lear	ves (B9) 3)	ted Matri	x (F3) and can b Secon Su Dra	e considered dary Indicate face Soil Cra ainage Patter	ors (minimum of acks (B6) ns (B10)	nd.
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3)	· ·	quired; check all that X Water St Aquatic F True Aqu	apply) ained Lea auna (B1: atic Plants	ves (B9) 3) s (B14)	ted Matri	x (F3) and can b Secon Sur Dra Dry	e considered adary Indicate face Soil Cra ainage Patter -Season Wa	ors (minimum of acks (B6) ns (B10) ter Table (C2)	d.
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Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)	· ·	quired; check all that X Water Sta Aquatic F True Aqu Hydroger Oxidized	apply) ained Lear auna (B1: atic Plants n Sulfide C	ves (B9) 3) s (B14) Odor (C1)	ving Roo	Secon Sun Dra Dry X (C3) Sats (C3)	e considered adary Indicate face Soil Cra ainage Patter -Season Wa ayfish Burrow turation Visib	ors (minimum of acks (B6) ns (B10) ter Table (C2) rs (C8)	f two requagery (CS
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Type:Depth (in marks: s data possible for the mark for the mary Inc. Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is red	quired; check all that X Water Standard Free Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula Aquatic Formula	apply) ained Lear fauna (B1: atic Plants a Sulfide C Rhizosph e of Reduct on Reduct k Surface Well Data	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (Ction in Tille (C7) a (D9)	ving Roo 4)	Secon	e considered adary Indicate face Soil Cra ainage Patter -Season Wa ayfish Burrow turation Visib inted or Stres omorphic Po	ors (minimum of acks (B6) rns (B10) ter Table (C2) rs (C8) ile on Aerial Imsesed Plants (D1 stion (D2)	f two requagery (CS
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Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav ervations: ater Present? Ye	Imagery (e Surface	quired; check all that X Water St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge of (B8) Other (Ex	apply) ained Lear fauna (B1: atic Plants a Sulfide C Rhizosph on Reduc on Reduc k Surface Well Data cplain in R (inches):	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (Ction in Tille (C7) a (D9)	ving Roo 4)	Secon	e considered adary Indicate face Soil Cra ainage Patter -Season Wa ayfish Burrow turation Visib inted or Stres omorphic Po	ors (minimum of acks (B6) rns (B10) ter Table (C2) rs (C8) ile on Aerial Imsesed Plants (D1 stion (D2)	f two requagery (CS
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Project/Site: I-69 Section 6 Wetland S6W048A		City/Cour	nty: Morgan C	County	Sampling Date: 9/20/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point CL17A-1W1
Investigator(s): R. Hook, C. Meador, A. Grisel		Section,	Township, Ra	nge: Sec 24-T12N-R1E	<u>:</u>
Landform (hillslope, terrace, etc.): roadside			Local reli	ef (concave, convex, no	ne): concave
Slope (%): 0-1 Lat: 39.460344	L	Long: -86	6.377422		Datum: GCS NAD 1983
Soil Map Unit Name Wakeland silt loam				NWI classit	fication: N/A
Are climatic/hydrologic conditions on the site typical for this ti	mo of voor	r2 Voc	Y No		
					present? Yes X No:
Are Vegetation, Soil or Hydrologysignif					
Are Vegetation, Soil or Hydrology natur	rally proble	ematic?	If nee	ded, explain answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map showin	g sampli	ing poin	t locations,	transects, importan	it features, etc.
Hydrophytic Vegetation Present? Yes X No					
Hydric Soils Present? Yes X No			the Sample		
Wetland Hydrology Present? Yes X No		l w	ithin a Wetla	ind? Yes	X No
Remarks This data point is for the emergent portion of wetl east from the edge of the pond to the edge of the					
VEGETATION - Use scientific names of plants					
			nt Indicator	Dominance Test wor	ksheet:
Tree Stratum (Plot Size: 30' radius)	% Cover	•	? Status	Number of Dominant S	Species
1				That Are OBL, FACW	, or FAC: 2 (A)
2				Total Number of Domi	
3			=	Species Across All Str	
4				Percent of Dominant S That are OBL, FACW,	
5		= Total C		mat are obe, 171011,	(117.6.
Sapling/Shrub Stratum (Plot Size: 15' radius)		- 101410		Prevalence Index wo	orksheet:
1				Total % Cover o	of: Multiply by:
2.				OBL species	60 x 1 = 60
3.					40 x 2 = 80
4		· -		FAC species	0 x 3 = 0
5				FACU species UPL species	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	0	= Total C	over		$\frac{0}{100}$ (A) $\frac{140}{140}$ (B)
Herb Stratum (Plot Size: 5' radius)		.,	0.51		
1. Leersia oryzoides	30	Yes	OBL	Prevalence Ind	lex = B/A = 1.40
2. Impatiens capensis	30	Yes	FACW	Hydrophytic Vegetat	ion Indicators:
Typha angustifolia Lemna aequinoctialis	10	No No	OBL OBL	X 1-Rapid Test for H	ydrophytic Vegetation:
5. Helenium autumnale	5	No	FACW	X 2-Dominance Test	is >50%
6. Glyceria striata	5	No	OBL	X 3-Prevalence Inde	
7. Bidens frondosa	5	No	FACW	4-Morphological Adda in Remarks of	daptations (Provide supporting r on a separate sheet)
8. Acorus calamus	5	No	OBL		phytic Vegetation ¹ (Explain)
9.				—	oil and wetland hydrology must
10				be present, unless dis	
	100	= Total C	over		
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1	-			Vegetation	
2				Present? Y	'es X No
	0	= Total C	over		
Remarks: (Include photo numbers here or on a separate sh This data point meets hydrophytic vegetation and can be co	,	o be withi	n a wetland.		

SOIL Sampling Point CL17A-1W1

pe: C=Concentration, D= Depletion, RM=Reducedric Soil Indiactors: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)	Sandy Gleye Sandy Redox Stripped Mati			ains. ² Location: PL=Pore Lining, M=Matrix Indiactors for Problematic Hydric Soils ³
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)	Sandy Gleye Sandy Redox Stripped Mati		d Sand Gra	<u> </u>
2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	X Loamy Mucky Loamy Gleye Depleted Mai Redox Dark S Depleted Dar Redox Depre	c (S5) rix (S6) y Mineral (F1) ed Matrix (F2) trix (F3) Surface (F6) rk Surface (F7)		Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12) Other Soil (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless
5 cm Muck Peat or Peat (S3)	Redox Depre	:5510115 (F0)		disturbed or problematic.
trictive Layer (If observed): ¬ype:				
Depth (inches):				Hydric Soil present? Yes X No
ROLOGY				
tland Hydrology Indicators: nary Indicators (minimum of one is required; ch	eck all that apply)			Coopedow la disease (as in the coopedow)
Surface Water (A1)		- 		Secondary Indicators (minimum of two requ
High Water Table (A2)	_ Water Stained Lo Aquatic Fauna (B	` ,		Surface Soil Cracks (B6)Drainage Patterns (B10)
Saturation (A3)	True Aquatic Pla	nts (B14)		Dry-Season Water Table (C2)
Water Marks (B1)	_ Hydrogen Sulfide		D1 /2	X Crayfish Burrows (C8)
Sediment Deposits (B2) Drift Deposits (B3)	Oxidized Rhizos Presence of Rec	•	•	 Saturation Visibile on Aerial Imagery (CS Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Red			Geomorphic Postion (D2)
Iron Deposits (B5)	Thin Muck Surfa			X FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	_ Gauge or Well D _ Other (Explain in	, ,		
ld Observations:				
face Water Present? Yes No _X	- ' '	· -	_	
ter Table Present? Yes No			_	
uration Present? Yes X No	Depth (inches			ind Hydrology Present? Yes X No
cribe Recorded Data (stream gauge, monitoring	j well, aerial photos	s, previous insp	ections), if	available:
narks:	alata malat bees 1		المعارين والمعا	gy and can be considered to be within a wetland.

Project/Site: I-69 Section 6 Wetland S6W048B		City/Cou	unty: Morgan		Sampling Date: 9/20/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point CL17B-1W1
Investigator(s): R. Hook, A. Grisel, C. Meador		Section,	, Township, Rar	nge: Sec 24-T12N-R1E	
Landform (hillslope, terrace, etc.): roadside			Local relie	ef (concave, convex, no	ne): concave
Slope (%): 0-1 Lat: 39.460522	L	ong: -8	36.377628		Datum: GCS NAD83
Soil Map Unit Name Wakeland silt loam				NWI classit	fication: PUBGx
Are climatic/hydrologic conditions on the site typical for this t	ime of year	? Yes	s X No	(If no, explain Re	marks.)
Are Vegetation , Soil or Hydrology signif	-				present? Yes X No:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showing			nt locations,	transects, importan	t features, etc.
Hydrophytic Vegetation Present? Yes X No					
Hydric Soils Present? Yes X No		1	Is the Sampled	l Area	
Wetland Hydrology Present? Yes X No		١ ١	within a Wetla	nd? Yes	X No
Remarks Data pont is taken for a wetland complex. This of point is located approximately 193 feet west of S		for the	forested portion	of the complex that ex	tends north from a pond. This
VEGETATION - Use scientific names of plants					
Tree Stratum (Plot Size:)	Absolute % Cover		ant Indicator s? Status	Dominance Test wor	ksheet:
1. Fraxinus pennsylvanica	10	Yes		Number of Dominant S That Are OBL, FACW,	
2.				Total Number of Domi	 -
3.				Species Across All Str	
4				Percent of Dominant S	
5				That are OBL, FACW,	or FAC: 100 (A/B)
(Dist 0)	10	= Total (Cover .	Prevalence Index wo	rksheet
Sapling/Shrub Stratum (Plot Size:)				Total % Cover o	
1	=			OBL species	5 x 1 = 5
2. 3.					55 x 2 = 110
4.				FAC species	25 x 3 = 75
5.	_			FACU species	5 x 4 = 20
	0	= Total (Cover	UPL species Column Totals:	$\frac{0}{90}$ $x = 0$ (B)
Herb Stratum (Plot Size:)					···
1. Impatiens capensis	30	Yes		Prevalence Ind	ex = B/A = <u>2.33</u>
2. Toxicodendron radicans	25	Yes		Hydrophytic Vegetat	ion Indicators:
Helenium autumnale Solidago altissima	<u>15</u> 	No No	FACW_ FACU	1-Rapid Test for H	ydrophytic Vegetation:
5. Lobelia siphilitica	5	No	OBL	X 2-Dominance Test	
6.				X 3-Prevalence Index	
7.					daptations (Provide supporting ron a separate sheet)
8.					phytic Vegetation ¹ (Explain)
9				¹ Indicators of hydric so	oil and wetland hydrology must
10				be present, unless dis	
Was Obstant (Diet Size)	80	= Total (Cover		
Vine Stratum (Plot Size:)				Hydrophytic	
1. 2.				Vegetation Present?	es X No
- -	0	= Total (Cover	. roomiti '	
Remarks: (Include photo numbers here or on a separate sh					
Tromano. (moiddo prioto numbers nere or on a separate si	1001.)				

SOIL Sampling Point CL17B-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc 2	Texture	Remarks
0-8	10YR3/1	80	2.5YR4/6	20	C	M	clay loam	prominent redox
8-20	10YR4/1	70	2.5YR4/6	30		M/PL	clay loam	prominent redox
8-20	10YR4/1	70	2.5YR4/6	30		PL/M	clay loam	prominent redox concentrations
	Concentration, D= De	pletion, F	RM=Reduced Matrix, 0	CS=Cover	ed or Coa	ated Sand		ocation: PL=Pore Lining, M=Matrix
			Cond	Clayed N	Actric (CA)			-
Histoso	pipedon (A2)			Gleyed M Redox (S)		ast Prairie Redox (A16) rk Surface (S7)
1	istic (A3)			ed Matrix				n-Manganese Masses (F12)
•	en Sulfide (A4)			/ Mucky M		1)		ry Shallow Dark Surface (TF12)
	d Layers (A5)			Gleyed N			_	her Soil (Explain in Remarks)
-	uck (A10)			ted Matrix			_	
Deplete	d Below Dark Surfac	e (A11)	X Redox	Dark Sur	face (F6)			
-	ark Surface (A12)			ted Dark S	•	7)		icators of hydrophytic vegetation and
	Mucky Mineral (S1)		Redox	Depressi	ions (F8)		wella	and hydrology must be present, unless disturbed or problematic.
	uck Peat or Peat (S3							·
strictive	Layer (If observed):							
Typo:								
	nches):						Hydric Sc	pil present? Yes X No
Depth (in							Hydric Sc	pil present? Yes X No
Depth (in property) DROLO	GY ydrology Indicators		quired; check all that	opply)				
Depth (in permarks: DROLO Vetland Herimary Inc.	GY ydrology Indicators dicators (minimum of		quired; check all that a				Seco	endary Indicators (minimum of two requ
Depth (in property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the prop	GY ydrology Indicators dicators (minimum of Water (A1)		Water Sta	ined Leav	` '		<u>Seco</u> S	andary Indicators (minimum of two requ urface Soil Cracks (B6)
Depth (in permarks: DROLO Vetland Horimary Inc. Surface High W	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F	ained Leav auna (B13	3)		<u>Seco</u> Si Di	ondary Indicators (minimum of two requ urface Soil Cracks (B6) rainage Patterns (B10)
DROLO Vetland H rimary Inc Surface High W Saturati	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3)		Water Sta Aquatic F True Aqua	nined Leav auna (B13 atic Plants	3) s (B14)		<u>Seco</u> Si Di	ondary Indicators (minimum of two requ urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2)
DROLO Vetland H rimary Inc Surface High W Saturati Water M	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F True Aqua	ained Leav auna (B13 atic Plants Sulfide O	B) S (B14) Odor (C1)	ving Root	Seco Si Di Di X Ci	ondary Indicators (minimum of two requ urface Soil Cracks (B6) rainage Patterns (B10)
DROLO Vetland H rimary Inc Surface High W Saturati Water M Sedime	gy ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)		Water Sta Aquatic F True Aqua Hydrogen X Oxidized	ained Leav auna (B13 atic Plants Sulfide O	3) s (B14) odor (C1) eres on Li	-	Seco Si Di X Ci s (C3)	ondary Indicators (minimum of two requ urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8)
DROLO Vetland H rimary Inc Surface High W Saturati Water M Sedime Drift De Algal M	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Iro	ained Leav auna (B13 atic Plants Sulfide O Rhizosphe of Reduct	B) S (B14) Odor (C1) Peres on Li ed Iron (C	24)	Seco Si Di Di X_ Ci Si Si Si Si	andary Indicators (minimum of two requ urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (Cst unted or Stressed Plants (D1) eomorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is re	Water Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Iru Thin Muci	ained Leavauna (B13 atic Plants Sulfide O Rhizosphe of Reduct on Reduct k Surface	B) S (B14) Odor (C1) Heres on Li Hered Iron (C Hed Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C Hered Iron (C	24)	Seco Si Di Di X_ Ci Si Si Si Si	endary Indicators (minimum of two requestrace Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (Cstunted or Stressed Plants (D1)
DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	one is re	Water Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Iru Thin Mucl	ained Leavauna (B13 atic Plants Sulfide O Rhizosphe of Reduct on Reduct k Surface Well Data	B) s (B14) dor (C1) eres on Li ed Iron (C tion in Tille (C7) a (D9)	24)	Seco Si Di Di X_ Ci Si Si Si Si	andary Indicators (minimum of two requ urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (Cst unted or Stressed Plants (D1) eomorphic Postion (D2)
Depth (in marks: DROLO Vetland Horimary Incomos Surface High W Saturati Water Mark Sedime Drift De Algal Mark Iron De Inundat Sparsel	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is re	Water Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Iru Thin Mucl (B7) Gauge or	ained Leavauna (B13 atic Plants Sulfide O Rhizosphe of Reduct on Reduct k Surface Well Data	B) s (B14) dor (C1) eres on Li ed Iron (C tion in Tille (C7) a (D9)	24)	Seco Si Di Di X_ Ci Si Si Si Si	andary Indicators (minimum of two requ urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (Cst unted or Stressed Plants (D1) eomorphic Postion (D2)
Depth (in marks: DROLO Vetland H rimary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is re magery (e Surface	Water Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Ira Thin Mucl (B7) Gauge or Other (Ex	ained Leavauna (B13 atic Plants Sulfide O Rhizosphe of Reduct on Reduct k Surface Well Data	B) s (B14) dor (C1) eres on Li ed Iron (C tion in Tille (C7) a (D9)	24)	Seco Si Di Di X_ Ci Si Si Si Si	andary Indicators (minimum of two requ urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (Cst unted or Stressed Plants (D1) eomorphic Postion (D2)
Depth (in marks: DROLO Vetland H rimary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel Vetla Obse urface Water Water Water M Iron De Inundat Iron De Inundat Iron De Inundat Iron De	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave	magery (Water Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Iru Thin Mucl (B7) Gauge or e (B8) Other (Ex	nined Leavalined Leavalined (B13 atic Plants Sulfide ORhizospheron Reducton Reductor Surface Well Data	B) s (B14) dor (C1) eres on Li ed Iron (C tion in Tille (C7) a (D9)	24)	Seco Si Di Di X_ Ci Si Si Si Si	andary Indicators (minimum of two requ urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (Cst unted or Stressed Plants (D1) eomorphic Postion (D2)
Depth (in promarks: DROLO Vetland Horimary Inc. Surface High Work Saturation Sedime Drift De Algal More Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed Incomposed In	gy ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Ye e Present?	magery (Water Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent In Thin Muci (B7) Gauge or (B8) Other (Ex	ained Leavauna (B13 atic Plants Sulfide ORhizosphe of Reducton Reduct & Surface Well Data plain in Reduction Reductor Surface (inches):	B) s (B14) dor (C1) eres on Li ed Iron (C tion in Tille (C7) a (D9)	ed Soils (0	Seco Si Di Di X_ Ci Si Si Si Si	andary Indicators (minimum of two requestrace Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C8) tunted or Stressed Plants (D1) eomorphic Postion (D2) AC-Neutral Test (D5)
DROLO Vetland H rimary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel vetland Character Water Table atturation Includes c	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave ervations: ater Present? Present? Present? Agaillary fringe)	magery (e Surface	Water Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent In Thin Muci (B7) Gauge or (B8) Other (Ex	ained Leavauna (B13 atic Plants Sulfide ORhizosphe of Reducton Reduct Surface Well Data plain in Refinches): _(inches): _(inches): _	B) s (B14) Odor (C1) eres on Li ed Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (0	Second	andary Indicators (minimum of two requestrace Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C8) tunted or Stressed Plants (D1) eomorphic Postion (D2) AC-Neutral Test (D5)
DROLO Petland H Imary Inc Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface W ater Table aturation includes c	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave ervations: ater Present? Present? Present? Agaillary fringe)	magery (e Surface	Water Sta Aquatic F True Aqua Hydrogen X Oxidized Presence Recent Ira Thin Mucl (B7) Gauge or (B8) Other (Ex	ained Leavauna (B13 atic Plants Sulfide ORhizosphe of Reducton Reduct Surface Well Data plain in Refinches): _(inches): _(inches): _	B) s (B14) Odor (C1) eres on Li ed Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (0	Second	andary Indicators (minimum of two requestrace Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C8) tunted or Stressed Plants (D1) eomorphic Postion (D2) AC-Neutral Test (D5)

Project/Site: I-69 Section 6 Wetland S6W048D		City/County	y: Morgan		Sampling Date: 8/25/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point CL17D-1W1
Investigator(s): R. Yeager, B. Reust		Section, To	ownship, Ra	ange: Sec 24-T12N-R1E	
Landform (hillslope, terrace, etc.): roadside ditch			Local reli	ief (concave, convex, no	ne): concave
Slope (%): 1-2 Lat: 39.459937	L	_ong: -86.3	- 377373		Datum: GCS NAD83
Soil Map Unit Name Wakeland silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this	s time of year	r? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology sig		_			present? Yes X No:
Are Vegetation , Soil or Hydrology na				eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show					
Hydrophytic Vegetation Present? Yes X N	lo				
	lo		he Sample		
Wetland Hydrology Present? Yes X N	lo	wit	hin a Wetla	and? Yes	X No
Remarks					
WEGETATION II					
VEGETATION - Use scientific names of plants				_	
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test wor	ksheet:
1		-,		Number of Dominant S That Are OBL, FACW	
2.				Total Number of Domi	
3				Species Across All Str	
4				Percent of Dominant S	
5				That are OBL, FACW,	, or FAC:100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Co	ver	Prevalence Index wo	 orksheet:
				Total % Cover o	of: Multiply by:
1. 2.					92 x 1 = 92
3.				FACW species	8 x 2 = 16
4.				FAC species	0 x 3 = 0
5			-	FACU species UPL species	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
(D) - D) - D	0	= Total Co	ver		100 (A) 108 (B)
Herb Stratum (Plot Size: 5' radius)	00	Vaa	OBL	Drovolongo Ind	Hov - P/A - 4.00
Leersia oryzoides Phalaris arundinacea		Yes No	OBL FACW	Prevalence Ind	lex = B/A = 1.08
3. Typha latifolia		No	OBL	Hydrophytic Vegetat	ion Indicators:
4.				· ·	ydrophytic Vegetation:
5.				X 2-Dominance Test X 3-Prevalence Inde:	
6				l —	daptations (Provide supporting
7				data in Remarks of	r on a separate sheet)
8				Problematic Hydro	phytic Vegetation ¹ (Explain)
9					oil and wetland hydrology must
10	100	= Total Co	ver	be present, unless dis	turbed or problematic
Vine Stratum (Plot Size: 30' radius)		. 5.4. 50	· = •		
1				Hydrophytic Vegetation	
2.					/es X No
	0	= Total Co	ver		
Remarks: (Include photo numbers here or on a separate	sheet.)				
·					

SOIL Sampling Point CL17D-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure	Remarks
0-7	10YR3/2	100					silt lo	am	
7-20	10YR4/1	50	10YR4/4	50	C	М	loamy	sand	
				-					
	-		-						
Type: C=0	Concentration, D= De	pletion, R	M=Reduced Matrix,	CS=Cove	red or Coa	ited Sand	Grains.	² Loc	ation: PL=Pore Lining, M=Matrix
lydric Soi	I Indiactors:							Indiacto	ors for Problematic Hydric Soils ³
_ Histoso	I (A1)		Sandy	/ Gleyed N	Matrix (S4)			Coas	st Prairie Redox (A16)
_	pipedon (A2)			/ Redox (•		Surface (S7)
_	istic (A3)			ed Matrix					Manganese Masses (F12)
	en Sulfide (A4)				Mineral (F1	•			Shallow Dark Surface (TF12)
_	d Layers (A5)				Matrix (F2))	•	Othe	r Soil (Explain in Remarks)
_	uck (A10) d Below Dark Surfac	o (A11)		ted Matrix	rface (F6)				
_	ark Surface (A12)	C (ATT)			Surface (F	7)		3 Indica	ators of hydrophytic vegetation and
_	Mucky Mineral (S1)			x Depress		.,			d hydrology must be present, unless
_	uck Peat or Peat (S3)	_		(-,				disturbed or problematic.
estrictive	Layer (If observed):								
_									
Type:	1 \						Llyed	ria Cail	mrecent? Vec V No
Type: Depth (in emarks:	nches):		<u> </u>				Hyd	ric Soil	present? Yes X No
Depth (ii							Hyd	ric Soil	present? Yes X No
Depth (in permarks:	GY						Hyd	ric Soil	present? Yes X No
Depth (in emarks:	GY ydrology Indicators		quired; check all that	apply)			Hyd		
Depth (in permarks: 'DROLO Vetland Herimary Inc.	GY ydrology Indicators licators (minimum of				ves (B9)		Hyd	Second	dary Indicators (minimum of two require
Depth (in permarks: 'DROLO Vetland Herimary Inc. Surface	GY ydrology Indicators dicators (minimum of Water (A1)		Water Sta	ained Lea	` '		Hyd	Second	dary Indicators (minimum of two require
Depth (in permarks: 'DROLO Vetland Herimary Inc. Surface	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F	ained Lea auna (B1	3)		Hyd	Second Surf X Drai	dary Indicators (minimum of two require face Soil Cracks (B6) inage Patterns (B10)
Depth (in permarks: DROLO Vetland Horimary Inc. Surface High W Saturati	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water State	ained Lea	3) s (B14)		Hyd	Second Surf X Drai	dary Indicators (minimum of two require
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Project/Site: I-69 Section 6 Wetland S6W053A		City/County:	Morgan		Sampling	Date: 04/05/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling	Point CL16A-1D1
Investigator(s): R. Yeager, B. Reust		Section, To	wnship, Ra	nge: SEC 13, T12N, R1	1E	
Landform (hillslope, terrace, etc.): hillslope			Local reli	ef (concave, convex, no	ne): conve	x
Slope (%): 10% Lat: 39.474106	L	ong: -86.36	69813		Datum: GC	S NAD83
Soil Map Unit Name Chetwynd Ioam, 18 to 80% slopes		<u> </u>		NWI classi	ification: upla	
Are climatic/hydrologic conditions on the site typical for the	his time of year	? Yes	X No.			2.10
Are Vegetation , Soil or Hydrology s				Normal Circumstances"		se y No:
Are Vegetation, Soil or Hydrology r				eded, explain answers in		,3 <u>X</u> No
SUMMARY OF FINDINGS - Attach site map sho						etc
<u> </u>		I Point it	Joanons,	transcots, importar	- reatures,	
Hydrophytic Vegetation Present? Hydric Soils Present? Yes Yes X	No X No	ls th	e Sample	d Area		
	No X		in a Wetla		No	Χ
Remarks	<u> </u>	<u> </u>				
Remarks						
VEGETATION - Use scientific names of plants						
- (DL + O) - OOL - I'		Dominant		Dominance Test wor	rksheet:	
Tree Stratum (Plot Size: 30' radius)		Species?	Status	Number of Dominant		
1. Carya sp. 2. Fagus grandifolia	<u>15</u> 10	Yes Yes	FACU	That Are OBL, FACW	, or FAC: _	1 (A)
3. Fraxinus pennsylvanica	20	Yes	FACW	Total Number of Domi		7 (D)
4. Quercus rubra	15	Yes	FACU	Species Across All Str	_	7 (B)
5.				Percent of Dominant S That are OBL, FACW,		14 (A/B)
	60	= Total Cov	er	, , ,		(``,
Sapling/Shrub Stratum (Plot Size: 15' radius				Prevalence Index wo	orksheet:	
1. Lonicera tatarica	10	Yes	FACU	Total % Cover of	of:	Multiply by:
2.				OBL species	0 x 1	=0
3				FACW species	20 x 2	
4				FAC species FACU species	0 x 3 :	
5				UPL species	20 x 5	
(Dist Cine Shorting	10	= Total Cov	er	· -	90 (A)	340 (B)
Herb Stratum (Plot Size: 5' radius)	45	Voc	FACIL	Drovolongo Inc	dox - P/A -	2.70
Claytonia virginica Polystichum acrostichoides	<u>15</u> 5	Yes Yes	FACU UPL	Prevalence Ind	lex = D/A =	3.78
3.		103	-01 L	Hydrophytic Vegetat	ion Indicato	rs:
4.				1-Rapid Test for H	lydrophytic V	egetation:
5.				2-Dominance Test		
6.				3-Prevalence Inde		Duanida anno antico
7.				4-Morphological Addata in Remarks o		
8				Problematic Hydro	•	•
9				1Indicators of hydric so	oil and wetlar	nd hydrology must
10				be present, unless dis		
Vine Charture (Plot Size: 20) radius	20	= Total Cove	er			
Vine Stratum (Plot Size: 30' radius)				Hydrophytic		
1				Vegetation Present?	⁄es	No X
2		= Total Cov	er	i ieseilt!		<u>//</u>
Remarks: (Include photo numbers here or on a separat	te sneet.)					

SOIL Sampling Point CL16A-1D1

Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0-5	10YR3/1						silty clay loa		
5-14	10YR4/1	85	5YR4/6	15	M	C	silty clay loa		
14-20	10YR5/1	85	5YR4/6	15	M		silty clay loa	<u>am</u>	
Histoso Histic E Black H Hydrog Stratifie 2 cm M Deplete Thick D Sandy I 5 cm M	Concentration, D= De il Indiactors: I (A1) ipipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5) uck (A10) ed Below Dark Surfactor eark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3 Layer (If observed):	e (A11)	Sand Sand Strip Loan Loan Loan Redd Depl	ly Gleyed I ly Redox (toped Matrix my Mucky I my Gleyed eted Matrix ox Dark Su	Matrix (S4) S5) (S6) Mineral (F1 Matrix (F2) (F3) rface (F6) Surface (F)	Ind	iactors for Pro Coast Prairie R Dark Surface (\$ ron-Manganes Very Shallow D Other Soil (Exp andicators of hydetland hydrolog	
Type: Depth (in							Hydric	Soil present?	Yes X No
Type:	nches):						Hydric	Soil present?	Yes X No
Type: Depth (in marks:	nches):		quired; check all tha	t apply)					
Type:	nches): OGY Address Indicators Address Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators In			t apply)_tained Lea	ves (B9)		<u>Se</u>	condary Indica	tors (minimum of two rec
Type:Depth (ii marks:	nches): GY ydrology Indicators		Water S		` '		Se		tors (minimum of two rec racks (B6)
Type:Depth (ii marks:	orgy ydrology Indicators dicators (minimum of		Water S Aquatic True Aq	tained Lea Fauna (B1 uatic Plant	3) s (B14)			condary Indica Surface Soil C Drainage Patte Dry-Season W	tors (minimum of two recoracks (B6) erns (B10) dater Table (C2)
Type:Depth (in marks:	nches): GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water S Aquatic True Aq Hydroge	tained Lea Fauna (B1 uatic Plant n Sulfide (3) s (B14) Odor (C1)		<u>Se</u> —	condary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro	tors (minimum of two red racks (B6) erns (B10) /ater Table (C2) ws (C8)
Type:Depth (in marks:	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)		Water S Aquatic True Aq Hydroge Oxidized	tained Lea Fauna (B1 uatic Plant n Sulfide (I Rhizosph	3) s (B14) Odor (C1) eres on Liv	-	Se — — — ts (C3)	condary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Vis	tors (minimum of two red racks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (C
Type:Depth (in marks:	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		Water S Aquatic True Aq Hydroge Oxidized Presence	tained Lea Fauna (B1 uatic Plant n Sulfide (I Rhizosph e of Redud	3) s (B14) Odor (C1) eres on Liv ced Iron (C	4)	Se — — — ts (C3) — —	condary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre	tors (minimum of two recoracks (B6) erns (B10) fater Table (C2) ws (C8) ibile on Aerial Imagery (Cessed Plants (D1)
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Project/Site: I-69 Section 6 Wetland S6W053A		City/County	y: Morgan	Sampling Date: <u>04/05/2017</u>
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point CL16A-1W1
Investigator(s): R. Yeager, B. Reust		Section, To	wnship, Ra	ange: SEC 13, T12N, R1E
Landform (hillslope, terrace, etc.): Flat			Local reli	ief (concave, convex, none): Concave
Slope (%): .5% Lat: 39.474183	L	_ong: -86.3	- 369632	Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam, Chetwynd loam, 18	-80% slope	s		NWI classification: PFO1C
Are climatic/hydrologic conditions on the site typical for this			X No	(If no, explain Remarks.)
Are Vegetation , Soil or Hydrology signi	•	_		Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology natu				eded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing				
Hydrophytic Vegetation Present? Yes X No				
Hydric Soils Present? Yes X No		ls t	he Sample	d Area
Wetland Hydrology Present? Yes X No		wit	hin a Wetla	and? Yes X No
Remarks				
VEGETATION - Use scientific names of plants				
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test worksheet:
1 Fraxinus pennsylvanica	70 COVE	Yes	FACW	Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 3 (A)
3.				Total Number of Dominant Species Across All Strata: 3 (B)
4.				Percent of Dominant Species
5				That are OBL, FACW, or FAC: 100 (A/B)
	10	= Total Co	/er	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot Size: 15' radius)				
1				Total % Cover of: Multiply by: OBL species 0 x 1 = 0
2				FACW species 95 x 2 = 190
3. 4.				FAC species 0 x 3 = 0
5.				FACU species 0 x 4 = 0
	0	= Total Co	/er	UPL species 0 x 5 = 0 Column Totals: 95 (A) 190 (B)
Herb Stratum (Plot Size: 5' radius)				Column Totals: 95 (A) 190 (B)
Cinna arundinacea	60	Yes	FACW	Prevalence Index = B/A = 2.00
2. Lysimachia nummularia		Yes	FACW	Hydrophytic Vegetation Indicators:
3. Packera aurea	5		FACW	1-Rapid Test for Hydrophytic Vegetation:
4				2-Dominance Test is >50%
5. 6.				3-Prevalence Index is <=3
7.				 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation ¹ (Explain)
9				Indicators of hydric soil and wetland hydrology must
10				be present, unless disturbed or problematic
(Dist 0) - 001 - 1	85	= Total Co	/er	
Vine Stratum (Plot Size: 30' radius)				Hydrophytic
1				Vegetation
2	0	= Total Co	 /er	Present? Yes X No No
Barrada (ladada et e		. 5147 00		l
Remarks: (Include photo numbers here or on a separate s	neet.)			

SOIL Sampling Point CL16A-1W1

Depth (Inches)	Color (moist)	%	Color (moist)	%	Typo1	Loc ²	Tours		Remark	
(Inches) 0-20	10YR3/1	100	Color (moist)		Type ¹	LOC 2	Texture silty clay loam		Remark	S
ype: C=C ydric Soi Histoso Histic E Black H	Concentration, D= D I Indiactors: I (A1) pipedon (A2) istic (A3)		Sa Sa Str	ndy Gleyed M ndy Redox (Sipped Matrix	Matrix (S4) S5) (S6)		d Grains. ² Lo Indiac Co Da	ocation: PL= ctors for Pro ast Prairie Re rk Surface (S	blematic Hydedox (A16) (77) (a) Masses (F	dric Soils ³
Stratifie 2 cm M Deplete Thick D	en Sulfide (A4) d Layers (A5) uck (A10) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1)	ce (A11)	Lo. De Re De	amy Mucky Mamy Gleyed I pleted Matrix dox Dark Su pleted Dark S dox Depress	Matrix (F2) ((F3) rface (F6) Surface (F	,	Oth	ry Shallow Da ner Soil (Expl icators of hyd and hydrology	ain in Remar Irophytic vego must be pre	etation and sent, unless
	uck Peat or Peat (S	<u> </u>						disturbed	d or problema	atic.
estrictive	Layer (If observed):								
Typo:	, ,									
					ot area (ne	ar the ce		pil present?	Yes X	
Depth (ir emarks: oils showe	nches): ed depletions on wet hydric and the samp				ot area (ne	ar the ce		-		
Depth (ir emarks: oils showe ensidered	nches): ed depletions on wet hydric and the samp GY ydrology Indicator	led area is o	deemed a wetlar	nd.	ot area (ne	ar the ce		-		
Depth (ir emarks: oils showe insidered 'DROLO Vetland H	d depletions on wethydric and the samp GY ydrology Indicator dicators (minimum o	led area is o	deemed a wetlar	at apply)		ar the ce	enter of the wetla	and) and were	e recorded as	
Depth (ir emarks: bils showe insidered TDROLO Vetland H Irimary Inc. Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat	GY ydrology Indicator dicators (minimum o Water (A1) ater Table (A2)	s: f one is requ	deemed a wetland	nd.	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	ving Roo 4)	Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second S	and) and were andary Indicat urface Soil Cr rainage Patte ry-Season Warayfish Burrov	ors (minimum racks (B6) rns (B10) ater Table (C ws (C8) bile on Aerial assed Plants opstion (D2)	n of two requi
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Project/Site: I-69 Section 6 Wetland S6W054A		City/County	: Morgan	Sampling Date: 04/04/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point CL15A-1D1
Investigator(s): R. Yeager, B. Reust		Section, To	wnship, Ra	nge: SEC 13, T12N, R1E
Landform (hillslope, terrace, etc.): Flat			Local reli	ef (concave, convex, none): Flat
Slope (%): .5% Lat: 39.474678	L	ong: -86.3	•	Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam			-	NWI classification: upland
'	ma of voor	·2 Vaa	V No	
Are climatic/hydrologic conditions on the site typical for this ti		_		
Are Vegetation, Soil or Hydrologysignif				Normal Circumstances" present? Yes X No:
Are Vegetation, Soil or Hydrology nature	rally proble	ematic?	If nee	ded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampli	ng point l	ocations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No				
Hydric Soils Present? Yes No	Х		ne Sample	
Wetland Hydrology Present? Yes No	Χ	with	nin a Wetla	nd? Yes NoX
Remarks				
VEGETATION - Use scientific names of plants				
(Plat O'res OOl west'res		Dominant		Dominance Test worksheet:
Tree Stratum (Plot Size: 30' radius)		Species?	Status	Number of Dominant Species
Fraxinus pennsylvanica Juglans nigra	20 10	Yes Yes	FACU FACU	That Are OBL, FACW, or FAC:6 (A)
3. Platanus occidentalis	10	Yes	FACW	Total Number of Dominant
4. Ulmus americana	10	Yes	FACW	Species Across All Strata: 9 (B)
5.				Percent of Dominant Species That are OBL, FACW, or FAC: 67 (A/B)
J	50	= Total Cov		(176)
Sapling/Shrub Stratum (Plot Size: 15' radius)		- 10tai 001	0.	Prevalence Index worksheet:
1. Acer negundo	2	Yes	FAC	Total % Cover of: Multiply by:
2. Lonicera tatarica	15	Yes	FACU	OBL species 0 x 1 = 0
3. Rosa multiflora	5	Yes	FACU	FACW species 74 x 2 = 148
4.				FAC species 37 x 3 = 111
5				FACU species 37 x 4 = 148 UPL species 15 x 5 = 75
	22	= Total Cov	er	UPL species15 x 5 =75 Column Totals: 163 (A) 482 (B)
Herb Stratum (Plot Size: 5' radius)				
1. Sanicula odorata	30	Yes	FAC	Prevalence Index = B/A = 2.96
2. Phalaris arundinacea	30	Yes	FACW	Hydrophytic Vegetation Indicators:
3. Symphyotrichum sp.	<u>10</u> 5		UPL	1-Rapid Test for Hydrophytic Vegetation:
4. Viola sororia	- 5		FAC_UPL	X 2-Dominance Test is >50%
5. Stellaria sp. 6. Phlox divaricata	5		FACU	X 3-Prevalence Index is <=3
7. Mertensia virginica	2		FACW	4-Morphological Adaptations (Provide supporting
8. Lysimachia nummularia	2		FACW	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
9. Galium aparine	2		FACU	-
	-			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
10				
Visco Otractica (Plot Sizor 20) redius	91	= Total Cov	er	
Vine Stratum (Plot Size: 30' radius)				Hydrophytic
1.				Vegetation Present? Yes X No
2	0	= Total Cov	er	Present? Yes X No No
		- 10tal C0V	OI .	ı
Remarks: (Include photo numbers here or on a separate sh	ieet.)			

SOIL Sampling Point CL15A-1D1

Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure		Remarks	
0-20	10YR4/3	100					sandy	loam			
	-										
wpo: C=C	Concentration, D= De	polotion PM	I_Poducod Matrix		rod or Coo	tod Sand	Grains	2 1 000	tion: DI _	Pore Lining, M	-Matrix
-	I Indiactors:	pielion, Kiv	=Reduced Matrix,	CS=Cove	red or Coa	ileu Sanu	Giailis.			blematic Hyd	
Histoso	(A1)		Sandy	Gleyed N	Matrix (S4)				Prairie Re		
	pipedon (A2)			/ Redox (S					Surface (S		
	istic (A3) en Sulfide (A4)			ed Matrix	(S6) ⁄lineral (F1)				: Masses (F12 ark Surface (TI	
	d Layers (A5)				Matrix (F2)					ain in Remark	
	uck (A10)		_	ted Matrix	, ,						,
	d Below Dark Surfac	e (A11)	_		rface (F6)						
	ark Surface (A12)				Surface (F	7)				rophytic veget must be pres	
	Mucky Mineral (S1) uck Peat or Peat (S3	3)	Redo:	c Depress	ions (F8)			wettand		or problemat	
	Layer (If observed)	<u></u>									
T. 100 C.											
	1 \						Live	luia Cail i		Voo	No
Depth (ir	nches):						Нус	Iric Soil p	oresent?	Yes	No
Type:							Нус	Iric Soil p	oresent?	Yes	_ No _
Depth (ir	GY	Si:					Нус	Iric Soil p	present?	Yes	_ No _
Depth (ir narks: DROLO			ired; check all that	apply)_			Нус			Yes	
Depth (ir narks: DROLO etland H mary Inc	GY ydrology Indicators		ired; check all that		ves (B9)		Нус	Seconda		ors (minimum	
Depth (ir narks: DROLO etland H mary Inc Surface High W	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F	ained Lea auna (B1	3)		Нус	Seconda Surfa Drair	ary Indicato ice Soil Cra age Patter	ors (minimum acks (B6) rns (B10)	of two requ
Depth (ir narks: DROLO etland H mary Inc Surface High W: Saturati	gydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3)		Water State Aquatic F True Aqu	ained Lea auna (B1 atic Plant	3) s (B14)		Нус	Second Surfa Drair Dry-S	ary Indicato ace Soil Cra age Patter Season Wa	ors (minimum acks (B6) rns (B10) ater Table (C2	of two requ
Depth (ir narks: DROLO etland H mary Inc Surface High W Saturati Water M	gy ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1)		Water Sta Aquatic F True Aqu Hydroger	ained Lea auna (B1 atic Plant n Sulfide (3) s (B14) Odor (C1)	ing Root		Second: Surfa Drair Dry-S Cray	ary Indicato ace Soil Cra age Patter Season Wa iish Burrow	ors (minimum acks (B6) rns (B10) ater Table (C2) vs (C8)	of two requ
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Depth (ir narks: DROLO etland H mary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Present? Y Present? Y apillary fringe)	Imagery (B' e Surface (I	Water St. Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 7) Gauge of B8) Other (Ex No X Depth No X Depth No X Depth	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat cplain in R (inches): (inches):	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4) ed Soils (0	s (C3) C6)	Seconda Surfa Drair Dry-S Cray Satur Stun Geor X FAC	ary Indicato ice Soil Cra lage Patter Season Wa iish Burrow ration Visib led or Stres norphic Po Neutral Te	ors (minimum acks (B6) rns (B10) ater Table (C2 vs (C8) bile on Aerial In ssed Plants (Destion (D2) est (D5)	of two requ

Project/Site: I-69 Section 6 Wetland S6W054A	City	//County: Morgan		Sampling Date: 04/05/2017
Applicant/Owner: INDOT/Lochumueller			State: Indiana	Sampling Point CL15A-1W1
Investigator(s): R. Yeager, B. Reust	Sec	tion, Township, Ra	inge: SEC 13, T12N, R1E	<u> </u>
Landform (hillslope, terrace, etc.): Flat		Local reli	ief (concave, convex, none	e): Concave
Slope (%): .5% Lat: 39.474853	Long	g: -86.369324	Γ	Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam			NWI classific	cation: PFO1C
Are climatic/hydrologic conditions on the site typical for thi	is time of year?	Yes X No	(If no, explain Rem	narks.)
Are Vegetation , Soil or Hydrology sig	-		Normal Circumstances" pr	
Are Vegetation , Soil or Hydrology na			eded, explain answers in R	
SUMMARY OF FINDINGS - Attach site map show			, transects, important	features, etc.
Hydrophytic Vegetation Present? Yes X	No		-	-
Hydric Soils Present? Yes X	No	Is the Sample		
Wetland Hydrology Present? Yes X	No	within a Wetla	ind? Yes X	No
Remarks				
VEGETATION . Her rejentific memor of plants				
VEGETATION - Use scientific names of plants	Abaabaa Da		<u> </u>	
Tree Stratum (Plot Size: 30' radius)	% Cover Sp	minant Indicator ecies? Status	Dominance Test works	
1. Fraxinus pennsylvanica		Yes FACW	Number of Dominant Sp That Are OBL, FACW, of	
2			Total Number of Domina	 : :
3			Species Across All Stra	ta: <u>3</u> (B)
4			Percent of Dominant Sp	
5		etal Cayor	That are OBL, FACW, o	or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	= To	otal Cover	Prevalence Index work	ksheet:
1			Total % Cover of:	Multiply by:
2.			OBL species	0 x 1 = 0
3.			FACW species 10	
4				$\frac{0}{0}$ $x 3 = \frac{0}{0}$ $x 4 = 0$
5			· · · · · · · · · · · · · · · ·	$\frac{0}{0}$ $x = 0$ $x = 0$ $x = 0$
Lively Objectives (Diet Size) El rediive	<u> </u>	otal Cover	Column Totals: 10	
Herb Stratum (Plot Size: 5' radius) 1. Phalaris arundinacea	45	Yes FACW	Prevalence Inde	x = B/A = 2.00
Lysimachia nummularia	35	Yes FACW	T To valence inde	X = B// (=
3.			Hydrophytic Vegetatio	
4.			X 1-Rapid Test for Hyd	
5			X 2-Dominance Test is X 3-Prevalence Index	
6			_	aptations (Provide supporting
7			data in Remarks or o	on a separate sheet)
8			l -	hytic Vegetation ¹ (Explain)
9			¹ Indicators of hydric soil be present, unless distu	l and wetland hydrology must
	80 = To	otal Cover	be present, amess dista	Tibed of problematio
Vine Stratum (Plot Size: 30' radius)			Hydrophysia	
1			Hydrophytic Vegetation	
2				s X No
	<u> </u>	otal Cover		
Remarks: (Include photo numbers here or on a separate	e sheet.)			

SOIL Sampling Point CL15A-1W1

0-7 10YR4/2 100	Inches)	Color (moist)	%	Color	(moist)	%	Type ¹	Loc 2	Texture	е	Rema	arks
7.20 10Yr4/2 95 SYR4/4 5 C M silty clay loam yper C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Location: PL=Pore Lining, M=Matrix Article Soil Indiactors: Indiactors for Problematic Hydric Soils 3 Indiactors: Indiactors for Problematic Hydric Soils 3 Surped Matrix (S4) Histisc Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) Black Histis (A3) Surface (A12) Depleted Matrix (F3) Stratified Layers (A5) Loarny Mucky Mineral (F1) Surface (A12) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Dark Surface (A12) Depleted Delow Depleted Delow Dark Surface (A12) Depleted Delow Depleted Delow Dark Surface (A12) Depleted Delow Depleted Delow Depleted Delow Depleted Delow Depleted Delow Delow Depleted Delow Depleted Delow Depleted Delow Delow Depleted Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delow Delo		10YR4/2										
Histosol Indiactors: Histosol (A1) Histosol (A1) Histosol (A2) Black Histic (A3) Sandy Redox (S5) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Depleted Below Dark Surface (F112) Thick Dark Surface (A12) Redox Dark Surface (F6) Depleted Below Dark Surface (F7) Redox Dark Surface (F7) Redox Daressions (F8) Sandy Redox (F7) Redox Dark Surface (F7) Redox Daressions (F8) Saltictive Layer (If observed): Type: Depth (Inches): Imarks: Imary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Hydric Soil present? Yes X No Depth (Inches): Drift Deposits (B3) Presence of Reduced Iron (C4) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F8) Surface Vater (B4) Saturation (A3) Presence of Reduced Iron (C4) Redox Dark Surface (F7) Sutnetd or Stressed Plants (D1) Geomorphic Postion (D2) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Indicators (minimum of two required: Wettand Hydrology Present? Yes X No Depth (Inches): United Observations: Inface Water Present? Yes X No Depth (Inches): United Observations: Inface Water Present? Yes X No Depth (Inches): United Observations: Inface Water Present? Yes X No Depth (Inches): United Observations: Inface Water Present? Yes X No Depth (Inches): United Observations: Inface Water Present? Yes X No Depth (Inches): United Observations: Inface Water Present		•		5YR4/4		5	С	М				
2 cm Muck (A10)	Histoso Histic E Black H Hydrog	il Indiactors: I (A1) pipedon (A2) listic (A3) en Sulfide (A4)	oletion, R	.M=Reduc	Sandy Sandy Strippe Loamy	Gleyed Nedox (Sed Matrix	Matrix (S4) S5) (S6) Mineral (F1)		Coast Prairi Dark Surfaction-Mangation	Problematic He Redox (A16) te (S7) nese Masses (w Dark Surface	Hydric Soils F12) e (TF12)
Type:	2 cm M Deplete Thick D Sandy I 5 cm M	uck (A10) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3))		X Deplet Redox Deplet	ted Matrix Dark Su ted Dark	(F3) rface (F6) Surface (F			Indicators of wetland hydro	hydrophytic ve logy must be p	egetation and
Depth (inches):		Layer (ii observeu).										
PROLOGY etland Hydrology Indicators: Imary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Aquatic Fauna (B13) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Popth (inches): Other (Explain in Remarks) Wetland Hydrology Present? Yes X No Depth (inches): Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:												
Surface Water (A1)	marks:	<u></u>							Hydri	c Soil preser	nt? Yes _	X No
Surface Water (A1)	marks: profile p	hoto.							Hydri	c Soil preser	nt? Yes _	X No
arface Water Present? Yes X No Depth (inches): 2 ater Table Present? Yes X No Depth (inches): 2 aturation Present? Yes X No Depth (inches): 0 Wetland Hydrology Present? Yes X No Depth (inches): 0 scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	marks: profile p DROLO	GY ydrology Indicators		univoda et	and all the state of					-		
ater Table Present? Yes X No Depth (inches): 2 Atturation Present? Yes X No Depth (inches): 0 Wetland Hydrology Present? Yes X No Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I	one is red	——————————————————————————————————————	Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I Presence Recent Iro Thin Muck Gauge or	nined Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc on Reduc s Surface Well Dat	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	ts (C3)	Secondary Inc Surface So Drainage F Dry-Season Crayfish Bu Saturation Stunted or Geomorphi	dicators (minim bil Cracks (B6) Patterns (B10) n Water Table urrows (C8) Visibile on Aer Stressed Plant ic Postion (D2)	um of two re (C2) ial Imagery (is (D1)
scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLO etland H imary Inc Surface High W Saturati Water M Sedime Algal M Iron De Inundat Sparsel	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) iposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave	magery (le Surface	B7)(B8)	Water Sta Aquatic Fi True Aqua Hydrogen Oxidized I Presence Recent Iro Thin Muck Gauge or Other (Ex	nined Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc on Reduc on Reduc on Surface Well Data plain in R	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) emarks)	4)	ts (C3)	Secondary Inc Surface So Drainage F Dry-Season Crayfish Bu Saturation Stunted or Geomorphi	dicators (minim bil Cracks (B6) Patterns (B10) n Water Table urrows (C8) Visibile on Aer Stressed Plant ic Postion (D2)	um of two re (C2) ial Imagery (is (D1)
marks:	DROLO etland H imary Inc Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave ervations: ater Present? Present? Ye Present?	magery (lee Surface	B7) (B8)	Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I Presence Recent Iro Thin Muck Gauge or Other (Ex	nined Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc on Reduc Surface Well Data plain in R	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (ts (C3)	Secondary Inc Surface So Drainage F Dry-Season Crayfish Bu Saturation Stunted or Geomorphi X FAC-Neutr	dicators (minim bil Cracks (B6) Patterns (B10) n Water Table urrows (C8) Visibile on Aer Stressed Plant ic Postion (D2) al Test (D5)	um of two re (C2) ial Imagery (
	DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse utater Table ituration cludes c	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I y Vegetated Concave ervations: ater Present? Present? Ye apillary fringe)	magery (lee Surface	B7)	Water Sta Aquatic Fa True Aqua Hydrogen Oxidized I Presence Recent Iro Thin Muck Gauge or Other (Exp	ined Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc on Reduc Surface Well Dat plain in R	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (ts (C3)	Secondary Inc Surface So Drainage F Dry-Season Crayfish Bu Saturation Stunted or Geomorphi X FAC-Neutr	dicators (minim bil Cracks (B6) Patterns (B10) n Water Table urrows (C8) Visibile on Aer Stressed Plant ic Postion (D2) al Test (D5)	um of two re (C2) ial Imagery (

Project/Site: I-69 Section 6 Wetland S6W055A		City/Count	ty: Morgan		Sampling Date: 04/05/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point CL14A-1D1
Investigator(s): R. Yeager, B. Reust		Section, T	ownship, Ra	nge: SEC 13, T12N, R	1E
Landform (hillslope, terrace, etc.): hillslope			Local reli	ef (concave, convex, no	ne): convex
Slope (%): 8% Lat: 39.474185	l	Long: -86.	- 368453		Datum: GCS NAD83
Soil Map Unit Name Genessee silt loam		<u> </u>		NWI classi	fication: upland
Are climatic/hydrologic conditions on the site typical for this t	ime of veal	r? Yes	X No		
Are Vegetation , Soil or Hydrology signif					present? Yes X No:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showing					
		Ing point	iocations,	transects, importar	etc.
Hydrophytic Vegetation Present? Yes No		Is	the Sample	d Area	
Hydric Soils Present? Yes No Wetland Hydrology Present? Yes No			thin a Wetla		No X
					
Remarks					
VEGETATION - Use scientific names of plants					
		Dominant		Dominance Test wor	ksheet:
Tree Stratum (Plot Size: 30' radius)		Species?		Number of Dominant	Species
Acer saccharum Fagus grandifolia		Yes Yes	FACU FACU	That Are OBL, FACW	, or FAC: 0 (A)
		-	1700	Total Number of Domi	
3				Species Across All St	
5				Percent of Dominant S That are OBL, FACW,	
	90	= Total Co	ver	, ,	
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index wo	orksheet:
1				Total % Cover of	of: Multiply by:
2.	_			OBL species	0 x 1 = 0
3				FACW species FAC species	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
4					$\begin{array}{cccccccccccccccccccccccccccccccccccc$
5					$\frac{100}{38}$ $\times 5 = \frac{112}{190}$
Harb Charters (Diot Sizo: El rodius	0	= Total Co	ver	Column Totals: 1	(A) 602 (B)
Herb Stratum (Plot Size: 5' radius) 1. Erythronium americanum	15	Yes	UPL	Prevalence Ind	dex = B/A = 4.27
Dicentra cucullaria	10	Yes	UPL	T TOVAICHOO IIIa	10X = B/T(= 4.21
3. Claytonia virginica	10	Yes	FACU	Hydrophytic Vegetat	ion Indicators:
4. Stellaria pubera	5	Yes	UPL		ydrophytic Vegetation:
5. Polystichum acrostichoides	5	Yes	UPL	2-Dominance Test	
6. Podophyllum peltatum	3	Yes	FACU	3-Prevalence Inde	x is <=3 daptations (Provide supporting
7. Erigenia bulbosa	3	Yes	UPL		r on a separate sheet)
8				Problematic Hydro	phytic Vegetation ¹ (Explain)
9		-			oil and wetland hydrology must
10		T		be present, unless dis	turbed or problematic
Vine Stratum (Plot Size: 30' radius)	51	= Total Co	ver		
				Hydrophytic	
1		-		Vegetation Present?	/es No _X_
	0	= Total Co	ver		<u> </u>
Demoglica (Include photo purchase have as a constraint					
Remarks: (Include photo numbers here or on a separate sh	1661.)				

SOIL Sampling Point CL14A-1D1

i ionie Desc			needed to documn				e absence	oi iriuicaluis.)		
Depth (Inches)	Color (moist)	<u>~</u> _	Color (moist)	dox Featur %	res Type ¹	Loc ²	- -	iuro	Remarks	
,			Color (moist)	70	туре	LOC 2			Remarks	
Hydric Soi Histosol Histic E Black H Hydroge Stratifie 2 cm Mi Deplete Thick D	I Indiactors:	face (A11)	Sand Stripp Loam Loam Deple Redo	y Gleyed I y Redox (ped Matrix y Mucky N y Gleyed eted Matrix x Dark Su	Matrix (S4) S5) (S6) Mineral (F1 Matrix (F2 (F3) rface (F6) Surface (F) 1))	silt lo	² Location: Indiactors for Coast Prairie Dark Surface Iron-Mangar Very Shallov Other Soil (E	PL=Pore Lining, Mare Redox (A16) e (S7) nese Masses (F12 W Dark Surface (TF Explain in Remarks hydrophytic vegetalogy must be prese	c) F12) s) ation and
_	uck Peat or Peat (Layer (If observenches):						Нус	distu	nt? Yes	. No X
IYDROLO Wetland H	GY ydrology Indicato	ors:								
Primary Inco Surface High Wa Saturati Water M Sedime Drift De Algal Ma Iron De Inundati	Water (A1) ater Table (A2)	of one is requ al Imagery (B	Aquatic F True Aqu Hydroger Oxidized Presencer Recent In Thin Muc	ained Lea Fauna (B1 uatic Plant n Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Li ced Iron (C tion in Tille (C7) a (D9)	24)		Surface So Drainage P Dry-Seasor Crayfish Bu Saturation Stunted or S	Visibile on Aerial Ir Stressed Plants (D c Postion (D2)	nagery (C9)
Water Table Saturation (includes ca	ater Present? e Present? Present? apillary fringe)	Yes	No X Depth	(inches): (inches): (inches):				dydrology Preso lable:	ent? Yes	NoX
Remarks: 8' above floo	odplain floor									

Project/Site: I-69 Section 6 Wetland S6W055A		City/County	Morgan		Sampling Date: 04/05/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point CL14A-1W1
Investigator(s): R. Yeager, B. Reust		Section, To	wnship, Ra	ange: SEC 13, T12N, R1	1E
Landform (hillslope, terrace, etc.): footslope to floodplain			Local reli	ief (concave, convex, no	one): concave
Slope (%): 1.5% Lat: 39.474207	L	ong: -86.3	6836		Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam				NWI classi	ification: PFO1
Are climatic/hydrologic conditions on the site typical for this	s time of year	? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology sig					present? Yes X No:
Are Vegetation , Soil or Hydrology na				eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show					
Hydrophytic Vegetation Present? Yes X N	lo				
Hydric Soils Present? Yes X N	lo		e Sample		
Wetland Hydrology Present? Yes X N	lo	with	in a Wetla	and? Yes	X No
Remarks		-			
VEGETATION . Her animatific manner of almost					
VEGETATION - Use scientific names of plants	A la a a la da	Description	La d'a atan	T	
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Status	Dominance Test wor	
1. Acer rubrum	20	Yes	FAC	Number of Dominant 3 That Are OBL, FACW	
2				Total Number of Domi	
3				Species Across All Str	rata: 4 (B)
4				Percent of Dominant S	
5		= Total Cov		That are OBL, FACW,	, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)		= Total Cov	CI	Prevalence Index wo	orksheet:
1. Lindera benzoin	10	Yes	FACW	Total % Cover of	of: Multiply by:
2.				OBL species	20 x 1 = 20
3.				· —	10 x 2 = 20
4				FAC species FACU species	$ \begin{array}{c} 30 \\ \hline 0 \\ \end{array} \begin{array}{c} x \ 3 = \\ \hline 0 \\ \end{array} \begin{array}{c} 90 \\ \hline 0 \end{array} $
5				UPL species	0
Herb Stratum (Plot Size: 5' radius)	10=	= Total Cov	er	Column Totals:	60 (A) 130 (B)
1. Symplocarpus foetidus	20	Yes	OBL	Prevalence Ind	dex = B/A = 2.17
2. Sanicula odorata	10	Yes	FAC		
3.				Hydrophytic Vegetat	
4				1-Rapid Test for HX 2-Dominance Test	lydrophytic Vegetation:
5				X 3-Prevalence Inde	
6					daptations (Provide supporting
7 8.					or on a separate sheet)
9.				I —	ophytic Vegetation ¹ (Explain)
10.				be present, unless dis	oil and wetland hydrology must sturbed or problematic
	30	= Total Cov	er	, ,	· · · · · · · · · · · · · · · · · · ·
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1				Vegetation	
2				Present?	Yes X No
		= Total Cov	er	<u> </u>	
Remarks: (Include photo numbers here or on a separate	sheet.)				

SOIL Sampling Point CL14A-1W1

(Inches)	Color (moist)	%	Color (moist)) %	Type ¹	Loc ²	Texture		Remarks	
0-6	10YR3/1	100					silt loam			
6-10	10YR3/1	95	7.5YR4/6	<u> </u>	С	M	silt loam			
10-20	10YR4/1	100	-				sandy loam	า		
	Concentration, D= De	pletion, R	M=Reduced Mat	rix, CS=Cove	ered or Coa	ated Sand			Pore Lining, M=	
	il Indiactors:								blematic Hydrid	Soils 3
Histoso	, ,			andy Gleyed I				Coast Prairie Re		
-	pipedon (A2)			andy Redox (Oark Surface (S		
-	listic (A3)			tripped Matrix	. ,	\			e Masses (F12) ark Surface (TF1	2)
	en Sulfide (A4) ed Layers (A5)			oamy Mucky I oamy Gleyed			_	-	ain in Remarks)	-)
_	uck (A10)			epleted Matrix	, ,	,	`	zaioi ooii (Expli	an in Romains)	
_	ed Below Dark Surfac	e (A11)	_	edox Dark Su						
	ark Surface (A12)	,	_	epleted Dark		7)	³ In	dicators of hyd	rophytic vegetat	ion and
Sandy	Mucky Mineral (S1)		R	edox Depress	sions (F8)		wet		must be preser	
5 cm M	uck Peat or Peat (S3)						alsturbed	d or problematic.	
strictive	Layer (If observed):									
	nches):						Hydric S	Soil present?	Yes X	Nο
Type: Depth (ii emarks:	nches):						Hydric S	Soil present?	Yes X	No _
Depth (i							Hydric S	Soil present?	Yes X	No _
Depth (imarks:	oGY lydrology Indicators		nuired: check all f	that anniv)						
Depth (i) marks: DROLO letland H rimary Incimary Incimary Incimary	OGY lydrology Indicators dicators (minimum of		•		(70)		Sec	condary Indicat	ors (minimum of	
DROLO Jetland Herimary Inc. Surface:	PGY lydrology Indicators dicators (minimum of		Wate	r Stained Lea	` '		Sec.	condary Indicat Surface Soil Cr	ors (minimum of	
DROLO etland H imary Inc Surface High W	lydrology Indicators dicators (minimum of a Water (A1) ater Table (A2)		Wate Aqua	r Stained Lea tic Fauna (B1	3)		<u>Sec</u>	condary Indicat Surface Soil Cr Drainage Patte	ors (minimum of acks (B6) rns (B10)	
DROLO etland H imary Inc Surface High W Saturat	lydrology Indicators dicators (minimum of Water (A1) fater Table (A2) ion (A3)		Wate Aqua True	r Stained Lea tic Fauna (B1 Aquatic Plant	3) s (B14)		<u>Sec</u>	condary Indicat Surface Soil Cr Drainage Patte Dry-Season Wa	ors (minimum of racks (B6) rns (B10) ater Table (C2)	
DROLO Petland H Imary Inc Surface High W Saturat Water I	lydrology Indicators dicators (minimum of a Water (A1) ater Table (A2)		Wate Aqua True Hydro	r Stained Lea tic Fauna (B1	3) s (B14) Odor (C1)	ving Root	<u>Sec</u>	condary Indicat Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov	ors (minimum of racks (B6) rns (B10) ater Table (C2)	two requ
DROLO Vetland H rimary Inc Surface High W Saturat Water N Sedime	lydrology Indicators dicators (minimum of Water (A1) fater Table (A2) ion (A3) Marks (B1)		Wate Aqua True Hydro	r Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (3) s (B14) Odor (C1) neres on Liv		Sec 	condary Indicate Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit	ors (minimum of acks (B6) rns (B10) ater Table (C2) ws (C8)	two requ
DROLO Vetland H Timary Inc Surface High W Saturat Water N Sedime Drift De	lydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)		Wate Aqua True Hydro Oxidi. Prese	r Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph	3) s (B14) Odor (C1) neres on Lived Iron (C	(4)	Sec (C3) (S (C3) (C6) (C6)	condary Indicate Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visite Stunted or Stre Geomorphic Po	ors (minimum of acks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Imsed Plants (D1) ostion (D2)	two requ
DROLO etland H imary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De	lydrology Indicators dicators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5)	one is re	Wate Aqua True Hydro Oxidia Prese Rece	r Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface	3) Ss (B14) Odor (C1) Deres on Lived Iron (Cotton in Tille	(4)	Sec (C3) (SC6) (SC6)	condary Indicat Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre	ors (minimum of acks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Imsed Plants (D1) ostion (D2)	two requagery (CS
DROLO etland H imary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat	lydrology Indicators dicators (minimum of e Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4)	one is red	— Wate Aqua True Hydro Oxidi: Prese Rece Thin	r Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc	3) Is (B14) Odor (C1) Interes on Linced Iron (C Ottion in Tille Is (C7) In (D9)	(4)	Sec (C3) (SC6) (SC6)	condary Indicate Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visite Stunted or Stre Geomorphic Po	ors (minimum of acks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Imsed Plants (D1) ostion (D2)	two requ
DROLO etland H imary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse	lydrology Indicators dicators (minimum of e Water (A1) fater Table (A2) fion (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4) posits (B5) fion Visible on Aerial	one is red	— Wate Aqua True Hydro Oxidi: Prese Rece Thin	r Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface e or Well Dat	3) Is (B14) Odor (C1) Interes on Linced Iron (C Ottion in Tille Is (C7) In (D9)	(4)	Sec (C3) (SC6) (SC6)	condary Indicate Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visite Stunted or Stre Geomorphic Po	ors (minimum of acks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Imsed Plants (D1) ostion (D2)	two requ
DROLO etland H imary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse	lydrology Indicators dicators (minimum of e Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) posits (B5) ion Visible on Aerial	magery (r Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface le or Well Dat r (Explain in F	3) Is (B14) Odor (C1) Interes on Linced Iron (C Ottion in Tille Is (C7) In (D9)	(4)	Sec (C3) (SC6) (SC6)	condary Indicate Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visite Stunted or Stre Geomorphic Po	ors (minimum of acks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Imsed Plants (D1) ostion (D2)	two requ
DROLO etland H imary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse eld Obse	lydrology Indicators dicators (minimum of water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) posits (B5) tion Visible on Aerial ly Vegetated Concave ervations: ater Present? Ye	magery (e Surface	Wate	r Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface le or Well Dat r (Explain in F	3) s (B14) Odor (C1) heres on Lived Iron (C stion in Tille (C7) a (D9) Remarks)	(4)	Sec (C3) (SC6) (SC6)	condary Indicate Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visite Stunted or Stre Geomorphic Po	ors (minimum of acks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Imsed Plants (D1) ostion (D2)	two requ
DROLO etland H imary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse eld Obse	lydrology Indicators dicators (minimum of water (A1) later Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) posits (B5) ion Visible on Aerial ly Vegetated Concave ervations: le Present? Present?	magery (e Surface	Wate	r Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface le or Well Dat r (Explain in F	3) s (B14) Odor (C1) heres on Lived Iron (C tion in Tille (C7) a (D9) Remarks)	ed Soils (0	Sec 	condary Indicate Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visite Stunted or Stre Geomorphic Po	ors (minimum of acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Im- ssed Plants (D1 ostion (D2) est (D5)	two requ
DROLO etland H imary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundar Sparse eld Obser urface W ater Tab	lydrology Indicators dicators (minimum of water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) posits (B5) tion Visible on Aerial ly Vegetated Concave ervations: ater Present? Ye	magery (e Surface	Wate	r Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface te or Well Data r (Explain in F	3) s (B14) Odor (C1) heres on Liv ced Iron (C tion in Tille c (C7) a (D9) Remarks)	ed Soils (0	Sec	condary Indicate Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visite Stunted or Stre Geomorphic Po FAC-Neutral Te	ors (minimum of acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Im- ssed Plants (D1 ostion (D2) est (D5)	agery (CS
DROLO etland H imary Ind Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundar Sparse eld Obser urface W ater Tab aturation cludes o	lydrology Indicators dicators (minimum of e Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) posits (B5) ion Visible on Aerial ly Vegetated Concave ervations: ater Present? Present? Present? Sepaillary fringe)	magery (e Surface	Wate	r Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface te or Well Data r (Explain in F	3) s (B14) Odor (C1) heres on Liv ced Iron (C tion in Tille c (C7) a (D9) Remarks)	ed Soils (0	Sec	condary Indicate Surface Soil Cr Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visite Stunted or Stre Geomorphic Po FAC-Neutral Te	ors (minimum of acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Im- ssed Plants (D1 ostion (D2) est (D5)	agery (CS

Project/Site: I-69 Section 6 Wetland S6W056A		City/County	/: Morgan	Sampling Date: <u>04/05/2017</u>
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point CL13A-1D1
Investigator(s): R. Yeager, B. Reust		Section, To	wnship, Ra	ange: SEC 13, T12N, R1E
Landform (hillslope, terrace, etc.): Flat			Local reli	lief (concave, convex, none): Flat
Slope (%): .5% Lat: 39.475106	L	ong: -86.3	- 36801	Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam				NWI classification: PFO1C
Are climatic/hydrologic conditions on the site typical for the	is time of year	? Yes	X No	
Are Vegetation , Soil or Hydrology si		_		Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology n				eded, explain answers in Remarks.)
				· · ·
SUMMARY OF FINDINGS - Attach site map show	wing sampli	ng point	locations,	, transects, important features, etc.
	No X	la 4	h	od Area
	No X		he Sample hin a Wetla	
Wetland Hydrology Present? Yes	No <u>X</u>	With	IIII a Wella	HIG. 165 NO X
Remarks				
VEGETATION - Use scientific names of plants				
TEGETATION COCCONTINUE HARMOS OF Plants	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot Size: 30' radius)		Species?	Status	
1. Fraxinus pennsylvanica	10	No	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
2. Quercus sp.	25	Yes	UPL	Total Number of Dominant
3. Robinia pseudoacacia	25	Yes	FACU	Species Across All Strata: 8 (B)
4. Ulmus americana		No	FACW	Percent of Dominant Species
5				That are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	70	= Total Cov	/er	Prevalence Index worksheet:
1. Acer negundo	5	Yes	FAC	Total % Cover of: Multiply by:
2. Lindera benzoin		Yes	FACW	OBL species 2 x 1 = 2
3. Lonicera tatarica	5	Yes	FACU	FACW species 70 x 2 = 140
4. Symphoricarpos orbiculatus	2	Yes	FACU	FAC species 20 x 3 = 60
5				FACU species 44 x 4 = 176 UPL species 25 x 5 = 125
	22	= Total Cov	/er	UPL species25
Herb Stratum (Plot Size: 5' radius)				
1. Cinna arundinacea	40	Yes	FACW	Prevalence Index = B/A = 3.12
2. Salidare altipointe		Yes	FAC	Hydrophytic Vegetation Indicators:
Solidago altissima Galium aparine	<u>5</u> 5	No No	FACU FACU	1-Rapid Test for Hydrophytic Vegetation:
5. Claytonia virginica		No	FACU	2-Dominance Test is >50%
6. Cardamine bulbosa	2	No	OBL	3-Prevalence Index is <=\$
7.				4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation ¹ (Explain)
9				Indicators of hydric soil and wetland hydrology must
10				be present, unless disturbed or problematic
	69	= Total Cov	/er	
Vine Stratum (Plot Size: 30' radius)				Hydrophytic
1				Vegetation No. You
2.		= Total Cov		Present? Yes No _X
		- 10tai 00t	, 01	<u> </u>
Remarks: (Include photo numbers here or on a separate	e sheet.)			
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SOIL Sampling Point CL13A-1D1

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Stained Leaves (B9) Aquatic Fauna (B13) Saturation (A3) True Aquatic Plants (B14) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Ino Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Very Company Indicators (minimum of two Secondary Indicators (minimum of two Surface (B9) Surface Soil Cracks (B6) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Surface Soil Cracks (B6) Drainage Patterns (B10) Surface Soil Cracks (B6) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Surface Vale Soil Cracks (B6) Drainage Patterns (B10) Secondary Indicators (minimum of two	Depth	Matrix		Red	ox Featur	es						
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ype: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2 Location: PL=Pore Lining, M=Matrix pdf: Soil Indiactors: Indiactors for Problematic Hydric Soil Indiactors: Indiactors for Problematic Hydric Soil Coast Prainie Redox (A16) Sandy Redox (85) Sandy Redox (85) Sandy Redox (85) Sandy Redox (85) Indiactors for Problematic Hydric Soil Coast Prainie Redox (A16) Dark Surface (87) New Surface (87) Very Shallow Dark Surface (F12) Very Shallow Dark Surface (F12) Very Shallow Dark Surface (F12) Very Shallow Dark Surface (F12) Very Shallow Dark Surface (F12) Very Shallow Dark Surface (F12) Thick Dark Surface (A11) Thick Dark Surface (A12) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Som Muck Peat or Peat (S3) Strictive Layer (if observed): Type: Depth (inchas): Depth (inchas): Dark Water (A1) Hydric Soil present? Yes No Algal Mat or Crust (B4) Iron Deposits (B3) Presence of Reduced Iron (C4) Sparse Vegetated Concave Surface (B8) Other (Explain in Remarks) Presence of Reduced Iron (C4) Think Surface (F7) Saturation (A3) Turus Aquatic Plants (B14) Dary Season Water Table (C2) Crayfish Burrows (B10) Secondary Indicators (minimum of two Surface) Surface Soil Cracks (B6) Dary-Season Water Table (C2) Crayfish Burrows (B10) Secondary Indicators (minimum of two Surface) Surface Soil Cracks (B6) Dary-Season Water Table (C2) Crayfish Burrows (B10) Secondary Indicators (minimum of two Surface) Secondary Indicators (minimum of two Surface) Secondary Indicators (minimum of two Surface) Secondary Indicators (minimum of two Surface) Secondary Indicators (minimum of two Surface) Secondary Indicators (minimum of two Surface) Secondary Indicators (minimum of two Surface) Secondary Indicators (minimum of two Surface) Secondary Indicators (minimum of two Surface) Secondary Indicators (minimum of two Surface) Secondary Indicators (minimum of two Surface) Secondary Indicators (mini	0-6	10YR4/2	100					silt lo	oam			
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Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Som Muck Peat or Peat (S3) Pept Bet Below Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Som Muck Peat or Peat (S3) Presence of Reduced Indicators (F7) Redox Depressions (F8) Presence of Reduced Inon (C4) Surface Water (A1) Saturation (R3) Surface Water (A1) Saturation (A3) Surface Water (A1) Sediment Deposits (B3) True Aquatic Plants (B14) Diringe Patterns (B10) Sediment Deposits (B3) Diringe Patterns (B10) Sediment Deposits (B3) Diringe Patterns (B4) Redox Depressions (F8) Secondary Indicators (minimum of two Surface (B4) Diringe Patterns (B10) Diringe Patterns (B10) Surface Water (A1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Diring Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Redox Patterns (B4) Redox Dark Surface (B6) Redox Depressions (F8) No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X Depth (inches): Surface Water Present? Ves No X No	Black H	istic (A3)		Stripp	ed Matrix	(S6)						
2 cm Muck (A10)	Hydroge	en Sulfide (A4)		Loam	y Mucky N	/lineral (F1)		Very	Shallow D	ark Surface (T	- 12)
Depleted Below Dark Surface (A11)	Stratifie	d Layers (A5)		Loam	y Gleyed I	Matrix (F2))		Othe	r Soil (Exp	lain in Remark	s)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Som Muck Peat or Peat (S3) Strictive Layer (If observed): Type: Depth (inches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches): Mary Indicators (Minches)	2 cm Mu	uck (A10)		Deple	ted Matrix	(F3)						
Thick Dark Surface (A12)	Deplete	d Below Dark Surfac	e (A11)	Redox	c Dark Su	rface (F6)						
Sandy Mucky Mineral (S1)	Thick D	ark Surface (A12)		Deple	ted Dark	Surface (F	7)		3 Indic	ators of hyd	drophytic veget	ation and
Secondary Indicators (minimum of two Surface Water (A1)						•	,		wetlar			
Type: Depth (inches):	-		5)	_	•	,				disturbe	d or problemat	c.
Depth (inches):		Layer (If observed)	:									
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etland Hydrology Indicators: imary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two Surface Water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Eld Observations: Irrace Water Present? Yes No X Depth (inches): Secondary Indicators (minimum of two Secondary Indicators (minimum of two Secondary Indicators (minimum of two Secondary Indicators (minimum of two Minimum of two Secondary Indicators (minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of two Minimum of Cala Minimum of two Minimum of Cala Minimum of Cala Minimum of Cala Minimum of Cala Minimum of Cala Minimum of Cala Minimum of Cala Minimum of Ca	marks:							Нус	dric Soi	present?	Yes	No
Surface Water (A1)	marks:	iches).						Нус	dric Soi	present?	Yes	_ No _
Surface Water (A1)								Нус	dric Soi	present?	Yes	NO _
High Water Table (A2) Saturation (A3) Aquatic Fauna (B13) Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visibile on Aerial Imagery Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Potential Table (C2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visibile on Aerial Imagery Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Other (Explain in Remarks) Wetland Hydrology Present? Yes No Depth (inches): Cudes capillary fringe) Wetland Hydrology Present? Yes No Sprevious inspections), if available:	OROLO	GY ydrology Indicators						Hyd				
Saturation (A3)	OROLO	GY ydrology Indicators		ired; check all that	apply)			Нус				
Water Marks (B1)	DROLO etland H mary Inc	GY ydrology Indicators licators (minimum of Water (A1)		Water Sta	ained Lea	` '		Нус	Secon	dary Indica face Soil C	tors (minimum racks (B6)	
Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Postion (D2) FAC-Neutral Test (D5) Gauge or Well Data (D9) Other (Explain in Remarks) Presence of Reduced Iron (C4) Geomorphic Postion (D2) FAC-Neutral Test (D5) Other (Explain in Remarks) Presence of Reduced Iron (C4) Geomorphic Postion (D2) FAC-Neutral Test (D5) Other (Explain in Remarks) Presence of Reduced Iron (C4) Geomorphic Postion (D2) FAC-Neutral Test (D5) Other (Explain in Remarks) Presence of Reduced Iron (C4) Geomorphic Postion (D2) FAC-Neutral Test (D5) Depth (inches): Other (Explain in Remarks) Presence of Reduced Iron (C4) Geomorphic Postion (D2) FAC-Neutral Test (D5) Depth (inches): Other (Explain in Remarks) Presence of Reduced Iron (C4) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Tes	DROLO etland H mary Inc	GY ydrology Indicators licators (minimum of Water (A1)		Water Sta	ained Lea	` '		Нус	Secon	dary Indica face Soil C	tors (minimum racks (B6)	
Drift Deposits (B3)	DROLO etland H mary Inc Surface High Wa	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F	ained Lea auna (B1	3)		Hyd	Secon Sur Dra	dary Indica face Soil C inage Patte	tors (minimum racks (B6) erns (B10)	of two req
Algal Mat or Crust (B4)	DROLO etland H mary Inc Surface High Wa Saturati	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3)		Water Sta Aquatic F True Aqu	ained Lea auna (B1 atic Plant	3) s (B14)		Hyd	Secon Sur Dra	dary Indica face Soil C inage Patte Season W	tors (minimum racks (B6) erns (B10) ater Table (C2	of two req
Iron Deposits (B5)	DROLO etland H mary Inc Surface High Wa Saturati Water M	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1)		Water Sta Aquatic F True Aqu Hydroger	ained Lea auna (B1 atic Plant n Sulfide (3) s (B14) Odor (C1)	ving Root		Secon Sur Dra Dry Cra	dary Indica face Soil C inage Patte -Season W yfish Burro	tors (minimum racks (B6) erns (B10) fater Table (C2 ws (C8)	of two req
Inundation Visible on Aerial Imagery (B7)	DROLO etland H mary Inc Surface High Wa Saturati Water M Sedime	gy ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2)		Water Sta Aquatic F True Aqu Hydroger Oxidized	ained Lea fauna (B1 atic Plant n Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Li	-		Secon Sui Dra Dry Cra Sat	dary Indica face Soil C inage Patte -Season W yfish Burro uration Visi	tors (minimum racks (B6) erns (B10) later Table (C2 ws (C8) bile on Aerial I	of two req
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) eld Observations: rface Water Present?	DROLO etland H mary Inc Surface High Wa Saturati Water M Sedime Drift De	gy ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3)		Water Sta Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea auna (B1 atic Plant Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Li ced Iron (C	(4)	rs (C3)	Secon Sur Dra Dry Cra Sat	dary Indica face Soil C inage Patte -Season W yfish Burro uration Visi nted or Stre	tors (minimum racks (B6) erns (B10) later Table (C2 ws (C8) bile on Aerial I	of two req
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) eld Observations: rface Water Present?	DROLO etland H mary Inc Surface High Wa Saturati Water M Sedime Drift De Algal Ma	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water State Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc	3) s (B14) Odor (C1) eres on Lired Iron (C	(4)	rs (C3)	Secon Sur Dra Dry Cra Sat Stu Gee	dary Indica face Soil C inage Patte -Season W yfish Burro uration Visi nted or Stre omorphic P	tors (minimum racks (B6) erns (B10) later Table (C2 ws (C8) bile on Aerial I essed Plants (I ostion (D2)	of two req
rface Water Present? Yes No X Depth (inches): ater Table Present? Yes X No Depth (inches): turation Present? Yes No X Depth (inches): cludes capillary fringe) wetland Hydrology Present? Yes No Compared to the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the pre	DROLO Petland H mary Inc Surface High Water M Sedime Drift De Algal Mailron De	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	one is requi	Water State Aquatic For True Aquestic For True Aquestic For Oxidized Presence Recent In Thin Muc	ained Lea fauna (B1 atic Plant n Sulfide C Rhizosph of Reduc on Reduc k Surface	3) s (B14) Odor (C1) eres on Li ed Iron (C tion in Tille (C7)	(4)	rs (C3)	Secon Sur Dra Dry Cra Sat Stu Gee	dary Indica face Soil C inage Patte -Season W yfish Burro uration Visi nted or Stre omorphic P	tors (minimum racks (B6) erns (B10) later Table (C2 ws (C8) bile on Aerial I essed Plants (I ostion (D2)	of two req
ater Table Present? Yes X No Depth (inches): 20 turation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Cludes capillary fringe) scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLO Surface High Water M Sedime Drift De Algal Ma	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is requi	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or	ained Lea fauna (B1 atic Plant Sulfide C Rhizosph of Reduc on Reduc k Surface	3) s (B14) Odor (C1) eres on Lited Iron (C tion in Tille (C7) a (D9)	(4)	rs (C3)	Secon Sur Dra Dry Cra Sat Stu Gee	dary Indica face Soil C inage Patte -Season W yfish Burro uration Visi nted or Stre omorphic P	tors (minimum racks (B6) erns (B10) later Table (C2 ws (C8) bile on Aerial I essed Plants (I ostion (D2)	of two req
turation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Cludes capillary fringe) Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLO etland H mary Inc Surface High Wa Saturati Water M Sedime Drift De Algal Ma Iron De Inundati Sparsel	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav	one is requi	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or	ained Lea fauna (B1 atic Plant Sulfide C Rhizosph of Reduc on Reduc k Surface	3) s (B14) Odor (C1) eres on Lited Iron (C tion in Tille (C7) a (D9)	(4)	rs (C3)	Secon Sur Dra Dry Cra Sat Stu Gee	dary Indica face Soil C inage Patte -Season W yfish Burro uration Visi nted or Stre omorphic P	tors (minimum racks (B6) erns (B10) later Table (C2 ws (C8) bile on Aerial I essed Plants (I ostion (D2)	of two req
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scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLO etland H imary Inc Surface High Wa Saturati Water M Sedime Drift De Algal M Iron De Inundati Sparsel eld Obse	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations:	one is requi	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or Other (Ex	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Data cplain in R	3) s (B14) Odor (C1) eres on Lir ced Iron (C tion in Tille (C7) a (D9) emarks)	(4)	rs (C3)	Secon Sur Dra Dry Cra Sat Stu Gee	dary Indica face Soil C inage Patte -Season W yfish Burro uration Visi nted or Stre omorphic P	tors (minimum racks (B6) erns (B10) later Table (C2 ws (C8) bile on Aerial I essed Plants (I ostion (D2)	of two req
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Project/Site: I-69 Section 6 Wetland S6W056A	City/	County: Morgan		Sampling Date: 04/05/2017
Applicant/Owner: INDOT/Lochumueller			State: Indiana	Sampling Point CL13A-1W1
Investigator(s): R. Yeager, B. Reust	Sect	ion, Township, Ran	nge: SEC 13, R1E, T12	N
Landform (hillslope, terrace, etc.): Flat		Local relie	ef (concave, convex, noi	ne): Flat
Slope (%): .5% Lat: 39.475153	Long:	: -86.367864		Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam			NWI classif	ication: PFO1C
Are climatic/hydrologic conditions on the site typical for thi	s time of year?	Yes X No	(If no, explain Re	marks.)
Are Vegetation , Soil or Hydrology sig	-			present? Yes X No:
Are Vegetation , Soil or Hydrology na			led, explain answers in	
SUMMARY OF FINDINGS - Attach site map show			transects, importan	t features, etc.
Hydrophytic Vegetation Present? Yes X N	lo			
	lo	Is the Sampled		
Wetland Hydrology Present? Yes X	lo	within a Wetlan	nd? Yes	X No
Remarks				
VEGETATION . Her asigniffic recover of release				
VEGETATION - Use scientific names of plants		·		
Tree Stratum (Plot Size: 30' radius)	% Cover Spe	ninant Indicator ecies? Status	Dominance Test wor	
1. Acer negundo		Yes FAC	Number of Dominant S That Are OBL, FACW,	
2. Platanus occidentalis	20	Yes FACW	Total Number of Domi	 ' ' '
3			Species Across All Str	
4			Percent of Dominant S	
5			That are OBL, FACW,	or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	<u>80</u> = To	tal Cover	Prevalence Index wo	rksheet:
<u> </u>			Total % Cover o	f: Multiply by:
1. 2.			OBL species	0 x 1 = 0
3.				70 x 2 = 140
4.			· —	60 x 3 = 180
5			FACU species UPL species	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
(-, -, -, -, -, -, -, -, -, -, -, -, -, -	0 = To	tal Cover		30 (A) 320 (B)
Herb Stratum (Plot Size: 5' radius)	50	/aa	Dravalance Ind	 ``
Lysimachia nummularia 2.	50	<u>Yes</u> <u>FACW</u>	Prevalence Ind	ex = B/A = <u>2.46</u>
3.			Hydrophytic Vegetati	on Indicators:
4.				ydrophytic Vegetation:
5.			X 2-Dominance Test	
6			X 3-Prevalence Index	daptations (Provide supporting
7				on a separate sheet)
8.			Problematic Hydro	phytic Vegetation ¹ (Explain)
9		 		oil and wetland hydrology must
10		tal Cover	be present, unless dist	turbed or problematic
Vine Stratum (Plot Size: 30' radius)	= 10	IGI OUVEI		
1			Hydrophytic Vegetation	
2.				es <u>X</u> No
	0 = To	tal Cover		
Remarks: (Include photo numbers here or on a separate	sheet.)			
, , ,	,			

SOIL Sampling Point CL13A-1W1

(Inches)	Color (moist)	%	Color (mo	ist) %	Type ¹	Loc ²	Texture	е		Rem	arks	
0-5	10YR3/2	100	,				silty clay I					
5-20	10YR5/2	98	5YR4/4	2	М	С	silty clay I					
Histoso Histic E Black H Hydrog Stratifie 2 cm M Deplete Thick D Sandy I 5 cm M	Concentration, D= De il Indiactors: I (A1) pipedon (A2) listic (A3) en Sulfide (A4) d Layers (A5) uck (A10) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3	e (A11)	_ _ _ _	Sandy Gleyer Sandy Redox Stripped Matr Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre	d Matrix (S4) (S5) ix (S6) Mineral (F1) d Matrix (F2) rix (F3) Surface (F6) k Surface (F6))))	In	Coast Dark S Iron-M Very S Other S	ion: PL=f s for Prol Prairie Re surface (S anganese hallow Da Soil (Explain ors of hydin hydrology disturbed	edox (A16 7) Masses ark Surfac ain in Ren	Hydric) (F12) ee (TF12 narks) regetatio	Soils ³ 2) on and
Type: Depth (ir	Layer (If observed):						Hydri	c Soil p	resent?	Yes _	X	No
Type: Depth (ir marks:	nches):						Hydri	c Soil p	resent?	Yes _	X	No _
Type: Depth (in marks:	GY ydrology Indicators	:	quired; check a	ull that apply)								
DROLO Tetland H Timary Inc Surface High Water M Sedime Drift De Algal M Iron De Inundat Sparsel	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial by Vegetated Concave	: one is red	— Wa — Aq — Tru — Hy — Ox — Pre — Re — Th B7) — Ga	all that apply) ater Stained Le uatic Fauna (E ue Aquatic Pla drogen Sulfide idized Rhizos esence of Red cent Iron Red in Muck Surfa uge or Well D ner (Explain in	a13) ints (B14) c Odor (C1) cheres on Li uced Iron (C uction in Tille ce (C7) ata (D9)	(4)	ts (C3)	Seconda Surfar Draina Dry-S Crayfi Satura Stunta	ry Indicate ce Soil Cra age Patter eason Wa sh Burrow ation Visib ed or Stree iorphic Po	ors (minin acks (B6) rns (B10) ater Table vs (C8) oile on Ae ssed Plan ostion (D2	num of t	iwo requi
DROLO Tetland H Timary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	: one is rec magery (I e Surface	— Wa — Aq — Tru — Hy — Ox — Pre — Re — Th B7) — Ga (B8) — Oth	ater Stained Louatic Fauna (Eue Aquatic Pladrogen Sulfide idized Rhizos esence of Redrent Iron Redrin Muck Surfauge or Well Deer (Explain in	ata (D9) Remarks)	(4)	ts (C3)	Seconda Surfar Draina Dry-S Crayfi Satura Stunta	ry Indicate ce Soil Cra age Patter eason Wa sh Burrow ation Visib ed or Stres	ors (minin acks (B6) rns (B10) ater Table vs (C8) oile on Ae ssed Plan ostion (D2	num of t	two requ
Type: Depth (ir marks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Present? Ye Present? Ye Present?	: one is recommand in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the seco		ater Stained Le uatic Fauna (I ue Aquatic Pla drogen Sulfide idized Rhizos esence of Red cent Iron Red in Muck Surfa uge or Well D	ata) note (B14) codor (C1) coheres on Li codor in Tille codor (C7) ata (D9) Remarks) codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille codor in Tille c	c4) ed Soils (ts (C3)	Seconda Surfac Draina Dry-S Crayfi Satura Stunta Geom	ry Indicate ce Soil Cra age Patter eason Wa sh Burrow ation Visib ed or Stres rorphic Po Neutral Te	ors (minin acks (B6) rns (B10) ater Table vs (C8) oile on Ae ssed Plan ostion (D2 est (D5)	num of t	two requ
Type:Depth (ir marks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? 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Type:Depth (ir marks:Depth (ir marks:DROLODROLO	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Present? Present? 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Project/Site: I-69 Section 6 Wetland S6W058B		City/Count	y: Morgan		Sampling Date: 04/06/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point CL29B-1D1
Investigator(s): R. Yeager, B. Reust		Section, To	ownship, Ra	nge: SEC 13, T12N, R1	1E
Landform (hillslope, terrace, etc.): hillslope			Local reli	ef (concave, convex, no	one): convex
Slope (%): 5% Lat: 39.478992	L	_ong: -86.3	- 366958		Datum: GCS NAD83
Soil Map Unit Name Martinsville Loam		<u> </u>		NWI classi	ification: upland
Are climatic/hydrologic conditions on the site typical for this ti	ime of vear	r? Yes	X No		
Are Vegetation , Soil or Hydrology signif		-			present? Yes X No:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showin					
-	ig sampii		iocations,	transects, importar	it leatures, etc.
Hydrophytic Vegetation Present? Yes No	<u>X</u>	ls f	he Sample	d Area	
Hydric Soils Present? Yes No Wetland Hydrology Present? Yes No			hin a Wetla		No X
					<u> </u>
Remarks					
VEGETATION - Use scientific names of plants					
	Absolute	Dominant	Indicator	Dominance Test wor	 rksheet:
Tree Stratum (Plot Size: 30' radius)	% Cover	Species?	Status	Number of Dominant	
1	_			That Are OBL, FACW	
2.				Total Number of Domi	
3				Species Across All Str	
45				Percent of Dominant S That are OBL, FACW,	
5	0	= Total Co	ver	mat are obl., i novi,	(17)
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index wo	orksheet:
1				Total % Cover of	of: Multiply by:
2.				OBL species	0 x 1 = 0
3				FACW species	0 x 2 = 0
4				FAC species FACU species	$\frac{5}{3}$ $\times 3 = \frac{15}{12}$
5					$\frac{3}{96}$ $x = \frac{72}{480}$
Hart Otratura (Diet Circu El rodius	0	= Total Co	ver	Column Totals: 1	104 (A) 507 (B)
Herb Stratum (Plot Size: 5' radius) 1. Grass unknown	60	Yes	UPL	Prevalence Ind	dex = B/A = 4.88
2. Lamium purpureum	25	Yes	UPL	T TOVAICHOO IIIa	10X = B//X = 4.00
3. Allium sp.	5	No	UPL	Hydrophytic Vegetat	ion Indicators:
4. Alliaria petiolata	5	No	FAC	1-Rapid Test for H	lydrophytic Vegetation:
5. Cirsium arvense	3	No	FACU	2-Dominance Test	
6. Rubus sp.	2	No	UPL	3-Prevalence Inde	daptations (Provide supporting
7. Geranium carolinianum	2	No	UPL		or on a separate sheet)
8. Erigenia bulbosa	2	No	UPL	Problematic Hydro	ophytic Vegetation ¹ (Explain)
9					oil and wetland hydrology must
10				be present, unless dis	turbed or problematic
Vine Stratum (Plot Size: 30' radius)	104	= Total Co	ver		
				Hydrophytic	
1. 2.		-		Vegetation Present?	res No X
	0	= Total Co	ver		<u> </u>
Demontos (Inglisdo photo pisch are bare and a service tele					
Remarks: (Include photo numbers here or on a separate sh	ieet.)				

SOIL Sampling Point CL29B-1D1

Profile Desc	ription: (Describe to	the depth nee				nfirm the	absen	ce of indic	cators.)			
Depth (Inches)	Matrix	% (ox Featu		Loc ²	_			Domorlo		
(Inches)	Color (moist)		Color (moist)	%	Type ¹	LOC 2	16	exture		Remarks		
0-5	10YR3/2	100						silt				
5-20	10YR4/4	100					san	dy loam				
						·						
-	-			· ·					-			
				-			-					
-	-			. ———								
¹ Type: C=C	Concentration, D= De	pletion, RM=R	deduced Matrix,	CS=Cove	ered or Coa	ated Sand	d Grain	s. ² Lo	cation: PL=	Pore Lining, M=	Matrix	
Hydric Soi	I Indiactors:							Indiac	tors for Pro	blematic Hydri	c Soils	3
Histoso	I (A1)		Sandy	/ Gleyed	Matrix (S4))		Coa	st Prairie Re	edox (A16)		
_	pipedon (A2)			/ Redox (k Surface (S			
_	istic (A3)			ed Matrix				Iron	-Manganese	Masses (F12)		
	en Sulfide (A4)				Mineral (F1	1)		Ver	y Shallow Da	ark Surface (TF	12)	
Stratifie	d Layers (A5)				Matrix (F2)			Oth	er Soil (Expl	ain in Remarks)		
_	uck (A10)			ted Matri		,			` .	,		
	d Below Dark Surfac	e (A11)			ırface (F6)							
_	ark Surface (A12)	,			Surface (F	7)		³ India	cators of hyd	rophytic vegeta	tion and	
	Mucky Mineral (S1)				sions (F8)	,		wetla		must be prese		S
	uck Peat or Peat (S3)	_						disturbed	d or problemation	•	
Restrictive	Layer (If observed):											
Type:	,											
Depth (ir	nches):						Н	lydric Soi	I present?	Yes	No	Χ
Remarks:							•					
HYDROLO	GY											
	ydrology Indicators											
	dicators (minimum of		d: chock all that	annly)				0	odami la d'a at	/		
-	·	one is required	u, check all that	арріу)						ors (minimum o	r two req	uirea)
	Water (A1)		Water Sta		` '			_	rface Soil Cr	` '		
	ater Table (A2)		Aquatic F						ainage Patte			
Saturati	` '		True Aqu							ater Table (C2)		
_	/larks (B1)				Odor (C1)				ayfish Burrov	` '		
Sedime	nt Deposits (B2)		_		neres on Li	-	ts (C3)			oile on Aerial Im		;9)
_	posits (B3)		_		ced Iron (C	,		_		ssed Plants (D1)	
_	at or Crust (B4)		Recent Ir	on Reduc	ction in Tille	ed Soils ((C6)		omorphic Po			
_	posits (B5)		Thin Muc		. ,			FA	C-Neutral Te	est (D5)		
_	ion Visible on Aerial	0, ,	Gauge or	· Well Dat	a (D9)							
Sparsel	y Vegetated Concav	e Surface (B8)	Other (Ex	oplain in F	Remarks)							
Field Obse	ervations:											
Surface Wa	ater Present? Ye	es No	X Depth	(inches):								
Water Tabl	e Present? Ye	es No		(inches):								
Saturation				(inches):		 ,,,			-			
	apillary fringe)	110	Z Boptin	(11101100).		— w	vetiano	i Hydrolo	gy Present?	Yes	No _	X
Describe Re	ecorded Data (stream	n gauge, monit	oring well, aeria	l photos,	previous in	spections	s), if av	/ailable:				
Remarks:												
. tomano.												

Project/Site: I-69 Section 6 Wetland S6W058B	City/	County: Morgan	Sampling Date: 04/06/2017
Applicant/Owner: INDOT/Lochmueller			State: Indiana Sampling Point CL29B-1W1
Investigator(s): R. Yeager, B. Reust	Sec	tion, Township, Ra	nge: SEC 13, T12N, R1E
Landform (hillslope, terrace, etc.): lake fringe		Local reli	ef (concave, convex, none): concave
Slope (%): 1% Lat: 39.478934	Long	: -86.366947	Datum: GCS NAD 1983
Soil Map Unit Name Martinsville Loam			NWI classification: PEM1
Are climatic/hydrologic conditions on the site typical for this tir	me of year?	Yes X No	(If no, explain Remarks.)
Are Vegetation , Soil or Hydrology signific	cantly disturbe	ed? Are "N	Normal Circumstances" present? Yes X No:
Are Vegetation, Soil or Hydrology nature			ded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing			transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soils Present? Wes X No Wetland Hydrology Present? Yes X No		Is the Sampled within a Wetla	
Remarks		I	
VEGETATION - Use scientific names of plants			
	Absolute Doi % Cover Spe	minant Indicator ecies? Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2. 3.			Total Number of Dominant Species Across All Strata: 2 (B)
4			Percent of Dominant Species That are OBL, FACW, or FAC: 100 (A/B)
	0 = To	otal Cover	
Sapling/Shrub Stratum (Plot Size: 15' radius)			Prevalence Index worksheet:
1. Salix interior	5	Yes FACW	Total % Cover of: Multiply by:
2			OBL species 0 x 1 = 0 FACW species 105 x 2 = 210
3			FAC species $0 \times 3 = 0$
5.			FACU species 0 x 4 = 0
<u> </u>	5 = To	otal Cover	UPL species 0 x 5 = 0
Herb Stratum (Plot Size: 5' radius)			Column Totals: 105 (A) 210 (B)
1. Phalaris arundinacea	100	Yes FACW	Prevalence Index = B/A = 2.00
2			Hydrophytic Vegetation Indicators:
3			X 1-Rapid Test for Hydrophytic Vegetation:
4			X 2-Dominance Test is >50%
5			X 3-Prevalence Index is <=3
6. 7.			4-Morphological Adaptation\$ (Provide supporting data in Remarks or on a separate sheet)
8.			Problematic Hydrophytic Vegetation ¹ (Explain)
9.			¹Indicators of hydric soil and wetland hydrology must
10			be present, unless disturbed or problematic
(DL 4.0)	100 = To	otal Cover	
Vine Stratum (Plot Size: 30' radius) 1.			Hydrophytic Vegetation
2			Present? Yes X No
		tal Cover	
Remarks: (Include photo numbers here or on a separate she	eet.)		

SOIL Sampling Point CL29B-1W1

Depth	Matrix	0/	Red	0/	T 1	1 2	- :		D	
Inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-4 4-20	10YR3/2 10YR4/2	100 60	5YR5/6	40			loamy sai			
. 20			OTTIO, O				loanly oal			
	Concentration, D= De	pletion, RN	M=Reduced Matrix,	CS=Cove	red or Coa	ted Sand			Pore Lining, M=N	
	I Indiactors:		Cond	. Clayed N	Motrice (CA)		ine		blematic Hydric	Solis
Histoso Histic F	pipedon (A2)			Redox (Matrix (S4) S5)		_	Coast Prairie Re Dark Surface (S		
	istic (A3)			ed Matrix			_	Iron-Manganese		
Hydrog	en Sulfide (A4)				Aineral (F1)	_	Very Shallow Da	ark Surface (TF12	2)
	d Layers (A5)			-	Matrix (F2))	_	Other Soil (Expl	ain in Remarks)	
	uck (A10)	- / ^ 4 4 \	X Deple							
•	d Below Dark Surfac	e (A11)			rface (F6) Surface (F	7)	3	Indicators of hyd	Irophytic vegetation	nn and
	ark Surface (A12) Mucky Mineral (S1)			ted Dark : Depress		,,			must be present	
	uck Peat or Peat (S3)		. 2 opiooo	(1 0)				d or problematic.	
trictive	Layer (If observed):									
LITCLIVE										
Гуре: _								0-11	V V	NI.
Type: _ Depth (in							Hydric	: Soil present?	Yes X	No _
Type: Depth (in marks:	nches):						Hydric	Soil present?	Yes X	No _
Type:	GY ydrology Indicators						Hydric	Soil present?	Yes X	No _
Type:	nches):		uired; check all that	apply)_					Yes X	
Type:	GY ydrology Indicators dicators (minimum of		Water Sta	ained Lea	, ,			econdary Indicat	ors (minimum of racks (B6)	
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F	ained Lea auna (B1	3)			econdary Indicat Surface Soil Ci Drainage Patte	ors (minimum of racks (B6) rns (B10)	
Depth (in narks: DROLO Surface High W Saturati	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3)		Water Sta Aquatic F True Aqu	ained Lea auna (B1 atic Plant	3) s (B14)			econdary Indicat Surface Soil Co Drainage Patte Dry-Season W	ors (minimum of racks (B6) rns (B10) ater Table (C2)	
DROLO Petland H mary Inc Surface High W Saturati Water M	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water Sta Aquatic F True Aqu Hydroger	ained Lea auna (B1 atic Plant Sulfide (3) s (B14) Odor (C1)	vina Root	<u>s</u>	econdary Indicat Surface Soil Ci Drainage Patte Dry-Season Wi Crayfish Burrov	ors (minimum of racks (B6) rns (B10) ater Table (C2) ws (C8)	two requ
DROLO Partiand H Mary Inc Surface High W Saturati Water M Sedime	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3)		Water Sta Aquatic F True Aqu Hydroger Oxidized	ained Lea fauna (B1 atic Plant Sulfide (Rhizosph	3) s (B14)	-	<u>s</u>	econdary Indicat Surface Soil Co Drainage Patte Dry-Season Wo Crayfish Burroo Saturation Visil	ors (minimum of racks (B6) rns (B10) ater Table (C2)	two requ
DROLO Petland H mary Inc Surface High W Saturati Water M Sedime Drift De	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		Water Sta Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea fauna (B1 atic Plant Sulfide C Rhizosph	3) s (B14) Odor (C1) eres on Liv	4)	<u>S</u> s (C3)	econdary Indicat Surface Soil Co Drainage Patte Dry-Season Wo Crayfish Burroo Saturation Visil	ors (minimum of racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ima	two requ
DROLO Petland H mary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is requ	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Lea fauna (B1 atic Plant a Sulfide C Rhizosph of Reduc on Reduc k Surface	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille	4)	S (C3)	econdary Indicat Surface Soil Ci Drainage Patte Dry-Season Wi Crayfish Burrov Saturation Visil	ors (minimum of racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ima assed Plants (D1) ostion (D2)	two req
DROLO Patland H Mary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	one is requ	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc	ained Lea fauna (B1 atic Plant Sulfide C Rhizosph of Reduc on Reduc k Surface Well Dat	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	S (C3)	econdary Indicat Surface Soil Cr Drainage Patte Dry-Season Wood Crayfish Burrow Saturation Visil Stunted or Stre	ors (minimum of racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ima assed Plants (D1) ostion (D2)	two requ
Depth (in narks: DROLO Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is requ	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc	ained Lea fauna (B1 atic Plant Sulfide C Rhizosph of Reduc on Reduc k Surface Well Dat	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	S (C3)	econdary Indicat Surface Soil Cr Drainage Patte Dry-Season Wood Crayfish Burrow Saturation Visil Stunted or Stre	ors (minimum of racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ima assed Plants (D1) ostion (D2)	two requ
DROLO Petland H Imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsele Peld Obse	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations:	one is required in the second is required in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Planta Sulfide C Rhizosph of Reduct on Reduct k Surface Well Data plain in R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	S (C3)	econdary Indicat Surface Soil Cr Drainage Patte Dry-Season Wood Crayfish Burrow Saturation Visil Stunted or Stre	ors (minimum of racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ima assed Plants (D1) ostion (D2)	two requ
DROLO DROLO Detland H mary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel Deld Obse Agarrace Water Table	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Ye e Present?	Imagery (Bes X	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant a Sulfide C Rhizosph of Reduc on Reduc k Surface Well Data cplain in R	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) Lemarks)	4)	S (C3)	econdary Indicat Surface Soil Cr Drainage Patte Dry-Season Wood Crayfish Burrow Saturation Visil Stunted or Stre	ors (minimum of racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ima assed Plants (D1) ostion (D2)	two requ
DROLO Petland H Imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel Peld Obse Irface Water Table Inturation	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations:	Imagery (Bes X	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Planta Sulfide C Rhizosph of Reduct on Reduct k Surface Well Data plain in R	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9)	4) ed Soils (0	s (C3)	econdary Indicat Surface Soil Cr Drainage Patte Dry-Season Wood Crayfish Burrow Saturation Visil Stunted or Stre	ors (minimum of racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ima essed Plants (D1) ostion (D2) est (D5)	two req
DROLO Patland H Mary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel Pid Obse rface Water Tabl turation cludes c	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Present? Ye Present?	Imagery (Bee Surface (Ses Xes X	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Thin Muc Gauge or B8) Other (Ex No Depth No Depth No Depth No Depth	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Data plain in R (inches): (inches):	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks) 1-2in Oin	4) ed Soils (0	s (C3)	econdary Indicate Surface Soil Control Drainage Patte Dry-Season Wordship Burron Saturation Visite Stunted or Street Geomorphic Potential Total	ors (minimum of racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ima essed Plants (D1) ostion (D2) est (D5)	two req
DROLO Patland H Mary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel Pid Obset Arace Water Table turation cludes c	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Present? Present? Ye apillary fringe)	Imagery (Bee Surface (Ses Xes X	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Thin Muc Gauge or B8) Other (Ex No Depth No Depth No Depth No Depth	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Data plain in R (inches): (inches):	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks) 1-2in Oin	4) ed Soils (0	s (C3)	econdary Indicate Surface Soil Control Drainage Patte Dry-Season Wordship Burron Saturation Visite Stunted or Street Geomorphic Potential Total	ors (minimum of racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ima essed Plants (D1) ostion (D2) est (D5)	two requ

Project/Site: I-69 Section 6 Wetland S6W059A		City/County	y: Morgan		Sampling Date: <u>8/25/2017</u>
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point CL19A-1D1
Investigator(s): R. Yeager, B. Reust		Section, To	wnship, Ra	nge: Sec 13-T12N-R1E	<u> </u>
Landform (hillslope, terrace, etc.): floodplain	_		Local reli	ef (concave, convex, no	ne): concave
Slope (%): 2-6 Lat: 39.479457	L	ong: -86.3	- 366896		Datum: GCS NAD83
Soil Map Unit Name Shoals silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for thi	is time of year	? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology sig		_			present? Yes X No:
Are Vegetation , Soil or Hydrology na				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show					
Hydrophytic Vegetation Present? Yes	No X			<u> </u>	
	No X	ls t	he Sample	d Area	
Wetland Hydrology Present? Yes N	No X	wit	hin a Wetla	nd? Yes	NoX
Remarks				-	-
VEGETATION - Use scientific names of plants					
T Or (Plat Circu 20) and inc		Dominant	_	Dominance Test wor	ksheet:
Tree Stratum (Plot Size: 30' radius)	% Cover	Species?	Status	Number of Dominant S	
1				That Are OBL, FACW	, or FAC: (A)
2. 3.				Total Number of Domi Species Across All Str	
4.				Percent of Dominant S	
5.				That are OBL, FACW,	
		= Total Cov	/er		
Sapling/Shrub Stratum (Plot Size: 15' radius				Prevalence Index wo	
1				Total % Cover of	
2				OBL species FACW species	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
3			-	FAC species	0 x3 = 0
4 5					102 x 4 = 408
s		= Total Cov	/er	UPL species	0 x 5 = 0
Herb Stratum (Plot Size: 5' radius)				Column Totals:1	104 (A) 412 (B)
1. Schedonorus arundinaceus	80	Yes	FACU	Prevalence Ind	lex = B/A = 3.96
2. Solidago altissima	10	No	FACU	Lively and the Manager	ian Indiantoro
3. Sorghum halepense	5	No	FACU	Hydrophytic Vegetat	
4. Lolium perenne	5	No	FACU	2-Dominance Test	lydrophytic Vegetation:
5. Cirsium arvense	2	No	FACU	3-Prevalence Inde	
6.					daptations (Provide supporting
7					r on a separate sheet)
8 9				l -	phytic Vegetation ¹ (Explain)
10.			-	¹ Indicators of hydric so be present, unless dis	oil and wetland hydrology must sturbed or problematic
		= Total Cov	/er		
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1. Vitis riparia	2	No		Hydrophytic Vegetation	
2					/es No _X_
	2	= Total Cov	/er		
Remarks: (Include photo numbers here or on a separate	sheet.)				

SOIL Sampling Point CL19A-1D1

Histosol (A1) Histic Epipedon (A2) Sandy Redox (S5) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Thick Dark Surface (A12) Sandy Mucky Mineral (F3) For Muck (A10) Depleted Below Dark Surface (A11) For Muck Peat or Peat (S3) Restrictive Layer (If observed): Type: Depth (inches): Soil is very hard below 4 nches and could not be penetrated by shovel. Hydric Remarks: Soil is very hard below 4 nches and could not be penetrated by shovel. Hydric National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National Could National	
Type: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indiactors: Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Batrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Experiment (F7) Sandy Redox Dark Surface (F6) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) Surface Water (F7) S	
Type: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indiactors: Histosol (A1) Histos Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Mucky Mineral (F2) Loamy Gleyed Matrix (F2) Loamy Mucky Mineral (F2) Loamy Gleyed Matrix (F3) Depleted Bellow Dark Surface (A11) Depleted Bellow Dark Surface (A12) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Some Muck Peat or Peat (S3) Setrictive Layer (If observed): Type: Depth (inches): marris: Oil is very hard below 4 nches and could not be penetrated by shovel. YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water Stafic (C7) Gauge or Well Data (D9) Surface Water Present? Yes No X Depth (inches): Water Mark (B4) A Depth (inches): Surface Water Present? Yes No X Depth (inches): Water Mark (B4) A Depth (inches): Surface Water Present? Yes No X Depth (inches): Water Mark (B4) A Depth (inches):	<u></u>
Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Sandy Redox (S5) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Semantian Muck Peat or Peat (S3) Stripped Matrix (F3) Depleted Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Depleted Matrix (F2) Depleted Dark Surface (F6) Thick Dark Surface (A12) Semantian Muck Peat or Peat (S3) Strictive Layer (If observed): Type: Depth (inches): Permarks: Soil is very hard below 4 nches and could not be penetrated by shovel. PROLOGY Vetland Hydrology Indicators: Trimary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches): Surface Water Present? Yes No X Depth (inches): Surface Water Present? Yes No X Depth (inches): Surface Water Present? Yes No X Depth (inches):	
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Histic Epipedon (A2) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Some Mucky Mineral (S1) Some Mucky Mineral (S1) Some Mucky Mineral (S1) Some Mucky Mineral (S1) Some Mucky Mineral (F2) Depleted Matrix (F3) Depleted Dark Surface (F6) Redox Dark Surface (F7) Redox Depressions (F8) Perfect (Inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): D	ndiactors for Problematic Hydric Soils ³
Histic Epipedon (A2) Black Histic (A3) Sandy Redox (S5) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Sem Muck Peat or Peat (S3) Petrictive Layer (If observed): Type: Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Coast Prairie Redox (A16)
Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 5 cm Muck Peat or Peat (S3) Sestrictive Layer (If observed): Type: Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Dark Surface (S7)
Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 5 cm Muck Peat or Peat (S3) Pestrictive Layer (If observed): Type: Depth (inches): Pemarks: Depleted Dark Surface (F6) Redox Depressions (F8) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Valuer Draves (A11) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Depressions (F6) Pepleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F6) Pepleted Dark Surface (F1) Redox Depressions (F8) Pepleted Dark Surface (F1) Redox Depressions (F8) Pepleted Dark Surface (F1) Redox Depressions (F8) Pepleted Dark Surfac	Iron-Manganese Masses (F12)
2 cm Muck (A10) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Som Muck Peat or Peat (S3) estrictive Layer (If observed): Type: Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Very Shallow Dark Surface (TF12)
	Other Soil (Explain in Remarks)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Som Muck Peat or Peat (S3) estrictive Layer (If observed): Type: Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inc	•
Sandy Mucky Mineral (S1)	
estrictive Layer (If observed): Type: Depth (inches): emarks: oil is very hard below 4 nches and could not be penetrated by shovel. Primary Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Vater Present? Ves No X Depth (inches): Vater Table (Present? Ves No X Depth (inches): Vater Table (Present? Ves No X Depth (inches): Vater Table (Present? Ves No X Depth (inches): Vater Table (Present? Ves No X Depth (inches):	Indicators of hydrophytic vegetation and
estrictive Layer (If observed): Type:	wetland hydrology must be present, unless
Type:	disturbed or problematic.
Depth (inches):	
PROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Valuation Deposits (B3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C1) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C1) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C4) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C4) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C5) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C4) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C5) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C4) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C4) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C4) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C1) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C1) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C1) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C1) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C1) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C1) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C1) Sparsely Vegetated Concave Surface (B8) Valuation Visible Odor (C1) Sparsely Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated Vegetated	c Soil present? Yes No
Vetland Hydrology Indicators: Irimary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Vater Mater Present? Vestal No X Depth (inches): Vater Marks (B1) Drift (Inunchas) Water Marks (B1) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Character Mater Present? Vestal No X Depth (inches): Vater Table Present? Vestal No X Depth (inches):	No
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water Table Present? Water Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Field Observations: Surface Water Present? Water Table Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches):	
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High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Fresh (B8) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches): Vater Table Present? Yes No X Depth (inches):	Surface Soil Cracks (B6)
Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches): Vater Table Present? Yes No X Depth (inches):	Drainage Patterns (B10)
Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Surface Water Present? Vater Table Present? Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Other (Explain in Remarks)	Dry-Season Water Table (C2)
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks)	Crayfish Burrows (C8)
Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Guiface Water Present? Vater Table Present? Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present? Vater Table Present?	Saturation Visibile on Aerial Imagery (C9
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Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches): Vater Table Present? Yes No X Depth (inches):	Geomorphic Postion (D2)
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches):	_ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No X Depth (inches): Vater Table Present? Yes No X Depth (inches):	
Surface Water Present? Yes No X Depth (inches): Vater Table Present? Yes No X Depth (inches): No X Depth (inches):	
Vater Table Present? Yes No X Depth (inches):	
Networking Present?	
Notionaline December 1 Van No. V. Danille (Cartern)	
Saturation Present? Yes No _X Depth (inches): Wetland Hydincludes capillary fringe)	drology Present? Yes No
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available	ole:
emarks:	
ample point is 5 to 6 feet above the adjacent wetland base elevation.	

Project/Site: I-69 Section 6 Wetland S6W059A		City/County	/: Morgan		Sampling Date: 8/25/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point CL19A-1W1
Investigator(s): R. Yeager, B. Reust		Section, To	wnship, Ra	nge: Sec 13-T12N-R1E	
Landform (hillslope, terrace, etc.): floodplain			Local reli	ef (concave, convex, no	ne): concave
Slope (%): 0-1 Lat: 39.479339	L	ong: -86.3	67239		Datum: GCS NAD83
Soil Map Unit Name Shoals silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this	time of year	? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology sign		_			present? Yes X No:
Are Vegetation , Soil or Hydrology na				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show					,
Hydrophytic Vegetation Present? Yes X N	0				
Hydric Soils Present? Yes X N	0		he Sample		
Wetland Hydrology Present? Yes X N	0	with	hin a Wetla	ind? Yes	X No
Remarks					
VEGETATION II					
VEGETATION - Use scientific names of plants					
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test wor	
1		•		Number of Dominant S That Are OBL, FACW	
2.				Total Number of Domi	 -
3				Species Across All Str	
4				Percent of Dominant S	
5				That are OBL, FACW,	or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Cov	/er	Prevalence Index wo	orksheet:
1. Salix interior	1	No	FACW	Total % Cover o	f: Multiply by:
2				-	00 x 1 = 100
3.				FACW species	1 x 2 = 2
4				FAC species	0 x 3 = 0
5				FACU species UPL species	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
(Dist Cine Shorther	1	= Total Cov	er er	· <u> </u>	01 (A) 102 (B)
Herb Stratum (Plot Size: 5' radius) 1. Leersia oryzoides	98	Yes	OBL	Prevalence Ind	lex = B/A = 1.01
Sium suave		No	OBL	Frevalence ind	ex = b/A = 1.01
3.				Hydrophytic Vegetat	ion Indicators:
4.					ydrophytic Vegetation:
5.				X 2-Dominance Test X 3-Prevalence Inde	
6		·		_	daptations (Provide supporting
7				data in Remarks of	r on a separate sheet)
8				Problematic Hydro	phytic Vegetation ¹ (Explain)
9				¹ Indicators of hydric so be present, unless dis	oil and wetland hydrology must
10	100	= Total Cov	/er	be present, unless uis	idibod of problematic
Vine Stratum (Plot Size: 30' radius)					
1				Hydrophytic Vegetation	
2					'es X No
	0	= Total Cov	er er		
Remarks: (Include photo numbers here or on a separate	sheet.)				

SOIL Sampling Point CL19A-1W1

Depth (Inches)	Color (moist)	%	Red Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-20	10YR4/1	95	10YR4/4	5	C		silt loam	
	-							
Type: C=C	Concentration, D= De	pletion, RI	M=Reduced Matrix,	CS=Cove	red or Coa	ated Sand	Grains. ²	Location: PL=Pore Lining, M=Matrix
lydric Soi	I Indiactors:						Ind	actors for Problematic Hydric Soils ³
Histoso	(A1)		Sandy	Gleyed N	Matrix (S4))	(Coast Prairie Redox (A16)
	pipedon (A2)			Redox (S				Dark Surface (S7)
_	istic (A3)			ed Matrix		1		ron-Manganese Masses (F12)
_	en Sulfide (A4)			-	/lineral (F1 Matrix (F2			/ery Shallow Dark Surface (TF12) Other Soil (Explain in Remarks)
_	d Layers (A5) uck (A10)		X Deple	-)	_ `	oner son (Explain in Remarks)
	d Below Dark Surfac	e (A11)			rface (F6)			
_	ark Surface (A12)	` ,			Surface (F	7)		ndicators of hydrophytic vegetation and
	Mucky Mineral (S1)		Redox	Depress	ions (F8)		we	tland hydrology must be present, unless disturbed or problematic.
	uck Peat or Peat (S3)							disturbed of problematic.
	Layer (If observed):							
Type: Depth (ir	nches):						Hydric	Soil present? Yes X No
	nches):						Hydric	Soil present? Yes X No
Depth (ir emarks:							Hydric	Soil present? Yes X No
Depth (ir emarks:	GY						Hydric	Soil present? Yes X No
Depth (ir emarks: YDROLO Vetland H	GY ydrology Indicators		uirad: abaak all that	opply)				
Depth (ir emarks: YDROLO Vetland H	GY ydrology Indicators licators (minimum of				(0.0)		Se	condary Indicators (minimum of two required
Depth (ir emarks: YDROLO Wetland H Primary Inc. Surface	GY ydrology Indicators licators (minimum of Water (A1)		Water Sta	ained Lea	` ,		<u>Se</u>	condary Indicators (minimum of two required Surface Soil Cracks (B6)
Depth (ir emarks: YDROLO Wetland H Primary Inc Surface High W	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F	ained Lea auna (B1	3)			condary Indicators (minimum of two required Surface Soil Cracks (B6) Drainage Patterns (B10)
Depth (ir emarks: YDROLO Wetland H Primary Inc Surface High W: Saturati	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3)		Water Sta Aquatic F True Aqu	ained Lea auna (B1 atic Plant	3) s (B14)		<u>Se</u>	condary Indicators (minimum of two required Surface Soil Cracks (B6)
Depth (ir emarks: YDROLO Vetland H Primary Inc Surface High W: Saturati Water N	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F True Aqu Hydroger	ained Lea auna (B1 atic Plants Sulfide C	3) s (B14) Odor (C1)	ving Roots	<u>Se</u>	condary Indicators (minimum of two required Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (ir emarks: YDROLO Vetland H Primary Inc Surface High W Saturati Water N Sedime Drift De	gy ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3)		Water State	ained Lea auna (B1 atic Plants Sulfide C Rhizosph of Reduc	3) s (B14) Odor (C1) eres on Li ced Iron (C	(4)	Se — — — — — (C3)	condary Indicators (minimum of two required Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Depth (ir emarks: YDROLO Vetland H Primary Inc Surface High W Saturati Water M Sedime Drift De Algal M	gy ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In	ained Lear auna (B1: atic Plants Sulfide C Rhizosph of Reducton Reducton	3) s (B14) Odor (C1) eres on Li ed Iron (C tion in Tille	-	Se ————————————————————————————————————	condary Indicators (minimum of two required Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
Depth (ir emarks: YDROLO Vetland H Primary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is requ	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc	ained Lear auna (B1 atic Plants a Sulfide C Rhizosph of Reduc on Reduc k Surface	3) s (B14) Odor (C1) eres on Li ed Iron (C tion in Tille (C7)	(4)	Se ————————————————————————————————————	condary Indicators (minimum of two required Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Depth (ir emarks: YDROLO Wetland H Primary Inc Surface High W: Saturati Water M Sedime Drift De Algal M Iron De Inundat	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I	one is requ	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc	ained Lear auna (B1: atic Plants Sulfide C Rhizosph of Reduct on Reduct k Surface Well Data	3) s (B14) Odor (C1) eres on Li ed Iron (C tion in Tille (C7) a (D9)	(4)	Se ————————————————————————————————————	condary Indicators (minimum of two required Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
Depth (ir emarks: YDROLO Vetland H Primary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I	one is requ	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc	ained Lear auna (B1: atic Plants Sulfide C Rhizosph of Reduct on Reduct k Surface Well Data	3) s (B14) Odor (C1) eres on Li ed Iron (C tion in Tille (C7) a (D9)	(4)	Se ————————————————————————————————————	condary Indicators (minimum of two required Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
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Project/Site: I-69 Section 6 Wetland S6W059B		City/County	r: Morgan	Sampling Date: 8/	/25/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point C	L19B-1W1
Investigator(s): R. Yeager, B. Reust		Section, To	wnship, Ra	nge:	
Landform (hillslope, terrace, etc.): floodplain			Local reli	ef (concave, convex, none): concave	
Slope (%): 1-2 Lat: 39.479151	L	ong: -86.3	671	Datum: GCS NAD8	3
Soil Map Unit Name Shoals silt loam				NWI classification: N/A	
Are climatic/hydrologic conditions on the site typical for this	time of year	·? Yes	X No	(If no, explain Remarks.)	
Are Vegetation , Soil or Hydrology sign					No:
Are Vegetation , Soil or Hydrology nat				ded, explain answers in Remarks.)	- —
SUMMARY OF FINDINGS - Attach site map show					
Hydrophytic Vegetation Present? Yes X No	0				
Hydric Soils Present? Yes X No	o <u> </u>		ne Sample		
Wetland Hydrology Present? Yes X No	<u> </u>	With	nin a Wetla	nd? Yes X No	
Remarks					
VEGETATION - Use scientific names of plants					
VEGETATION - Ose scientific frames of plants	Absoluto	Dominant	Indicator	Damin anna Tast was sleek ast.	
Tree Stratum (Plot Size: 30' radius)		Species?	Status	Dominance Test worksheet:	
1. Acer negundo	10	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 4	(A)
2. Fraxinus pennsylvanica	10	Yes	FACW	Total Number of Dominant	
3				Species Across All Strata: 4	(B)
4				Percent of Dominant Species That are OBL, FACW, or FAC: 100	(
5	20	= Total Cov		That are OBL, FACW, or FAC: 100	(A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)		= 10tai 00v	Ci	Prevalence Index worksheet:	
1. Acer negundo	5	No	FAC	Total % Cover of: Multiply I	by:
2. Fraxinus pennsylvanica	5	No	FACW	OBL species 2 x 1 =	2
3. Salix interior	90	Yes	FACW	· — — · — — —	66 45
4				FAC species $\begin{array}{cccccccccccccccccccccccccccccccccccc$	45 0
5				UPL species 0 x 5 =	0
Herb Stratum (Plot Size: 5' radius)	100	= Total Cov	er		13 (B)
1. Lysimachia nummularia	20	Yes	FACW	Prevalence Index = B/A = 2.0)9
2. Urtica dioica	2	No	FACW		
3. Solidago gigantea	2	No	FACW	Hydrophytic Vegetation Indicators:	
4. Rudbeckia laciniata	2	No	FACW	1-Rapid Test for Hydrophytic Vegetation	1:
5. Persicaria amphibia	2	No	OBL	X 2-Dominance Test is >50% X 3-Prevalence Index is <=3	
6. Cinna arundinacea	2	No	FACW	4-Morphological Adaptations (Provide s	supporting
7				data in Remarks or on a separate sheet	•
8. g				Problematic Hydrophytic Vegetation ¹ (E	
9. 10.	<u> </u>			Indicators of hydric soil and wetland hydro be present, unless disturbed or problematic	
	30	= Total Cov	er		
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1				Vegetation	
2				Present? Yes X No _	
	0	= Total Cov	rer		
Remarks: (Include photo numbers here or on a separate s	sheet.)				
I					

SOIL Sampling Point CL19B-1W1

Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc 2	Textu	re	Remarks	
0-5	10YR3/2	100			71 -		silt loa			
5-10	10YR4/2	95	10YR4/6	5		M	silt loa			
10-20	10YR5/6	100					loamy s			
	Concentration, D= De	pletion, F	RM=Reduced Mat	ix, CS=Cove	ered or Coa	ited Sand			: PL=Pore Lining, M=Matri	
Histoso			Sa	ndy Gleyed	Matriy (S4)				irie Redox (A16)	
	pipedon (A2)			ndy Redox (_	Dark Surfa		
	istic (A3)			ripped Matrix			_		anese Masses (F12)	
	en Sulfide (A4)			amy Mucky I)	_		ow Dark Surface (TF12)	
	d Layers (A5)			amy Gleyed	,	•	_		(Explain in Remarks)	
2 cm M	uck (A10)		X De	pleted Matri	x (F3)		_	_		
Deplete	d Below Dark Surfac	e (A11)	Re	dox Dark Su	ırface (F6)					
•	ark Surface (A12)			pleted Dark	,	7)			of hydrophytic vegetation a	
	Mucky Mineral (S1)		Re	dox Depress	sions (F8)			•	rology must be present, un turbed or problematic.	iiess
	uck Peat or Peat (S3	<u> </u>								
	Layer (If observed)	:								
-	nches):						Hydr	ic Soil pres	ent? Yes X	اo _
Type: _ Depth (in marks:	nches):						Hydr	ic Soil pres	ent? Yes X N	No _
Depth (in							Hydr	ic Soil prese	ent? Yes <u>X</u> N	√o <u> </u>
Depth (in marks:	GY ydrology Indicators									
Depth (in marks:	GY		quired; check all t	nat apply)				Secondary I	ndicators (minimum of two	
DROLO detland H imary Inc. Surface	GY ydrology Indicators dicators (minimum of Water (A1)		Water	Stained Lea	` '			Secondary II	ndicators (minimum of two	
DROLO etland H imary Inc. Surface High W	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water Aquat	Stained Lea ic Fauna (B1	3)			Secondary II Surface S Drainage	ndicators (minimum of two Soil Cracks (B6) Patterns (B10)	
DROLO Vetland H rimary Inc Surface High W Saturati	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3)		Water Aquat True /	Stained Lea ic Fauna (B1 Aquatic Plant	3) ts (B14)			Secondary Ii Surface S Drainage Dry-Seas	ndicators (minimum of two Soil Cracks (B6) Patterns (B10) on Water Table (C2)	
DROLO Petland Hrimary Inc. Surface High W Saturati Water M	gy ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)		Water Aquat True / Hydro	Stained Lea ic Fauna (B1 Aquatic Plant gen Sulfide (3) ts (B14) Odor (C1)	uing Root		Secondary II Surface S Drainage Dry-Seas X Crayfish I	ndicators (minimum of two Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)	requ
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DROLO Petland H Imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface Water Table aturation	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Ye e Present?	Imagery (e Surface	Water	Stained Lea ic Fauna (B1 Aquatic Plant gen Sulfide (ced Rhizosph nce of Reduc th Iron Reduc Muck Surface e or Well Dat (Explain in F	3) Its (B14) Odor (C1) Ineres on Linced Iron (C Ition in Tille Ite (C7) Ita (D9) Remarks)	4) ed Soils (ts (C3)	Secondary II Surface S Drainage Dry-Seas X Crayfish I Saturation Stunted o	ndicators (minimum of two Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visibile on Aerial Imagery or Stressed Plants (D1) hic Postion (D2) tral Test (D5)	requ
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DROLO etland H imary Inc Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface W ater Table aturation includes c	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Present? Present? you	Imagery (e Surfaceeses	Water	Stained Lea ic Fauna (B1 Aquatic Plant gen Sulfide (ced Rhizosph nce of Reduc it Iron Reduc fluck Surface or Well Dat (Explain in F oth (inches): oth (inches):	3) Its (B14) Odor (C1) Ineres on Liv Ced Iron (C Ction in Tille (C7) Ita (D9) Remarks)	4) ded Soils (ts (C3) C6)	Secondary II Surface S Drainage Dry-Seas X Crayfish I Saturation Stunted o Geomorp X FAC-Neu	ndicators (minimum of two Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visibile on Aerial Imagery or Stressed Plants (D1) hic Postion (D2) tral Test (D5)	requ

Project/Site: I-69 Section 6 Wetland S6W063A	City/0	County: Morgan		Sampling Date: <u>04/05/2017</u>
Applicant/Owner: INDOT/Lochumueller			State: Indiana	Sampling Point HB07A-1D1
Investigator(s): R. Yeager, B. Reust	Secti	on, Township, Rar	nge: SEC 8, T12N, R2E	
Landform (hillslope, terrace, etc.): flat	<u>.</u>	Local relie	ef (concave, convex, nor	ne): flat
Slope (%): 1% Lat: 39.496349	Long:	-86.341805		Datum: GCS NAD83
Soil Map Unit Name Shoals silt loam			NWI classif	cation: upland
Are climatic/hydrologic conditions on the site typical for this t	ime of year?	Yes X No		·
Are Vegetation , Soil or Hydrology signi				resent? Yes X No:
Are Vegetation , Soil or Hydrology natu			ded, explain answers in I	
SUMMARY OF FINDINGS - Attach site map showing				
Hydrophytic Vegetation Present? Yes X No				
Hydric Soils Present? Yes No	X	Is the Sampled		
Wetland Hydrology Present? Yes No	X	within a Wetlar	nd? Yes	NoX
Remarks				
VEGETATION - Use scientific names of plants				
Tree Stratum (Plot Size: 30' radius)		ninant Indicator	Dominance Test work	ksheet:
1	% Cover Spe	cies? Status	Number of Dominant S That Are OBL, FACW,	
2			Total Number of Domir	nant
3			Species Across All Stra	
4 5			Percent of Dominant S That are OBL, FACW,	
-	0 = Tot	tal Cover		
Sapling/Shrub Stratum (Plot Size: 15' radius)			Prevalence Index wo	rksheet:
1			Total % Cover of	
2			OBL species	$\frac{0}{10}$ x 1 = $\frac{0}{20}$
3			FACW species	$ \frac{10}{0} \text{x 2} = \frac{20}{0} $
4			FACU species	0 x 4 = 0
5	0 = Tot	tal Cover	UPL species	0 x 5 = 0
Herb Stratum (Plot Size: 5' radius)		.a. 55751	Column Totals:	10 (A) <u>20 (B)</u>
1. Packera glabella	10 Y	es FACW	Prevalence Inde	ex = B/A = 2.00
2			Hydrophytic Vegetation	on Indicators:
3			X 1-Rapid Test for Hy	
4			X 2-Dominance Test	· · ·
5.			X 3-Prevalence Index	
6				laptations (Provide supporting
7 8.				on a separate sheet) bhytic Vegetation ¹ (Explain)
9.			_	
10.			be present, unless dist	il and wetland hydrology must urbed or problematic
(D) + O' - OO! - I'	10 = Tot	tal Cover		
Vine Stratum (Plot Size: 30' radius)			Hydrophytic	
1			Vegetation Present?	es X No
2	0 = Tot	tal Cover	r rescrit:	<u> </u>
Remarks: (Include photo numbers here or on a separate sl	neet.)	<u></u>		
(,			

SOIL Sampling Point HB07A-1D1

Depth Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure		Remarks	
0-6	10YR4/2	100			71 -		silt lo				
6-20	10YR4/3	100					silt lo				
0.20	1011(4/3						Silt it				
		·									
	Concentration, D= De	epletion, RM	=Reduced Matrix,	CS=Cove	red or Coa	ited Sand	Grains.			Pore Lining, M	
Histoso			Sand	v Gleved N	Matrix (S4)					edox (A16)	10 00113
	pipedon (A2)			y Redox (Surface (S		
	listic (A3)			ed Matrix						e Masses (F12	2)
	en Sulfide (A4)				/lineral (F1)				ark Surface (TF	
	d Layers (A5)				Matrix (F2)			_		ain in Remarks	
	uck (A10)			ted Matrix					` .		•
Deplete	ed Below Dark Surfac	e (A11)		x Dark Su							
Thick D	ark Surface (A12)		Deple	ted Dark	Surface (F	7)				Irophytic veget	
Sandy M	Mucky Mineral (S1)		Redo	x Depress	ions (F8)			wetland		must be presed or problemati	
5 cm M	uck Peat or Peat (S3	5)							disturbed	a or problemati	C.
trictive	Layer (If observed)	:									
Туре:		:					Шли	dria Sail	nrocent?	Voc	No
strictive Type: Depth (ir		:	<u> </u>				Нус	dric Soil	present?	Yes	. No <u>.</u>
Type:	nches):	:					Нус	dric Soil	present?	Yes	No _
Type:	nches):						Нус	dric Soil	present?	Yes	. No <u>-</u>
Type:	GY	::	ired; check all that	apply)			Нус			Yes	
Type:	GY ydrology Indicators	::		apply) ained Lea	ves (B9)		Нус	Second	lary Indicat	ors (minimum acks (B6)	
Type:	GY ydrology Indicators dicators (minimum of	::	Water St				Нус	Second Surfa Draii	lary Indicat ace Soil Cr nage Patte	ors (minimum racks (B6) rns (B10)	of two req
DROLO Petland H mary Inc Surface High W: Saturati	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3)	::	Water St Aquatic I True Aqu	ained Lea Fauna (B1 Jatic Plant	3) s (B14)		Нус	Second Surfa Drain Dry-:	lary Indicat ace Soil Cr nage Patte Season Wa	ors (minimum racks (B6) rns (B10) ater Table (C2)	of two req
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)	::	Water St Aquatic I True Aqu Hydroge	ained Lea Fauna (B1 uatic Plant n Sulfide (3) s (B14) Odor (C1)			Second Surfa Drain Dry-:	lary Indicat ace Soil Cr nage Patte Season Wa	ors (minimum racks (B6) rns (B10) ater Table (C2) ws (C8)	of two req
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2)	::	Water St Aquatic I True Aqu Hydroge Oxidized	ained Lea Fauna (B1 Jatic Plant In Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Li	-		Second Surfa Drain Dry-S Cray Satu	lary Indicat ace Soil Cr nage Patte Season Wa fish Burrov ration Visil	ors (minimum racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ir	of two req
DROLO Petland H mary Inc Surface High Water M Sedime Drift De	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3)	::	Water St Aquatic I True Aqu Hydroge Oxidized Presence	ained Lea Fauna (B1 Jatic Plant In Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Liv ced Iron (C	4)	s (C3)	Second Surfa Drain Dry-3 Cray Satu Stun	lary Indicate ace Soil Cranage Patte Season Warfish Burroversten Visil ted or Streen	ors (minimum racks (B6) rns (B10) ater Table (C2) ws (C8) oile on Aerial Ir ssed Plants (D	of two req
DROLO Petland H Imary Inc Surface High Water M Sedime Drift De Algal M	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4)	::	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I	ained Lea Fauna (B1 Latic Plant Con Sulfide (Control Rhizospher of Reduction Reduction	3) s (B14) Odor (C1) eres on Lived Iron (C	4)	s (C3)	Second Surfa Drain Dry-3 Cray Satu Stun Geo	lary Indicate ace Soil Cranage Patte Season Warfish Burroveration Visil ted or Stremorphic Po	ors (minimum racks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Ir ssed Plants (Dostion (D2)	of two req
DROLO Petland H mary Inc Saturati Water M Sedime Drift De Algal M Iron De	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	s: one is requ	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc	ained Lea Fauna (B1 uatic Plante Sulfide C Rhizosph of Reduct on Reduct k Surface	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille	4)	s (C3)	Second Surfa Drain Dry-3 Cray Satu Stun Geo	lary Indicate ace Soil Cranage Patte Season Warfish Burroversten Visil ted or Streen	ors (minimum racks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Ir ssed Plants (Dostion (D2)	of two req
Depth (ir narks: DROLO Petland H mary Inc Surface High Water M Sedime Drift De Algal M. Iron De Inundati	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4)	s: one is requ	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc 7) Gauge o	ained Lea Fauna (B1 Latic Plant Con Sulfide (Control Rhizospher of Reduction Reduction	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	s (C3)	Second Surfa Drain Dry-3 Cray Satu Stun Geo	lary Indicate ace Soil Cranage Patte Season Warfish Burroveration Visil ted or Stremorphic Po	ors (minimum racks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Ir ssed Plants (Dostion (D2)	of two req
DROLO Patland H Mary Inc Surface High Water M Sedime Drift De Algal M Iron De Inundati Sparsel	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	s: one is requ	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc 7) Gauge o	ained Lea Fauna (B1 Jatic Plants In Sulfide (Rhizosph In Geductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor Reductor	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	s (C3)	Second Surfa Drain Dry-3 Cray Satu Stun Geo	lary Indicate ace Soil Cranage Patte Season Warfish Burroveration Visil ted or Stremorphic Po	ors (minimum racks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Ir ssed Plants (Dostion (D2)	of two req
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DROLO Petland H Imary Inc Surface High Water M Sedime Drift De Algal M Iron De Inundat Sparsel Peld Obse	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present?	one is required in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc Gauge o Other (E	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc ron Reduc ck Surface r Well Dat xplain in R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	4)	s (C3)	Second Surfa Drain Dry-3 Cray Satu Stun Geo	lary Indicate ace Soil Cranage Patte Season Warfish Burroveration Visil ted or Stremorphic Po	ors (minimum racks (B6) rns (B10) ater Table (C2) ws (C8) bile on Aerial Ir ssed Plants (Dostion (D2)	of two req
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Project/Site: I-69 Section 6 Wetland S6W063A	City/County: Morgan	Sampling Date: 04/05/2017
Applicant/Owner: INDOT/Lochumueller		State: Indiana Sampling Point HB07A-1W1
Investigator(s): R. Yeager, B. Reust	Section, Township, Ra	ange: SEC 12, T12N, R2E
Landform (hillslope, terrace, etc.): roadside	Local rel	lief (concave, convex, none): flat
Slope (%): 1% Lat: 39.49626	Long: -86.341724	Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam, Shoals silt loam		NWI classification: PEM1
Are climatic/hydrologic conditions on the site typical for this ti	me of year? Yes X No	(If no, explain Remarks.)
Are Vegetation X , Soil or Hydrology signifi		Normal Circumstances" present? Yes X No:
Are Vegetation, Soil or Hydrology natur		eded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin		
Hydrophytic Vegetation Present? Yes X No Hydric Soils Present? Yes X No	Is the Sample	ed Area
Wetland Hydrology Present? Yes X No	within a Wetla	and? Yes X No
Remarks	- '	
VEGETATION - Use scientific names of plants		
Tree Stratum (Plot Size: 30' radius) 1.	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2. 3.		Total Number of Dominant Species Across All Strata: 1 (B)
4. 5.		Percent of Dominant Species That are OBL, FACW, or FAC: 100 (A/B)
	0 = Total Cover	(
Sapling/Shrub Stratum (Plot Size: 15' radius)		Prevalence Index worksheet:
1	·	Total % Cover of: Multiply by:
2		OBL species 0 x 1 = 0
3		FACW species 100 x 2 = 200 FAC species 0 x 3 = 0
4		FACU species $0 \times 4 = 0$
5	0 = Total Cover	UPL species 0 x 5 = 0
 Herb Stratum (Plot Size: 5' radius)		Column Totals:100 (A)200(B)
1. Phalaris arundinacea	100 Yes FACW	Prevalence Index = B/A = 2.00
2.		Liver why the Vocatation Indicators
3		Hydrophytic Vegetation Indicators: X 1-Rapid Test for Hydrophytic Vegetation:
4		X 2-Dominance Test is >50%
5.		X 3-Prevalence Index is <=3
6		4-Morphological Adaptations (Provide supporting
7 8		data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
9		-
10.		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
	100 = Total Cover	
Vine Stratum (Plot Size: 30' radius)		Hydrophytic
1		Vegetation Present? Yes X No
2	0 = Total Cover	11636Ht: 100 <u>X</u> 110
Remarks: (Include photo numbers here or on a separate sh This roadside wetland is regularly mowed.	eet.)	

SOIL Sampling Point HB07A-1W1

Inches)	Color (moist)	%	Color (n	noist)	%	Type ¹	Loc ²	Textu	re		Rema	arks	
0-6	10YR 4/2	100						silty clay	loam				
6-12	10YR4/2	98	5YR4/6		2	С	М	silty clay	loam				
12-20	10YR5/2	98	5YR4/6		2	С	М	silty clay	loam				
dric So Histoso Histic E Black F Hydrog Stratifie 2 cm M	Concentration, D= De la la la la la la la la la la la la la		- - - -	Sandy Sandy Strippe Loamy Loamy X Deplet	Gleyed Medox (Sed Matrix Mucky Mucky Med Matrix Gleyed Matrix	Matrix (S4) S5) (S6) Mineral (F1) Matrix (F2))		ndiactors _ Coast F _ Dark So _ Iron-Ma _ Very Sh	on: PL=F s for Prob Prairie Red urface (S7 anganese nallow Da Soil (Expla	dox (A16) ') Masses (rk Surface	Hydric : (F12) e (TF12	Soils ³
	Park Surface (A12)	(/(11)	-	_		Surface (F7	7)	3	Indicato	rs of hydr	ophytic ve	egetatio	n and
	Mucky Mineral (S1)		-			sions (F8)	,		wetland h	ydrology	must be p	oresent,	
-	uck Peat or Peat (S3	3)								disturbed	or proble	matic.	
strictive	Layer (If observed)	:											
	, ,							1					
								Llydr	ic Sail nr	ocont?	Voc	Y	No
Type: Depth (ii marks:								Hydr	ic Soil pr	esent?	Yes _	X	No _
Depth (i	nches):							Hydr	ic Soil pr	esent?	Yes _	<u>X</u>	No _
Depth (imarks:	nches): OGY lydrology Indicators		guirod: obool	k all that o	onnik)								
Depth (imarks:	oGY lydrology Indicators dicators (minimum of					(0.0)			Secondar	y Indicato	ors (minim		
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DROLO DROLO Surface High W	oGY lydrology Indicators dicators (minimum of a Water (A1) ater Table (A2)		_ }	Water Sta Aquatic Fa	ined Lea auna (B1	3)			Secondar Surfac Draina	y Indicato e Soil Cra ge Patteri	ors (minim ricks (B6) ns (B10)	num of t	
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DROLO etland H imary Inc Surface High W Saturat Water N Sedime Drift De	lydrology Indicators dicators (minimum of water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		_ \ _ _ _	Water Sta Aquatic Fa Frue Aqua Hydrogen Oxidized I Presence	ined Lea auna (B1 atic Plant Sulfide C Rhizosph of Reduc	3) s (B14) Odor (C1) eres on Liv ced Iron (C	4)	ts (C3)	Secondar Surfac Draina Dry-Se Crayfis Satura	y Indicato e Soil Cra ge Patten eason Wa sh Burrow tion Visib d or Stres	ers (minimates (B6)) ns (B10) ter Table s (C8) ille on Aer sed Plan	(C2) rial Imaç ts (D1)	wo requ
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Depth (in marks: DROLO etland H imary Inc Surface High W Saturat Water In Sedime Drift De Algal M Iron De Inundat Sparse	dicators (minimum of e Water (A1) (A2) (Marks (B1) (B2) (B3) (B4) (B5) (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (Marks (B5) (M	one is red	— \\	Water Sta Aquatic Fa Frue Aqua Hydrogen Dxidized I Presence Recent Iro Fhin Muck Gauge or Other (Ex	nined Lea auna (B1 atic Plant Sulfide C Rhizosph of Reduc on Reduc c Surface Well Dat	3) s (B14) Odor (C1) eres on Liv ced Iron (C- tion in Tille (C7) a (D9)	4)	ts (C3)	Secondar Surfac Draina Dry-Se Crayfis Satura Stunte X Geome	y Indicato e Soil Cra ge Patter eason Wa sh Burrow tion Visib d or Stres orphic Pos	ors (minimal cks (B6) ons (B10) ter Table on Aeres (S8) ille on Aeres (Sed Plantstion (D2)	(C2) rial Imaç ts (D1)	wo requ
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Depth (in marks: DROLO etland H mary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse eld Obse rface W ater Tab turation	Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches	Imagery (e Surface	B7) (88) (88) (80)	Water Sta Aquatic Fa Frue Aqua Hydrogen Dxidized I Presence Recent Iro Fhin Muck Gauge or Other (Exp	ined Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc on Reduc c Surface Well Data plain in R	3) s (B14) Odor (C1) eres on Liv ced Iron (C- tion in Tille (C7) a (D9)	4) ad Soils (ts (C3)	Secondar Surfac Draina Dry-Se Crayfis Satura Stunte X Geome	y Indicato e Soil Cra ge Pattern eason Wa sh Burrow tion Visib d or Stres orphic Pos leutral Tes	ors (minimal cks (B6) ons (B10) of the Table on Aerosed Planstion (D2) of the table of the table on the table on the table on the table on the table on the table of the table of the table of the table of the table of the table of the table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of tab	(C2) rial Imaç ts (D1)	wo requ
DROLO Petland H mary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundar Sparse Ind Obser Irace W ater Tab turation cludes o	Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inc	Imagery (e Surfaceeses	B7) (B8) (NoX NoX X	Water Sta Aquatic Fa Frue Aqua Hydrogen Dxidized I Presence Recent Iro Finin Muck Gauge or Other (Exp	ined Lea auna (B1 atic Plant: Sulfide (Rhizosph of Reduc on Reduc on Reduc on Surface Well Dat: plain in R inches): inches):	3) s (B14) Ddor (C1) eres on Liv ced Iron (C- tion in Tille (C7) a (D9) temarks)	4) Ad Soils (ts (C3) C6)	Secondar Surfac Draina Dry-Se Crayfis Satura Stunte X Geome X FAC-N	y Indicato e Soil Cra ge Pattern eason Wa sh Burrow tion Visib d or Stres orphic Pos leutral Tes	ors (minimal cks (B6) ons (B10) of the Table on Aerosed Planstion (D2) of the table of the table on the table on the table on the table on the table on the table of the table of the table of the table of the table of the table of the table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of tab	(C2) rial Imagits (D1)	wo requ
DROLO etland H imary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundar Sparse eld Obser urface W ater Tab	nches): Individual of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the pro	Imagery (e Surfaceeses	B7) (B8) (NoX NoX X	Water Sta Aquatic Fa Frue Aqua Hydrogen Dxidized I Presence Recent Iro Finin Muck Gauge or Other (Exp	ined Lea auna (B1 atic Plant: Sulfide (Rhizosph of Reduc on Reduc on Reduc on Surface Well Dat: plain in R inches): inches):	3) s (B14) Ddor (C1) eres on Liv ced Iron (C- tion in Tille (C7) a (D9) temarks)	4) Ad Soils (ts (C3) C6)	Secondar Surfac Draina Dry-Se Crayfis Satura Stunte X Geome X FAC-N	y Indicato e Soil Cra ge Pattern eason Wa sh Burrow tion Visib d or Stres orphic Pos leutral Tes	ors (minimal cks (B6) ons (B10) of the Table on Aerosed Planstion (D2) of the table of the table on the table on the table on the table on the table on the table of the table of the table of the table of the table of the table of the table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of table of tab	(C2) rial Imagits (D1)	wo requ

Project/Site: I-69 Section 6 Wetland S6W064A		City/Cour	nty: Morgan		Sampling [Date: 11/3/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling F	Point HB03A-1D1
Investigator(s): L. Barnhart, A. Grisel		Section,	Township, Ra	nge: Sec 8-T12N-R2E		
Landform (hillslope, terrace, etc.): roadside			Local reli	ef (concave, convex, no	ne): none	
Slope (%): 18-25 Lat: 39.494993	L	_ong: -86	5.341108		Datum: GCS	S NAD83
Soil Map Unit Name Princeton fine sandy loam	,			NWI classit	fication: N/A	
Are climatic/hydrologic conditions on the site typical for this t	ime of vear	r? Yes	X No			
Are Vegetation , Soil or Hydrology signif				Iormal Circumstances" p		s X No:
Are Vegetation, Soil or Hydrology natu				ded, explain answers in		
SUMMARY OF FINDINGS - Attach site map showir				•	,	etc.
Hydrophytic Vegetation Present? Yes No	X	<u> </u>	<u> </u>		<u> </u>	
Hydric Soils Present? Yes No	<u>X</u>	Is	the Sample	d Area		
Wetland Hydrology Present? Yes No	X	w	ithin a Wetla	nd? Yes	No _	X
Remarks Data point is located approximately 282 feet eas	t of SR 37.	-				
VEGETATION - Use scientific names of plants						
Tree Stratum (Plot Size: 30' radius)	Absolute % Cover		nt Indicator ? Status	Dominance Test wor		
1. Acer saccharum	40	Yes	FACU	Number of Dominant S That Are OBL, FACW,		1 (A)
2.				Total Number of Domi		
3				Species Across All Str		4 (B)
4				Percent of Dominant S		(4/5)
5		T-1-10		That are OBL, FACW,	or FAC:	25 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	40	= Total C	over	Prevalence Index wo	rksheet:	
1 Acer saccharum	25	Yes	FACU	Total % Cover o	f: N	fultiply by:
2. Gleditsia triacanthos	5	No	FACU	OBL species	0 x 1 =	
3.		-		FACW species	15 x 2 =	30
4.				FAC species	0 x 3 =	
5				FACU species UPL species	$\frac{90}{0}$ x 4 = $\frac{30}{0}$ x 5 =	
	30	= Total C	over		05 (A)	390 (B)
Herb Stratum (Plot Size: 5' radius)	20	V	FACIL	Dravalance Ind		0.74
Sanicula canadensis Persicaria bicornis		Yes Yes	FACU FACW	Prevalence Ind	ex = b/A =	3.71
3.		100		Hydrophytic Vegetat	on Indicator	s:
4.				1-Rapid Test for H	ydrophytic Ve	getation:
5.				2-Dominance Test		
6.				3-Prevalence Index 4-Morphological Ad-		rovide supporting
7				data in Remarks or	r on a separat	e sheet)
8				Problematic Hydro	phytic Vegeta	tion ¹ (Explain)
9				¹ Indicators of hydric so		
10	35	= Total C	over	be present, unless dis	turbed or prob	piematic
Vine Stratum (Plot Size: 30' radius)		- Total C	O V O I	Hydrophytic		
1				Vegetation		
2					'es	No X
	0	= Total C	over			
Remarks: (Include photo numbers here or on a separate sh	neet.)					

SOIL Sampling Point HB03A-1D1

Depth Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture		Remarks	
0-10	10YR4/3	100	, ,				saı				
10-20	10YR6/4	100					saı				
				-							
-	Concentration, D= De	epletion, RM	l=Reduced Matrix,	CS=Cove	red or Coa	ated Sand	Grains.			Pore Lining, M	
	I Indiactors:				(0.1)					blematic Hydi	ic Soils
Histoso	, ,				Matrix (S4)				t Prairie Ro Surface (S	edox (A16)	
	pipedon (A2) istic (A3)			y Redox (S ed Matrix						e Masses (F12)
	en Sulfide (A4)				(56) ∕lineral (F1	1				ark Surface (TF	
-	d Layers (A5)				Matrix (F2)					lain in Remarks	
	uck (A10)			eted Matrix	, ,	,		_ 0010	i Ooii (Expi	an in Romana	·)
	d Below Dark Surfac	e (A11)		x Dark Su							
	ark Surface (A12)	(* * * * * * * * * * * * * * * * * * *			Surface (F	7)		³ Indica	ators of hyd	drophytic veget	ation and
	Mucky Mineral (S1)			x Depress		,		wetland		must be prese	
-	uck Peat or Peat (S3	3)	_		,				disturbe	d or problemati	c.
strictive	Layer (If observed)	:									
Туре:		:					Librar	dria Cail	nracant?	Voo	No
strictive Type: Depth (ir		:					Нус	dric Soil	present?	Yes	. No <u>-</u>
Type:	nches):	:					Нус	dric Soil	present?	Yes	No _
Type:	GY						Нус	dric Soil	present?	Yes	No _
Type:	nches):	::	ired; check all that	apply)			Нус				
Type:	GY ydrology Indicators	::			ves (B9)		Нус	Second	dary Indicat	tors (minimum	
Type:	GY ydrology Indicators dicators (minimum of Water (A1)	::	Water St	ained Lea			Нус	Second	dary Indicat	tors (minimum racks (B6)	
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)	::	Water St Aquatic I	ained Leav auna (B1	3)		Нус	Second Surf Drai	dary Indicat ace Soil Ci nage Patte	tors (minimum racks (B6) erns (B10)	of two requ
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3)	::	Water St Aquatic I True Aqu	ained Lear Fauna (B1: Jatic Plants	3) s (B14)		Нус	Second Surf Drai	dary Indicar ace Soil Ci nage Patte Season W	tors (minimum racks (B6) erns (B10) ater Table (C2)	of two requ
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)	::	Water St Aquatic I True Aqu Hydroge	ained Leav Fauna (B1) uatic Plants n Sulfide C	3) s (B14)	ving Roots		Second Surf Drai Dry- Cray	dary Indicat ace Soil Ci nage Patte Season W rfish Burro	tors (minimum racks (B6) erns (B10) ater Table (C2)	of two requ
DROLO Patland H mary Inc Surface High Wa Saturati Water N Sedime	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)	::	Water St Aquatic I True Aqu Hydroge Oxidized	ained Lear Fauna (B1: Jatic Plants In Sulfide C Rhizosph	3) s (B14) Odor (C1)	-		Second Surf Drai Dry- Cray Satu	dary Indicat ace Soil Ci nage Patte Season W rfish Burrov uration Visi	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8)	of two requ
DROLO Patland H mary Inc Surface High Water M Sedime Drift De	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)	::	Water St Aquatic I True Aqu Hydroge Oxidized Presence	ained Leaverauna (B1: Juatic Plants Sulfide C Rhizospher	3) s (B14) Odor (C1) eres on Li	(4)	s (C3)	Second Surf Drai Dry- Cray Satu	dary Indicat ace Soil Ci nage Patte Season W rfish Burrov Iration Visi inted or Stre	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial Ir	of two requ
DROLO Petland H mary Inc Saturati Water M Sedime Drift De Algal M	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)	::	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I	ained Leaverauna (B1: Juatic Plants Sulfide C Rhizospher	3) s (B14) Odor (C1) eres on Lived Iron (C	(4)	s (C3)	Second Surf Drai Dry- Cray Satu Stur	dary Indicat ace Soil Ci nage Patte Season W rfish Burrov Iration Visi inted or Stre	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial Ir essed Plants (Dostion (D2)	of two requ
Depth (ir narks: DROLO Petland H mary Inc Surface High Water M Sedime Drift De Algal M. Iron De Inundati	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	s: one is requ	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc 7) Gauge o	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduce ron Reduce k Surface r Well Data	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	(4)	s (C3)	Second Surf Drai Dry- Cray Satu Stur	dary Indicat ace Soil Ci nage Patte Season W rfish Burron uration Visi nted or Stre morphic Po	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial Ir essed Plants (Dostion (D2)	of two requ
Depth (ir narks: DROLO etland H mary Inc Surface High Water M Sedime Drift De Algal M. Iron De Inundati	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	s: one is requ	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc 7) Gauge o	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduct ron Reduct k Surface	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	(4)	s (C3)	Second Surf Drai Dry- Cray Satu Stur	dary Indicat ace Soil Ci nage Patte Season W rfish Burron uration Visi nted or Stre morphic Po	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial Ir essed Plants (Dostion (D2)	of two requ
DROLO Patland H Mary Inc Surface High Water M Sedime Drift De Algal M Iron De Inundat Sparsel	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	s: one is requ	Water St Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc 7) Gauge o	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduce ron Reduce k Surface r Well Data	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	(4)	s (C3)	Second Surf Drai Dry- Cray Satu Stur	dary Indicat ace Soil Ci nage Patte Season W rfish Burron uration Visi nted or Stre morphic Po	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial Ir essed Plants (Dostion (D2)	of two requ
Depth (ir narks: DROLO Petland H mary Inc Surface High W: Saturati Water M Sedime Drift De Algal M: Iron De Inundat Sparsel	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations:	s: one is requ	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc Gauge o Other (E	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduce ron Reduce k Surface r Well Data	3) s (B14) Ddor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	(4)	s (C3)	Second Surf Drai Dry- Cray Satu Stur	dary Indicat ace Soil Ci nage Patte Season W rfish Burron uration Visi nted or Stre morphic Po	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial Ir essed Plants (Dostion (D2)	of two requ
DROLO Petland H mary Inc Surface High Water M Sedime Drift De Algal M Iron De Inundat Sparsel	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present?	one is required in the second is required in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc Gauge o 38) Other (E	ained Lear Fauna (B1: actic Plants n Sulfide C Rhizosph e of Reduct on Reduct ck Surface r Well Data xplain in R (inches): (inches):	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	(4)	s (C3)	Second Surf Drai Dry- Cray Satu Stur	dary Indicat ace Soil Ci nage Patte Season W rfish Burron uration Visi nted or Stre morphic Po	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial Ir essed Plants (Dostion (D2)	of two requ
DROLO DROLO DROLO Detland H mary Inc Surface High Water M Sedime Drift De Algal M Iron De Inundat Sparsel Deld Obse rface Water Tabl turation	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Present? Y Present? Y	one is required in the second is required in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in the second in	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc Gauge o Other (E No X Depth No X Depth	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduct ron Reduct ck Surface r Well Data xplain in R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (C	s (C3)	Second Surf Drai Dry- Cray Satu Stur Geo FAC	dary Indicat ace Soil Ci nage Patte Season W rfish Burron uration Visi nted or Stre morphic Po	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial Ir essed Plants (D ostion (D2) est (D5)	of two requ
DROLO Patland H Mary Inc Surface High Wa Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel Pid Obse rface Wa ater Tabl turation cludes ca	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Y	Imagery (Bile Surface (I	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc Gauge o 38) Other (E	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduce on Reduce k Surface r Well Data xplain in R (inches): (inches):	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (C	s (C3) C6)	Second Surf Drai Dry- Cray Satu Stur Geo FAC	dary Indicat ace Soil Conage Patte Season W ofish Burron uration Visi inted or Stre morphic Po c-Neutral To	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial Ir essed Plants (D ostion (D2) est (D5)	of two requinagery (C:
DROLO Patland H Mary Inc Surface High Wa Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel Pid Obse rface Wa ater Tabl turation cludes ca	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Present? Y Present? Y Present? Y apillary fringe)	Imagery (Bile Surface (I	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc Gauge o 38) Other (E	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduce on Reduce k Surface r Well Data xplain in R (inches): (inches):	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (C	s (C3) C6)	Second Surf Drai Dry- Cray Satu Stur Geo FAC	dary Indicat ace Soil Conage Patte Season W ofish Burron uration Visi inted or Stre morphic Po c-Neutral To	tors (minimum racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial Ir essed Plants (D ostion (D2) est (D5)	of two requinagery (C:

Project/Site: I-69 Section 6 Wetland S6W064A		City/County	r: Morgan		Samplir	ng Date: 11/3	3/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Samplin	ng Point HB()3A-1W1
Investigator(s): L. Barnhart, A. Grisel		Section, To	wnship, Ran	ge: Sec 8-T12N-R2E			
Landform (hillslope, terrace, etc.): roadside			Local relief	f (concave, convex, no	ne): con	cave	
Slope (%): 18-25 Lat: 39.495016	L	ong: -86.3	41059		Datum: (GCS NAD83	
Soil Map Unit Name Princeton fine sandy loam				NWI classif	fication: N	J/A	
Are climatic/hydrologic conditions on the site typical for this ti	me of vear	? Yes	X No		_	<i>47</i> · ·	
Are Vegetation , Soil or Hydrology signif		_		ormal Circumstances" p		Vas Y	No:
Are Vegetation, Soil or Hydrologynatur				ed, explain answers in			
SUMMARY OF FINDINGS - Attach site map showin							
	y sampii		ocations, t	Tansects, importan	Teature		
Hydrophytic Vegetation Present? Yes X No Hydric Soils Present? Yes X No		ls ti	he Sampled	Area			
Wetland Hydrology Present? Yes X No			nin a Wetlan		X No)	
Remarks Data point is located approximately 279 feet east	of SR 37.						
VEGETATION - Use scientific names of plants							
		Dominant	Indicator	Dominance Test wor	ksheet:		
Tree Stratum (Plot Size: 30' radius)		Species?	Status	Number of Dominant S	Species		
1. Acer negundo 2. Acer saccharum	- <u>5</u> 15	Yes Yes	FACU	That Are OBL, FACW,	, or FAC:	4	(A)
3. Platanus occidentalis	5	Yes	EA 0\A/	Total Number of Domi		0	(D)
4.			- TAOW	Species Across All Str		6	(B)
5.	. ———			Percent of Dominant S That are OBL, FACW,		67	(A/B)
o	25	= Total Cov					_ (* * - /
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index wo	rksheet:		
1. Acer negundo	5	No	FAC	Total % Cover o	f:	Multiply by	<u>: </u>
2. Acer saccharum	40	Yes	FACU	· —		1 =10	
3. Gleditsia triacanthos	5	No	FACU	· —		2 = 120	
4				· -		3 = 30 $4 = 240$	
5				UPL species		5 = 0	
Herb Stratum (Plot Size: 5' radius)	50	= Total Cov	er	Column Totals: 1		A) 400	(B)
Herb Stratum (Plot Size: 5' radius) 1. Urtica dioica	20	Yes	FACW	Prevalence Ind	ex = B/A =	= 2.86	
2. Elymus riparius	20	Yes	FACW	r rovalonoo ina	OX = Birt =	2.00	
3. Boehmeria cylindrica	10	No		Hydrophytic Vegetati	ion Indica	tors:	
4. Solidago gigantea	5	No	FACW	1-Rapid Test for H		Vegetation:	
5. Phalaris arundinacea	5	No	FACW	2-Dominance Test 3-Prevalence Index			
6. Persicaria bicornis	5	No	FACW	4-Morphological Ad		(Provide su	nnorting
7				data in Remarks or			pporting
8				Problematic Hydro	phytic Veg	getation ¹ (Ex	plain)
9				¹ Indicators of hydric so			gy must
10	65	= Total Cov		be present, unless dis	turbed or p	oroblematic	
Vine Stratum (Plot Size: 30' radius)		- Total Cov	GI				
1				Hydrophytic			
2.				Vegetation Present?	'es X	No	
	0	= Total Cov	ver				
Remarks: (Include photo numbers here or on a separate sh	eet.)						
, and a separate of	/						

SOIL Sampling Point HB03A-1W1

	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
(Inches) 0-12	10YR3/1	90	10YR5/6	10	M		sand	
12-20	10YR4/1	100	1011(3/0		IVI		sand	
12-20	101K4/1	100	-				Sanu	
/dric Soi Histoso Histic E Black H Hydrogo Stratifie	Concentration, D= De I Indiactors: I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) uck (A10)	pletion, R	Sandy Sandy Stripp Loam Loam	CS=Covered / Gleyed Ma / Redox (S5) ed Matrix (S) y Mucky Min y Gleyed Ma ted Matrix (F)	atrix (S4)) 66) neral (F1 atrix (F2))	Ind X I _	Location: PL=Pore Lining, M=Matrix iactors for Problematic Hydric Soils ³ Coast Prairie Redox (A16) Dark Surface (S7) ron-Manganese Masses (F12) Very Shallow Dark Surface (TF12) Other Soil (Explain in Remarks)
Deplete Thick D Sandy I 5 cm M	d Below Dark Surfac ark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3)	Redox Deple	x Dark Surfa ted Dark Su x Depression	rface (F6)	7)		ndicators of hydrophytic vegetation and stland hydrology must be present, unless disturbed or problematic.
strictive	Layer (If observed)							
_	_ayo. (oboo. rou)	=						
Type:		-					Hydric	Soil present? Yes X No
Type: Depth (in emarks:							Hydric	Soil present? Yes X No _
Depth (in	nches):						Hydric	Soil present? Yes X No _
Depth (in	nches):						Hydric :	Soil present? Yes X No _
Depth (in permarks:	GY	:	uired; check all that	apply)_				
DROLO Vetland H rimary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave	: one is req	Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water	apply) ained Leaver fauna (B13) atic Plants (In Sulfide Odd Rhizosphere of Reduced on Reduction k Surface (Control Well Data (In Red	B14) or (C1) es on Liv d Iron (C on in Tille C7)	4)	Se ————————————————————————————————————	condary Indicators (minimum of two requ Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Depth (in marks: DROLO Vetland H rimary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave	: one is req Imagery (E e Surface	Water Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard Market Standard	ained Leaves Fauna (B13) atic Plants (In Sulfide Odd Rhizosphere of Reduced on Reduction k Surface (Comments) Well Data (In Splain in Ren	B14) or (C1) es on Liv d Iron (C on in Tille C7)	4)	Se ————————————————————————————————————	condary Indicators (minimum of two requestions Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Postion (D2)
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DROLO etland H imary Inc Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface W ater Table aturation includes c	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concaveryations: ater Present? Present? Present? you	Imagery (Ee Surface	Water Sta Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gary Gauge or (B8) Other (Ex	ained Leaves Fauna (B13) atic Plants (In Sulfide Odd Rhizosphere of Reduced on Reduction k Surface (Con Well Data (Inches): (inches): (inches):	B14) or (C1) es on Liv d Iron (C n in Tille C7) D9) narks)	4) ed Soils (C	Se	condary Indicators (minimum of two requivariance Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visibile on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Postion (D2) FAC-Neutral Test (D5)

Project/Site: I-69 Section 6 Wetland S6W065A		City/Coun	ty: Morgan		Sampling Date:	8/25/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point	HB04A-1D1
Investigator(s): R. Yeager, B. Reust		Section, T	ownship, Ra	nge: Sec 8-T12N-R2E		
Landform (hillslope, terrace, etc.): hillslope			Local reli	ef (concave, convex, no	ne): convex	
Slope (%): 6-12 Lat: 39.497322	I	Long: -86.	338604		Datum: GCS NAD	083
Soil Map Unit Name Pits				NWI classi	fication: N/A	
Are climatic/hydrologic conditions on the site typical for this	time of year	r? Yes	X No	(If no, explain Re	emarks.)	
Are Vegetation , Soil or Hydrology signi		•		Normal Circumstances"		No:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in		
SUMMARY OF FINDINGS - Attach site map showing						
Hydrophytic Vegetation Present? Yes No	X			_		
Hydric Soils Present? Yes No		Is	the Sample	d Area		
Wetland Hydrology Present? Yes No	X	wi	thin a Wetla	ind? Yes	NoX	_
Remarks						
VEGETATION - Use scientific names of plants						
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	t Indicator Status	Dominance Test wor	ksheet:	
1	70 OOVCI	Орсоюз.	Olalas	Number of Dominant S That Are OBL, FACW		(A)
2.		· ·	-		·	(A)
3.				Total Number of Domi Species Across All Str		(B)
4				Percent of Dominant S		
5				That are OBL, FACW,	, or FAC: 50	(A/B)
(5) (5)	0	= Total Co	over	Prevalence Index wo		
Sapling/Shrub Stratum (Plot Size: 15' radius)				Total % Cover o		v bv:
1		-		OBL species	0 x 1 =	0 0
2				FACW species	5 x 2 =	10
3. 4.		-	-	FAC species	40 x 3 =	120
5.				'		120
	0	= Total Co	over	UPL species Column Totals:	0 x 5 =(A)	0 250 (B)
Herb Stratum (Plot Size: 5' radius)						230 (B)
1. Sanicula odorata	40	Yes	FAC	Prevalence Ind	iex = B/A =3	3.33
2. Lonicera japonica		Yes	FACU	Hydrophytic Vegetat	ion Indicators:	
Elymus riparius Ageratina altissima	<u>5</u> 5	No No	FACW FACU	1-Rapid Test for H	ydrophytic Vegetati	ion:
		110	1700	2-Dominance Test	is >50%	
5		-	·	3-Prevalence Inde		
7.				4-Morphological Addata in Remarks of	daptations (Provide r on a separate she	
8.					phytic Vegetation ¹	•
9			-	Indicators of hydric so		
10				be present, unless dis		
No. Oc. 10 (Diet Cine) COl resilier	75	= Total Co	over			
Vine Stratum (Plot Size: 30' radius)				Hydrophytic		
1			-	Vegetation Present?	res No	X
2		= Total Co	over	i resent:		
December (Include whate our let		. 5.3. 50				
Remarks: (Include photo numbers here or on a separate si	neet.)					

SOIL Sampling Point HB04A-1D1

Profile Desc	ription: (Describe	e to the depth	needed to	documnet	the indic	ator or co	nfirm the	e abse	nce of indic	ators.)			
Depth	Matri	X		Redo	x Featur	es							
(Inches)	Color (moist)	%	Color (n	noist)	%	Type ¹	Loc ²	1	Texture		Remarks		
1-14+	10YR4/4	100						S	silt loam		dry and friable)	
-	-		-					-					
	•												
	-							-					
	-							-					
	-							-					
-								-					
¹ Type: C=C	Concentration, D=	Depletion, R	M=Reduced	l Matrix, C	S=Cove	red or Coa	ated Sar	nd Grai	ins. ² Loc	cation: PL=I	Pore Lining, M=	Matrix	
Hydric Soi	I Indiactors:								Indiact	ors for Prol	blematic Hydric	Soils	3
Histoso	I (A1)			Sandy	Gleved N	/latrix (S4)				st Prairie Re	•		
_	pipedon (A2)		_		Redox (S					Surface (S			
	istic (A3)		-		ed Matrix						Masses (F12)		
_	en Sulfide (A4)		_			ineral (F1)				ark Surface (TF1	2)	
Stratifie	d Layers (A5)			Loamy	Gleyed I	Matrix (F2))		Othe	er Soil (Expl	ain in Remarks)		
	uck (A10)		_		ed Matrix								
	d Below Dark Su		_			face (F6)							
_	ark Surface (A12	•	_			Surface (F	7)				rophytic vegetat must be preser		•
	Mucky Mineral (S	,	_	_ Redox	Depress	ions (F8)			wellar		d or problematic.		5
	uck Peat or Peat	` ,											
	Layer (If observ	ed):											
Type: Depth (ir	oches):								Hydric Soil	present?	Yes	No	X
Remarks:									,	p. 000			
	d to penetrate wit	h shovel heve	and 14 inche	s Very	Irv and fri	ahla							
Con too nare	a to penetrate wit	ii silovei beye	ind 14 mone	.s. very e	ily alla ili	abic.							
LIVERGLO	ov.												
HYDROLO	G Y												
Wetland H	ydrology Indicat	ors:											
Primary Inc	licators (minimun	n of one is rec	uired; checl	k all that a	apply)				Secon	dary Indicate	ors (minimum of	two req	uired)
Surface	Water (A1)		\	Nater Sta	ined Leav	ves (B9)			Sur	face Soil Cr	acks (B6)		
High Wa	ater Table (A2)		_ ,	Aquatic Fa	auna (B1	3)			Dra	inage Patter	rns (B10)		
Saturati	on (A3)		7	Γrue Aqua	atic Plants	s (B14)			Dry	-Season Wa	ater Table (C2)		
Water N	/larks (B1)		_ +	Hydrogen	Sulfide C	dor (C1)			Cra	yfish Burrov	vs (C8)		
Sedime	nt Deposits (B2)		_ (Oxidized F	Rhizosph	eres on Liv	ving Ro	ots (C3	3) Sat	uration Visib	oile on Aerial Ima	agery (C	(9)
	posits (B3)		_ F	Presence	of Reduc	ed Iron (C	(4)		_		ssed Plants (D1)	
	at or Crust (B4)					tion in Tille	ed Soils	(C6)	_	omorphic Po	` '		
	posits (B5)			Γhin Muck		. ,			FAC	C-Neutral Te	est (D5)		
_	ion Visible on Ae		_	Gauge or									
_ Sparsel	y Vegetated Con-	cave Surface	(B8) _ (Other (Exp	olain in R	emarks)							
Field Obse	ervations:												
Surface Wa	ater Present?	Yes	No X	Depth (inches):								
Water Tabl		Yes	No X	•	inches):								
Saturation		Yes	No X	-	inches):		_	Motlor	d Uvdrala	w Bracant?	. Voo	No	V
	apillary fringe)			-1 (vettar	iu nyurolo(gy Present?	Yes	No _	^
Describe Re	ecorded Data (str	eam gauge, n	nonitoring w	ell, aerial	photos, p	revious in	spection	ns), if a	available:				
Remarks:													

nvestigator(s): R. Yeager, B. Reust Section, Township, Range: Sec 8-T12N-R2E Local relief (concave, convex, none): concave	Project/Site: I-69 Section 6 Wetland S6W065A		City/County	y: Morgan		Sampling Date: 8/25/2017
Local relief (concave, convex, none): Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Concave Conc	Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point HB04A-1W1
Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic Slogic S	Investigator(s): R. Yeager, B. Reust		Section, To	ownship, Ra	inge: Sec 8-T12N-R2E	
New Content Name Pits New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content New Content Ne	Landform (hillslope, terrace, etc.): hillside swale	<u>.</u>		Local reli	ief (concave, convex, no	ne): concave
Assolute Dominant Indicator Status (Plot Size: 30' radius) Assolute Stratum (Plot Size: 15' radius) 1. Sapling/Shrub Stratum (Plot Size: 15' radius) 1. Sapling/Shrub Stratum (Plot Size: 15' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 1. Pleas pumila (Plot Size: 6' radius) 2. Total Cover (Previdence index is each of the pumila pumila pumila pumila pumila pumila pumila pumila pumila pumila pumila pumila pumila pumila pumila pumila	Slope (%): 2-6 Lat: 39.497256	L	ong: -86.3	338623		Datum: GCS NAD83
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Summary Soil			_			
Summary OF Findings - Attach site map showing sampling point locations, transects, important features, etc.						
Is the Sampled Area within a Wetland? Yes x No						
Is the Sampled Area within a Wetland? Yes x No	Hydrophytic Vegetation Present? Yes X	No				
VEGETATION - Use scientific names of plants			ls t	he Sample	d Area	
Absolute Dominant Indicator Species? Status	Wetland Hydrology Present? Yes X	No	wit	hin a Wetla	ind? Yes	X No
Absolute Cover Species Cover Species Cover Status Cover Species Cover Status Cover Species Cover Status Cover Species Cover Status Cover Species Cover Status Cover Species Cover Status Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover Cover	Remarks		•			
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Tree Stratum	VEGETATION - Use scientific names of plants					
1.	Tree Stratum (Plot Size: 30' radius)			_	Dominance Test wor	ksheet:
2.		70 00001	орсою.	Otatas		
Species Across All Strata: 4 (B)			-			
Percent of Dominant Species That are OBL, FACW, or FAC: 100 (A/B)						
Sapling/Shrub Stratum (Plot Size: 15' radius)						
Prevalence Index worksheet: Total % Cover of: Multiply by:	5				That are OBL, FACW,	or FAC: 100 (A/B)
Total % Cover of: Multiply by: 1.	(5) (5)	0	= Total Co	ver	Prevalence Index wo	
DBL species 2	<u> </u>					
FACW species 7					_	
4.						
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Herb Stratum (Plot Size: 5' radius)						
Herb Stratum (Plot Size: 5' radius) 1. Pilea pumila 5			= Total Co	ver	·	
2 Yes FAC 3. Impatiens capensis 2 Yes FACW 4. Glyceria striata 2 Yes OBL 5.	Herb Stratum (Plot Size: 5' radius)				Column rotals.	11 (A) <u>22 (B)</u>
A. Glyceria striata 2 Yes OBL 1-Rapid Test for Hydrophytic Vegetation: 1-Rapid Test for Hydrophytic Vegetation: 2-Dominance Test is >50% X-3-Prevalence Index is <=3 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation 1 (Explain) 1-Rapid Test for Hydrophytic Vegetation: X-2-Dominance Test is >50% X-3-Prevalence Index is <=3 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation 1 (Explain) 1-Rapid Test for Hydrophytic Vegetation: X-2-Dominance Test is >50% X-3-Prevalence Index is <=3 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation 1 (Explain) 1-Rapid Test for Hydrophytic Vegetation: X-2-Dominance Test is >50% X-3-Prevalence Index is <=3 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation 1 (Explain) 1-Rapid Test for Hydrophytic Vegetation: X-2-Dominance Test is >50% X-3-Prevalence Index is <=3 4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation 1 (Explain) 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid Test for Hydrophytic Vegetation 1-Rapid					Prevalence Ind	lex = B/A = 2.00
4. Glyceria striata 2 Yes OBL 5	-				Hydrophytic Vegetat	ion Indicators:
5.	- · · · · · · · · · · · · · · · · · · ·				1-Rapid Test for H	ydrophytic Vegetation:
6. 7. 8. 9. 10. 11 = Total Cover Augre of the stratum Plot Size: 30' radius One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One of the stratum One o			162	OBL		· · · · · · · · · · · · · · · · · · ·
7	-					
8 Problematic Hydrophytic Vegetation 1 (Explain) 9						
9	0					•
10					<u> </u>	
Vine Stratum (Plot Size: 30' radius) Hydrophytic Vegetation Present? Yes X No						
1	MI 20 (Dist 2) 200 "	11	= Total Co	ver		
2 Present? Yes X No						
0 = Total Cover						res X No
<u> </u>	-		= Total Cov	ver	i-resent?	<u> </u>
Kemarks: (Include photo numbers here or on a separate sheet.)					<u> </u>	
	кетпаткs: (Include photo numbers here or on a separate	e sneet.)				

SOIL Sampling Point HB04A-1W1

Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc 2	Textu	ıre	F	Remarks	
0-8	7.5YR3/1	80	2.7YR3/4	20	C	M	loamy				
8-20	10YR4/1	100		·			loamy				
				·							
	Concentration, D= De	pletion, R	M=Reduced Matrix,	CS=Covered	d or Coa	ted Sand			on: PL=Pore L	<u> </u>	
Histoso	I (A1)		Sandy	/ Gleyed Ma	atrix (S4)			Coast F	Prairie Redox (A16)	
	pipedon (A2)			Redox (S5			-		urface (S7)	-,	
Black H	istic (A3)		Stripp	ed Matrix (S	86)		-	Iron-Ma	nganese Mass	ses (F12)	
Hydroge	en Sulfide (A4)		Loam	y Mucky Min	neral (F1)		Very Sh	nallow Dark Su	rface (TF12)
Stratifie	d Layers (A5)		Loam	y Gleyed Ma	atrix (F2)		-	Other S	oil (Explain in	Remarks)	
2 cm M	uck (A10)		X Deple	ted Matrix (F	F3)						
Deplete	d Below Dark Surfac	e (A11)		x Dark Surfa	. ,						
	ark Surface (A12)			ted Dark Su	`	7)			rs of hydrophy		
-	Mucky Mineral (S1)		Redox	x Depression	ns (F8)				ydrology must disturbed or pr		uniess
	uck Peat or Peat (S3	<u> </u>							шоталова втр.		
	Layer (If observed)										
Гуре:											
	ochae):						Hvd	ric Soil pr	esent? Ye	s X	Nο
Depth (ir	nches):						Hyd	ric Soil pr	esent? Ye	s <u>X</u>	No _
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Depth (ir marks: DROLO etland H mary Inc Surface High W Saturati Water M Sedime Drift De	ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)		Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water	ained Leave fauna (B13) atic Plants (n Sulfide Ode Rhizosphere	(B14) or (C1) es on Liv	4)	ts (C3)	Secondar Surfac Draina X Dry-Se Crayfis Satura Stunte	y Indicators (m e Soil Cracks (ge Patterns (B eason Water Ta th Burrows (C8 tion Visibile on d or Stressed I	ninimum of to B6) 10) able (C2) b) Aerial Imag	wo requ
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Project/Site: I-69 Section 6 Wetland S6W066A		City/County	y: Morgan		Sampling Date: 9/21/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point HB06A-1D1
Investigator(s): R. Connolly, A. Grisel		Section, To	ownship, Ra	inge: Sec 8-T12N-R2E	
Landform (hillslope, terrace, etc.): roadside			Local reli	ief (concave, convex, no	ne): none
Slope (%): 0-2 Lat: 39.498839	l	Long: -86.3	- 336371		Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam				NWI classif	fication: N/A
Are climatic/hydrologic conditions on the site typical for this	time of year	r? Yes	X No	(If no, explain Re	marks.)
Are Vegetation , Soil or Hydrology sign		_			oresent? Yes X No:
Are Vegetation , Soil or Hydrology nat				eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show					
Hydrophytic Vegetation Present? Yes No	o X			<u> </u>	
Hydric Soils Present? Yes No		ls t	he Sample	d Area	
Wetland Hydrology Present? Yes No	o X	wit	hin a Wetla	ind? Yes	NoX
Remarks Data point is located along a SR37 roadside dit	ch approxim	naetly 28 fee	et east of SF	₹ 37.	
VEGETATION - Use scientific names of plants	A1 1 1		1 12 4		
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test wor	
1		•		Number of Dominant S That Are OBL, FACW,	
2.				Total Number of Domi	
3				Species Across All Str	
4				Percent of Dominant S	
5				That are OBL, FACW,	or FAC:0 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Cov	ver	Prevalence Index wo	rksheet:
				Total % Cover o	f: Multiply by:
1. 2.				OBL species	$0 \qquad x = 0$
3.				FACW species	0 x 2 = 0
4.				FAC species	0 x 3 = 0
5.				· —	25 x 4 = 100
	0	= Total Cov	ver	· —	$\frac{70}{95}$ $x = 350$ (B)
Herb Stratum (Plot Size: 5' radius)				-	
1. Securigeria varia	45	Yes	UPL	Prevalence Ind	ex = B/A = 4.74
2. Solidago canadensis	25	Yes	FACU	Hydrophytic Vegetati	ion Indicators:
3. <u>Daucus carota</u>	25	Yes	UPL	1-Rapid Test for H	ydrophytic Vegetation:
45				2-Dominance Test	is >50%
5				3-Prevalence Index	
7.					daptations (Provide supporting ron a separate sheet)
8.					phytic Vegetation ¹ (Explain)
9.				I —	oil and wetland hydrology must
10				be present, unless dis	
(0) 10:	95	= Total Cov	ver		
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1				Vegetation	es No _X_
2	0	= Total Cov	/er	Present? Y	NO
		- 10tal 00		<u> </u>	
Remarks: (Include photo numbers here or on a separate :	sneet.)				

SOIL Sampling Point HB06A-1D1

(Inches)	Matrix Color (moist)	%	Red Color (moist)	%	Type ¹	Loc ²	Textu	ure		Rema	rks	
0-2	10YR4/3	100					clay lo					
2-20	10YR6/1	100					clay lo					
							0.4,					
	-											
Type: C=C	Concentration, D= De	pletion, RM	M=Reduced Matrix,	CS=Cove	red or Coa	ted Sand	Grains.	² Locat	tion: PL=I	Pore Lining	, M=Matri	Κ
lydric Soi	I Indiactors:	-						Indiactor	s for Pro	blematic H	ydric Soi	s 3
Histoso			Sandy	Gleved I	Matrix (S4)					edox (A16)	•	
_	pipedon (A2)			Redox (-		Surface (S			
_	istic (A3)			ed Matrix			•			Masses (I	F12)	
_	en Sulfide (A4)				Mineral (F1)	•			ark Surface		
-	d Layers (A5)			-	Matrix (F2)		•			ain in Rema		
_	uck (A10)			ted Matrix			•		` .		,	
	d Below Dark Surfac	e (A11)			rface (F6)							
Thick D	ark Surface (A12)		Deple	ted Dark	Surface (F	7)				rophytic ve		
Sandy I	Mucky Mineral (S1)		Redox	Depress	ions (F8)			wetland		must be pr		ess
5 cm M	uck Peat or Peat (S3)							disturbed	or problem	iauc.	
estrictive	Layer (If observed)	:										
Type:										V		
	nches):						Hyd	ric Soil p	resent?	Yes		o <u> </u>
Type: Depth (ir emarks:							Hyd	ric Soil p	resent?	Yes		0
Type:	GY						Hyd	ric Soil p	resent?	Yes		o
Type:	GY ydrology Indicators		uired: check all that	apply)			Hyd					
Type:	GY ydrology Indicators licators (minimum of				(P0)		Hyd	Seconda	ıry Indicat	ors (minimu		
Type:	GY ydrology Indicators dicators (minimum of Water (A1)		Water Sta	ained Lea	` ,		Hyd	Seconda Surfa	ıry Indicat	ors (minimu acks (B6)		
Type: Depth (in emarks: /DROLO Vetland H Primary Inc Surface High W:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F	ained Lea auna (B1	3)		Hyd	Seconda Surfa Draina	ıry Indicat ce Soil Cr age Patte	ors (minimu acks (B6) rns (B10)	ım of two	
Type: Depth (in emarks: //DROLO //DROLO Vetland H Primary Inc Surface High W: Saturati	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3)		Water Sta Aquatic F True Aqu	ained Lea auna (B1 atic Plant	3) s (B14)		Hyd	Seconda Surfar Drain: Dry-S	ıry Indicatı ce Soil Cr age Patte eason Wa	ors (minimu acks (B6) rns (B10) ater Table (ım of two	
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Project/Site: I-69 Section 6 Wetland S6W066A		City/Count	y: <u>Morgan</u>		Sampling Date: 9/21/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point HB06A-1W1
Investigator(s): R. Connolly, A. Grisel		Section, To	ownship, Ra	ange: Sec 8-T12N-R2E	
Landform (hillslope, terrace, etc.): roadside			Local reli	ief (concave, convex, no	ne): concave
Slope (%): 0-2 Lat: 39.498868	L	_ong: -86.	336377		Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this	s time of year	r? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology sign	-	_			present? Yes X No:
Are Vegetation, Soil or Hydrology na				eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show				•	,
Hydrophytic Vegetation Present? Yes X N	0				
Hydric Soils Present? Yes X N			the Sample		
Wetland Hydrology Present? Yes X N	0	wit	thin a Wetla	and? Yes	X No
Remarks Data point is located along a SR 37 roadside d	itch approxin	nately 19 fe	eet east of S	R 37.	
VEGETATION - Use scientific names of plants					
Tree Stratum (Plot Size: 30' radius)		Dominant		Dominance Test wor	ksheet:
1		Species?	Status	Number of Dominant S That Are OBL, FACW,	
2. 3.				Total Number of Domi Species Across All Str	
4				Percent of Dominant S	Species
5				That are OBL, FACW,	or FAC: 100 (A/B)
20.00	0	= Total Co	ver	Prevalence Index wo	
Sapling/Shrub Stratum (Plot Size: 15' radius)					
1.				Total % Cover o OBL species	1000000000000000000000000000000000000
2					80 x 2 = 160
3		-		FAC species	0 x 3 = 0
4 5				FACU species	0 x 4 = 0
	0	= Total Co	ver	UPL species	$0 \times 5 = 0$
Herb Stratum (Plot Size: 5' radius)				Column Totals: 1	(A) <u>180</u> (B)
1. Phalaris arundinacea	40	Yes	FACW	Prevalence Ind	lex = B/A = 1.80
2. Impatiens capensis	40	Yes	FACW	Hydrophytic Vegetati	ion Indicators:
3. Schoenoplectus tabernaemontani	20	Yes	OBL	' ' '	ydrophytic Vegetation:
4				2-Dominance Test	
5.				3-Prevalence Index	
6.					daptations (Provide supporting
7 8.					r on a separate sheet)
9.				—	phytic Vegetation ¹ (Explain)
10.				Indicators of hydric so be present, unless dis	oil and wetland hydrology must sturbed or problematic
	100	= Total Co	ver	, ,	
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1				Vegetation	
2					'es X No
	0	= Total Co	ver		
Remarks: (Include photo numbers here or on a separate	sheet.)				

SOIL Sampling Point HB06A-1W1

(Inches)	Color (moist)	%	Color	(moist)	%	Type ¹	Loc ²	Textur	·e		Rem	arks	
0-3	10YR2/1	100						clay loa	am				
3-20	10YR3/1	100					 -	clay loa					
ydric So Histoso Histic E Black H Hydrog Stratifie	Concentration, D= De il Indiactors: ol (A1) Epipedon (A2) Histic (A3) en Sulfide (A4) ed Layers (A5) Huck (A10)	epletion, R	M=Reduce	Sandy Sandy Stripp Loam	Gleyed N Redox (Sed Matrix Mucky N	Matrix (S4) S5) (S6) Mineral (F1) Matrix (F2))	lı	Coast I Coast I Dark S Iron-Ma	ion: PL=F s for Prob Prairie Re urface (Si anganese hallow Da Soil (Expla	dox (A16 7) Masses rk Surfac	Hydric) (F12) e (TF12	Soils ³
Deplete Thick D Sandy	ed Below Dark Surfac Dark Surface (A12) Mucky Mineral (S1) luck Peat or Peat (S3			Redox Deple	k Dark Sui	rface (F6) Surface (F7	7)			ors of hydrology disturbed	must be	present	
estrictive	Layer (If observed)	:											
_	, , , , , , , , , , , , , , , , , , , ,	=											
Type: Depth (i			<u> </u>					Hydr	ic Soil p	resent?	Yes _	X	No _
Depth (ii marks:	nches):							Hydr	ic Soil p	resent?	Yes _	X	No _
Depth (in marks:	nches):	::						Hydr	ic Soil p	resent?	Yes _	X	No _
Depth (i) marks: DROLO Vetland H rimary Incimary Incimary	PGY lydrology Indicators dicators (minimum of	::	quired; che						Seconda	ry Indicato	ors (minin	num of	
DROLO Vetland H rimary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat	nches):	s: one is rec	— — — — — — — — —	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc Gauge or	ained Leavanna (B1: atic Plants Sulfide C Rhizosph	3) s (B14) Odor (C1) eres on Liv ed Iron (C4 tion in Tille (C7) a (D9)	4)	s (C3)	Seconda Surfac Draina Dry-So Crayfii Satura Stunte X Geom		ors (minin acks (B6) ns (B10) ter Table vs (C8) ile on Ae ssed Plar stion (D2	num of (C2) rial Ima	two requ
DROLO Petland Hrimary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse	pogy Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): Inches): I	one is rec	B7)(B8)	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gauge or Other (Ex	ained Lear fauna (B1: atic Plants a Sulfide C Rhizosph of Reduc on Reduc k Surface Well Data cplain in R	3) s (B14) Odor (C1) eres on Liv ed Iron (C4 tion in Tille (C7) a (D9)	4)	s (C3)	Seconda Surfac Draina Dry-So Crayfii Satura Stunte X Geom	ry Indicato ce Soil Cra age Patter eason Wa sh Burrow ation Visib ed or Stres orphic Po	ors (minin acks (B6) ns (B10) ter Table vs (C8) ile on Ae ssed Plar stion (D2	num of (C2) rial Ima	two requ
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Project/Site: I-69 Section 6 Wetland S6W067A		City/Count	y: Morgan		Sampling Date: <u>9/21/2016</u>
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point HB05A-1D1
Investigator(s): R. Connolly, A. Grisel		Section, To	ownship, Ra	nge: Sec 8-T12N-R2E	
Landform (hillslope, terrace, etc.): hillside			Local reli	ef (concave, convex, no	ne): convex
Slope (%): 18-25 Lat: 39.498377	L	ong: -86.	337249		Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam				NWI classif	fication: N/A
Are climatic/hydrologic conditions on the site typical for this t	ime of year	·? Yes	X No	(If no, explain Re	marks.)
Are Vegetation , Soil or Hydrology signit		_			present? Yes X No:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showir					
Hydrophytic Vegetation Present? Yes No	Х				
Hydric Soils Present? Yes No		ls t	he Sample	d Area	
Wetland Hydrology Present? Yes No	X	wit	hin a Wetla	nd? Yes	NoX
Remarks Data point is located on hillside adjacent to wetla VEGETATION - Use scientific names of plants	and approxi	mately 56 f	eet east of S	SR 37.	
VEGETATION - Use scientific finances of plants	Absolute	Dominant	Indicator	Dominance Test wor	kshoot:
Tree Stratum (Plot Size: 30' radius)		Species?	Status	Number of Dominant S	
1				That Are OBL, FACW,	
2				Total Number of Domi	nant
3.				Species Across All Str	rata: 2 (B)
4				Percent of Dominant S That are OBL, FACW,	
5	0	= Total Co		mat are OBL, FACVV,	or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)		= Total Co	vei	Prevalence Index wo	rksheet:
<u> </u>				Total % Cover o	f: Multiply by:
1. 2.	-			OBL species	0 x 1 = 0
3.	-				10 x 2 = 20
4.				FAC species	0 x 3 = 0
5					65 x 4 = 260
	0	= Total Co	ver		$\frac{25}{00}$ $x = 125$ (B)
Herb Stratum (Plot Size: 5' radius)					····
1. Solidago canadensis	65	Yes	FACU	Prevalence Ind	ex = B/A = 4.05
2. Securigeria varia	25	Yes	UPL	Hydrophytic Vegetati	on Indicators:
3. Impatiens capensis	10	No	FACW	1-Rapid Test for H	ydrophytic Vegetation:
4	-			2-Dominance Test	is >50%
5. 6.				3-Prevalence Index	
7.					daptations (Provide supporting on a separate sheet)
8.					phytic Vegetation ¹ (Explain)
9.				_	oil and wetland hydrology must
10				be present, unless dis	
	100	= Total Co	ver		
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1				Vegetation	os No V
2		= Total Co		Present? Y	es No <u>X</u>
		= TOTAL CO	v⊎ı		
Remarks: (Include photo numbers here or on a separate sh	neet.)				

SOIL Sampling Point HB05A-1D1

Depth	Matrix		R	edox Featui							
Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture		Remarks	
0-4	10YR3/2	100					clay I	oam			
4-20	10YR4/3	100					clay I	oam			
		·									
ype: C=C	oncentration, D= D	epletion, RN	//aReduced Matri	x, CS=Cove	red or Coa	ated Sand	Grains.	² Locat	ion: PL=F	Pore Lining, M	=Matrix
dric Soil	Indiactors:	-						Indiactor	s for Prob	olematic Hyd	ic Soils
Histosol	(A1)		Sar	ndy Gleyed I	Matrix (S4))		Coast	Prairie Re	dox (A16)	
Histic Ep	oipedon (A2)		_	ndy Redox (Surface (S7		
Black Hi	stic (A3)		Stri	pped Matrix	(S6)					Masses (F12	
Hydroge	en Sulfide (A4)			my Mucky I						rk Surface (TI	
	d Layers (A5)			my Gleyed)		Other	Soil (Expla	ain in Remark	s)
	ıck (A10)			oleted Matrix							
	d Below Dark Surfa	ce (A11)		dox Dark Su	, ,						
	ark Surface (A12)			oleted Dark	,	7)				rophytic veget must be pres	
-	Mucky Mineral (S1)	۵)	Red	dox Depress	sions (F8)			welland		l or problemat	
	ıck Peat or Peat (S Layer (If observed	,								•	
	Layer (ii observed	<i>,</i> -									
rype:											
Type: Depth (in marks:	ches):						Нус	dric Soil p	resent?	Yes	No
Depth (in							Нус	dric Soil p	resent?	Yes	No
Depth (in marks:	GY						Нус	dric Soil p	resent?	Yes	No _
Depth (in marks:			uired; check all th	at apply)			Нус				
Depth (innarks: DROLOGetland Hymary Ind	GY ydrology Indicator icators (minimum c				oves (B9)		Нус	Seconda	ry Indicato	ors (minimum	
Depth (innarks: DROLOGETIAND Hymary Indo	GY ydrology Indicator icators (minimum o		Water	Stained Lea	` '		Hyd	Seconda Surfa	ry Indicato	ors (minimum acks (B6)	
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DROLOG etland Hy imary Ind Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely eld Obse ater Table atturation F	drology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) ater Table (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria vegetated Concarvations:	I Imagery (B ve Surface (— Water : — Aquatic — True A — Hydrog — Oxidize — Presen — Recent — Thin M 7) — Gauge B8) — Other (No X Depr	Stained Leace Fauna (B1 quatic Plant len Sulfide (ed Rhizosphace of Reduct Iron Reduct Surface or Well Dat Explain in Fauth (inches):	3) s (B14) Odor (C1) neres on Li ced Iron (C tion in Tille (C7) a (D9)	:4) ed Soils (0	s (C3)	Seconda Surfa Draina Dry-S Crayfi Satura Stunta	ry Indicato ce Soil Cra age Patter eason Wa sh Burrow ation Visib ed or Stres torphic Po Neutral Te	ors (minimum acks (B6) rns (B10) ater Table (C2 vs (C8) oile on Aerial In ssed Plants (D sstion (D2) est (D5)	of two req
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Project/Site: I-69 Section 6 Wetland S6W067A		City/County	y: Morgan		Sampling Date: 9/21	1/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point HB0)5A-1W1
Investigator(s): R. Connolly, A. Grisel		Section, To	wnship, Ra	inge: Sec 8-T12N-R2E		
Landform (hillslope, terrace, etc.): hillside			Local reli	ief (concave, convex, no	ne): concave	
Slope (%): 18-25 Lat: 39.498372	L	Long: -86.3	- 337181		Datum: GCS NAD83	
Soil Map Unit Name Princeton fine sandy loam				NWI classif	fication: N/A	
Are climatic/hydrologic conditions on the site typical for this t	time of year	r? Yes	X No	(If no, explain Re	marks.)	
Are Vegetation , Soil or Hydrology signi		_		Normal Circumstances" p		No:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in		
SUMMARY OF FINDINGS - Attach site map showing					,	
Hydrophytic Vegetation Present? Yes X No						
Hydric Soils Present? Yes X No		ls t	he Sample	d Area		
Wetland Hydrology Present? Yes X No		wit	hin a Wetla	ind? Yes	X No	
Remarks Data point is located on hillside approximately 72	2 feet eat o	f SR 37.				
VEGETATION - Use scientific names of plants						
Total Ottal and (Plot Size), 201 radius		Dominant	_	Dominance Test wor	ksheet:	
Tree Stratum (Plot Size: 30' radius)	% Cover	Species?	Status	Number of Dominant S		(4)
1	_			That Are OBL, FACW,		(A)
2. 3.				Total Number of Domi Species Across All Str		(B)
4.				Percent of Dominant S		_ (-/
5.				That are OBL, FACW,		(A/B)
	0	= Total Cov	/er			
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index wo		
1				Total % Cover o		
2				·	$ \begin{array}{ccc} 20 & x & 1 & = & 20 \\ 75 & x & 2 & = & 150 \end{array} $	
3				FAC species	$\frac{70}{0}$ $x = \frac{100}{0}$	
4				FACU species	5 x 4 = 20	<u> </u>
5	0	= Total Cov	/er	UPL species	0 x 5 = 0	
Herb Stratum (Plot Size: 5' radius)		- 10101 00		Column Totals: 1	00 (A) 190	(B)
1. Phalaris arundinacea	60	Yes	FACW	Prevalence Ind	ex = B/A = 1.90	
2. Impatiens capensis	15	No	FACW	Herdman bestie Vanatati	ion Indicators	
3. Eupatorium perfoliatum	15	No	OBL	Hydrophytic Vegetati		
4. Solidago canadensis	5	No	FACU	2-Dominance Test	ydrophytic Vegetation:	
5. Carex lurida	5	No	OBL	3-Prevalence Index		
6.					daptations (Provide su	pporting
7.					r on a separate sheet)	
8a				I —	phytic Vegetation ¹ (Exp	
9. 10.				¹ Indicators of hydric so be present, unless dis	oil and wetland hydrolog turbed or problematic	y must
	100	= Total Cov	/er	be precent, amose ale	- Idibod of problematic	
Vine Stratum (Plot Size: 30' radius)				Headman bearing		
1				Hydrophytic Vegetation		
2					es <u>X</u> No	_
	0	= Total Cov	/er			
Remarks: (Include photo numbers here or on a separate sl	heet.)					

SOIL Sampling Point HB05A-1W1

Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR3/1	100					clay loam	
3-20	10YR4/1	80	10YR5/6	20	С	М	clay loam	
ydric So Histosco Histic E Black H Hydrog Stratifie 2 cm M Deplete	Concentration, D= De il Indiactors: I (A1) Epipedon (A2) Ilistic (A3) En Sulfide (A4) Ed Layers (A5) Ed Below Dark Surface Eark Surface (A12)		Sand Sand Stripl Loam Loam Deple Redo	CS=Cove Ily Gleyed Note of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the cont	Matrix (S4) S5) (S6) Mineral (F1) Matrix (F2) (F3) rface (F6))	Indiac Coa Dan Iror Ver Oth	pocation: PL=Pore Lining, M=Matrix ctors for Problematic Hydric Soils ast Prairie Redox (A16) rk Surface (S7) n-Manganese Masses (F12) ry Shallow Dark Surface (TF12) ner Soil (Explain in Remarks) cators of hydrophytic vegetation and
Sandy	Mucky Mineral (S1) uck Peat or Peat (S3)		ox Depress	`	<i>(</i>)		and hydrology must be present, unless disturbed or problematic.
strictive	Layer (If observed):							
Type:								
Depth (i	nches):						Hydric So	il present? Yes X No
Depth (i							Hydric So	il present? Yes X No
Depth (i	·GY ydrology Indicators		quired: check all that	t apply)				
Depth (i emarks: DROLC Vetland Herimary Incimary Incimary	GY lydrology Indicators dicators (minimum of				was (BQ)		Seco	ndary Indicators (minimum of two requ
DROLC Jetland Herimary Inc. Surface	ydrology Indicators dicators (minimum of water (A1)		Water St	tained Lea	` '		<u>Seco</u> l	ndary Indicators (minimum of two requ urface Soil Cracks (B6)
DROLO Petland Hrimary Inc. Surface High W	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water St	tained Lea Fauna (B1	3)		<u>Seco</u> l	ndary Indicators (minimum of two requ urface Soil Cracks (B6) ainage Patterns (B10)
DROLO Tetland Hrimary Inc. Surface High W Saturat	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water Si Aquatic True Aqu	tained Lea	3) s (B14)		<u>Seco</u> Su Dr Dr	ndary Indicators (minimum of two requ urface Soil Cracks (B6)
DROLO DROLO Vetland H rimary Inc Surface High W Saturat Water I	lydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3)		Water Si Aquatic True Aqu Hydroge Oxidized	tained Lea Fauna (B1 uatic Plant n Sulfide C I Rhizosph	3) s (B14) Odor (C1) eres on Liv		Secoi Su Dr Dr Dr X Cr	ndary Indicators (minimum of two requ urface Soil Cracks (B6) rainage Patterns (B10) y-Season Water Table (C2)
DROLO Petland Hrimary Inc Surface High W Saturat Water I Sedime Drift De	ydrology Indicators dicators (minimum of water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)		Water Si Aquatic True Aqu Hydroge Oxidized Presenc	tained Lea Fauna (B1 uatic Plants n Sulfide C I Rhizosph e of Reduc	3) s (B14) Odor (C1) eres on Liv ced Iron (C	4)	Secon	ndary Indicators (minimum of two requ urface Soil Cracks (B6) ainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1)
DROLO Tetland Hrimary Inc Surface High W Saturat Water I Sedime Drift De Algal M	ydrology Indicators dicators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4)		Water Si Aquatic True Aqu Hydroge Oxidized Presenc Recent I	tained Lear Fauna (B1 uatic Plants on Sulfide C I Rhizosph e of Reduction Reduc	3) s (B14) Odor (C1) eres on Lived Iron (C	4)	Secon	ndary Indicators (minimum of two requ urface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1) eomorphic Postion (D2)
DROLO Vetland Hrimary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De	ydrology Indicators dicators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) ant Deposits (B2) aposits (B3) at or Crust (B4) posits (B5)	one is re	Water Si Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu	tained Lear Fauna (B1: uatic Plants n Sulfide C I Rhizosph e of Reduct ron Reduct	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille	4)	Secon	ndary Indicators (minimum of two requ urface Soil Cracks (B6) ainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1)
DROLO Petland H Imary In Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundar	ydrology Indicators dicators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4)	one is rec	Water Si Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mut B7) Gauge o	tained Lear Fauna (B1 uatic Plants on Sulfide C I Rhizosph e of Reduction Reduc	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	Secon	ndary Indicators (minimum of two requ urface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1) eomorphic Postion (D2)
DROLO Vetland Hrimary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundar Sparse	ydrology Indicators dicators (minimum of wWater (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is rec	Water Si Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mut B7) Gauge o	tained Lear Fauna (B1: uatic Plants on Sulfide C d Rhizosph e of Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	Secon	ndary Indicators (minimum of two requ urface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1) eomorphic Postion (D2)
DROLO Vetland H rimary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundar Sparse Veld Observations	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial by Vegetated Concave	magery (Water Si Aquatic i True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) No X Depth	tained Lear Fauna (B1: uatic Plants In Sulfide C I Rhizosph e of Reduc ron Reduc ck Surface or Well Data xplain in R	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) emarks)	4)	Secon Su Dr X Cr s (C3) Sa Sti S6) X Ge	ndary Indicators (minimum of two requirface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C9) unted or Stressed Plants (D1) ecomorphic Postion (D2)
Depth (i emarks: DROLC Vetland H rimary Inc Surface High W Saturat Vater I Sedime Drift De Algal M Iron De Inundar Sparse ield Obse	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial by Vegetated Concave	magery (Water Si Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) Other (E	tained Lear Fauna (B1: uatic Plants In Sulfide C I Rhizosph e of Reduc ron Reduc ck Surface or Well Data xplain in R (inches):	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	Secon Su Dr X Cr s (C3) Sa Sti S6) X Ge	ndary Indicators (minimum of two requirface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C9) unted or Stressed Plants (D1) ecomorphic Postion (D2)
DROLO Vetland H rimary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse eld Obse urface W vater Tab aturation includes o	ydrology Indicators dicators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial dy Vegetated Concave ervations: ater Present? Present? Ye apillary fringe)	magery (ee Surface	Water Si Aquatic Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) Other (E	tained Lear Fauna (B1: uatic Plants in Sulfide C I Rhizosph e of Reduct ron Reduct ck Surface or Well Data xplain in R i (inches): i (inches): i (inches):	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (C	Secon	ndary Indicators (minimum of two requirface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1) ecomorphic Postion (D2) AC-Neutral Test (D5)
DROLO Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundar Sparse eld Obse urface W dater Tab aturation includes o	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I by Vegetated Concave ervations: ater Present? Present? Ye Present?	magery (ee Surface	Water Si Aquatic Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) Other (E	tained Lear Fauna (B1: uatic Plants in Sulfide C I Rhizosph e of Reduct ron Reduct ck Surface or Well Data xplain in R i (inches): i (inches): i (inches):	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (C	Secon	ndary Indicators (minimum of two requ urface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1) eomorphic Postion (D2) AC-Neutral Test (D5)
DROLO Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundar Sparse eld Obse urface W dater Tab aturation includes o	ydrology Indicators dicators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial dy Vegetated Concave ervations: ater Present? Present? Ye apillary fringe)	magery (ee Surface	Water Si Aquatic Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) Other (E	tained Lear Fauna (B1: uatic Plants in Sulfide C I Rhizosph e of Reduct ron Reduct ck Surface or Well Data xplain in R i (inches): i (inches): i (inches):	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (C	Secon	ndary Indicators (minimum of two requirface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) rayfish Burrows (C8) aturation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1) ecomorphic Postion (D2) AC-Neutral Test (D5)

Project/Site: I-69 Section 6 Wetland S6W068A		City/County	: Morgan	Sampling Date: 04/05/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point HB02A-1D1
Investigator(s): R. Yeager, B. Reust		Section, To	wnship, Rai	nge: SEC 8, T12N, R2E
Landform (hillslope, terrace, etc.): floodplain			Local reli	ef (concave, convex, none): flat
Slope (%): 2% Lat: 39.500192	L	.ong: <u>-86.3</u>	3546	Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam	<u>.</u>			NWI classification: upland
Are climatic/hydrologic conditions on the site typical for this tim	e of year	? Yes	X No	(If no, explain Remarks.)
Are Vegetation , Soil or Hydrology significa	antly distu	urbed?	Are "N	Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology natural	lly proble	matic?	If nee	ded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing			ocations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No				
l '	X		ne Sampleo nin a Wetla	
Wetland Hydrology Present? Yes No	X	*****	iii a wala	103 NO
Remarks				
VEGETATION - Use scientific names of plants				
	Absolute	Dominant	Indicator	Dominance Test worksheet:
		Species?	Status	Number of Dominant Species
1. Acer negundo	30	Yes	FAC	That Are OBL, FACW, or FAC: 5 (A)
2. Acer saccharinum 3. Juniperus virginiana	50	Yes	FACU FACU	Total Number of Dominant
-			1700	Species Across All Strata: 5 (B)
4. 5.				Percent of Dominant Species That are OBL, FACW, or FAC: 100 (A/B)
<u> </u>	85 =	= Total Cov	er	(*=
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index worksheet:
1. Acer negundo	5	Yes	FAC	Total % Cover of: Multiply by:
2. Acer saccharinum	5	Yes	FACW	OBL species 0 x 1 = 0
3				FACW species 121 x 2 = 242 FAC species 36 x 3 = 108
4				FAC species 36 x 3 = 108 FACU species 15 x 4 = 60
5				UPL species $5 \times 5 = 25$
Herb Stratum (Plot Size: 5' radius)	10 :	= Total Cov	er	Column Totals: 177 (A) 435 (B)
1. Elymus riparius	65	Yes	FACW	Prevalence Index = B/A = 2.46
2. Viola sp.	5		UPL	
3. Stellaria media	5		FACU	Hydrophytic Vegetation Indicators:
4. Galium aparine	5		FACU	1-Rapid Test for Hydrophytic Vegetation:
5. Laportea canadensis	1		FACW	X 2-Dominance Test is >50% X 3-Prevalence Index is <=3
6. Alliaria petiolata	1		FAC	4-Morphological Adaptations (Provide supporting
7				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
10	82 =	= Total Cov	er	be present, unless disturbed of problematic
Vine Stratum (Plot Size: 30' radius)				
1				Hydrophytic Vegetation
2				Present? Yes X No
	0 =	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate sheet	et.)		•	

SOIL Sampling Point HB02A-1D1

Depth (Inches)	Matrix Color (moist)	%	Red Color (moist)	%	Type ¹	Loc ²	Text	ure		Rema	rks	
0-3	10YR4/2	100	,				silt lo					
3-15	10YR4/3	100				 -	silt lo					
0 .0						 -	0					
						 -						
					-							
Type: C=C	Concentration, D= De	pletion, RM	M=Reduced Matrix,	CS=Cove	red or Coa	ted Sand	Grains.	² Loca	ation: PL=	Pore Lining	, M=Matri	<
lydric Soi	I Indiactors:							Indiacto	rs for Pro	blematic H	ydric Soi	s 3
Histoso	I (A1)		Sandy	Gleved I	Matrix (S4)					edox (A16)		
_	pipedon (A2)			Redox (Surface (S			
	istic (A3)			ed Matrix						Masses (I	- 12)	
_	en Sulfide (A4)				Nineral (F1)				ark Surface		
-	d Layers (A5)				Matrix (F2)			Other	Soil (Expl	ain in Rema	ırks)	
2 cm M	uck (A10)		Deple	ted Matrix	k (F3)			_				
Deplete	d Below Dark Surfac	e (A11)	Redox	Dark Su	rface (F6)							
_	ark Surface (A12)				Surface (F	7)				rophytic ve		
_	Mucky Mineral (S1)		Redox	Depress	sions (F8)			wetland		must be pr		ess
_	uck Peat or Peat (S3	,							4.014.00	2 0. p. 00.00.		
actrictiva	Layer (If observed)											
	, ,											
Type:							Hyd	dric Soil i	oresent?	Yes	N	0
							Hyd	dric Soil _I	oresent?	Yes	N	o <u> </u>
Type:	nches):						Hyd	dric Soil _I	oresent?	Yes	N	o <u> </u>
Type:	nches):						Hyd	dric Soil _I	oresent?	Yes	N	o
Type:	GY ydrology Indicators		uired: check all that	apply)			Hyd					
Type:	GY ydrology Indicators				(D0)		Hyd	Second	ary Indicat	ors (minimu		
Type: Depth (ir emarks:	GY ydrology Indicators dicators (minimum of		Water Sta	ained Lea	` '		Hyd	Second Surfa	ary Indicat	ors (minimu acks (B6)		
Type: Depth (in permarks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F	ained Lea auna (B1	3)		Hyd	Second Surfa Drair	ary Indicat ace Soil Cr nage Patte	ors (minimu acks (B6) rns (B10)	ım of two	
Type: Depth (ir emarks: //DROLO Vetland H Primary Inc. Surface High W: Saturati	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3)		Water Sta Aquatic F True Aqu	ained Lea auna (B1 atic Plant	3) s (B14)		Hyd	Second Surfa Drair Dry-S	ary Indicat ace Soil Cr nage Patte Season Wa	ors (minimu racks (B6) rns (B10) ater Table (ım of two	
Type: Depth (ir emarks: /DROLO Vetland H Primary Inc. Surface High Water N Water N	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water Sta Aquatic F True Aqu Hydroger	ained Lea auna (B1 atic Plant Sulfide (3) s (B14) Odor (C1)	vina Roots		Second Surfa Drair Dry-S Cray	ary Indicat ace Soil Cr nage Patte Season Wa fish Burrov	ors (minimu acks (B6) rns (B10) ater Table (v	om of two	requii
Type: Depth (ir emarks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		Water Sta Aquatic F True Aqu Hydroger Oxidized	ained Lea auna (B1 atic Plant Sulfide (Rhizosph	3) s (B14)	•		Second Surfa Drair Dry-S Cray Satu	ary Indicat ace Soil Cr nage Patte Season Wa fish Burrov ration Visil	ors (minimu racks (B6) rns (B10) ater Table (om of two	requii
Type: Depth (ir emarks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water State Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc	3) s (B14) Odor (C1) neres on Li	4)	s (C3)	Second Surfa Drair Dry-S Cray Satu Stun	ary Indicat ace Soil Cr nage Patte Season Wa fish Burrov ration Visit ted or Stre	ors (minimu acks (B6) rns (B10) ater Table (vs (C8) oile on Aeria	om of two	requii
Type: Depth (ir emarks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)		Water State Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc	3) s (B14) Odor (C1) neres on Lir ced Iron (C	4)	s (C3)	Second Surfa Drair Dry-S Cray Satu Stun Geor	ary Indicat ace Soil Cr nage Patte Season Wa fish Burrov ration Visit ted or Stre	ors (minimu acks (B6) rns (B10) ater Table (vs (C8) oile on Aeria ssed Plants ostion (D2)	om of two	requii
Type: Depth (ir emarks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	one is requ	Water State Aquatic For True Aquestic For True Aquestic For Oxidized Presence Recent Iru Thin Muc	ained Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc on Reduc k Surface	3) SS (B14) Odor (C1) Deres on Liced Iron (Cetion in Tille	4)	s (C3)	Second Surfa Drair Dry-S Cray Satu Stun Geor	ary Indicat ace Soil Cr nage Patte Season Wa fish Burrov ration Visil ted or Stre norphic Po	ors (minimu acks (B6) rns (B10) ater Table (vs (C8) oile on Aeria ssed Plants ostion (D2)	om of two	requii
Type: Depth (in permarks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is requ	Water State Aquatic For True Aquestic For True Aquestic For Consider Agreement For Thin Muces For Tour Gauge or For True Aquatic For True Aquatic For For For For For For For For For For	nained Lea fauna (B1 atic Plant Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat	3) Is (B14) Odor (C1) Ineres on Liticed Iron (C Stion in Tille (C7) a (D9)	4)	s (C3)	Second Surfa Drair Dry-S Cray Satu Stun Geor	ary Indicat ace Soil Cr nage Patte Season Wa fish Burrov ration Visil ted or Stre norphic Po	ors (minimu acks (B6) rns (B10) ater Table (vs (C8) oile on Aeria ssed Plants ostion (D2)	om of two	requii
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Project/Site: I-69 Section 6 Wetland S6W068A		City/County	: Morgan	Sampling Date: 04/05/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana Sampling Point HB02A-1W1
Investigator(s): R. Yeager, B. Reust		Section, To	wnship, Ra	nge: SEC 8, T12N, R2E
Landform (hillslope, terrace, etc.): flat			Local reli	ef (concave, convex, none): flat
Slope (%): 0-1 Lat: 39.500116	L	.ong: <u>-86.3</u>	3523	Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam	_			NWI classification: PFO1
Are climatic/hydrologic conditions on the site typical for this	time of year	? Yes	X No	(If no, explain Remarks.)
Are Vegetation, Soil or Hydrologysign	ificantly dist	urbed?	Are "N	Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology nat	urally proble	matic?	If nee	ded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showi	ng sampli	ng point l	ocations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soils Present? Yes No Wetland Hydrology Present? Yes X No	X		ne Sample nin a Wetla	
Remarks				
VEGETATION - Use scientific names of plants				
Tree Stratum (Plot Size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Acer negundo	10	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)
2. Acer saccharinum	70	Yes	FACW	Total Number of Dominant
3. Populus deltoides		Yes	FAC	Species Across All Strata: 7 (B)
4				Percent of Dominant Species
5	90	= Total Cov		That are OBL, FACW, or FAC: 86 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	90	= 10tal C0V	Ci	Prevalence Index worksheet:
1. Acer saccharinum	15	Yes	FACW	Total % Cover of: Multiply by:
2.				OBL species 0 x 1 = 0
3				FACW species 100 x 2 = 200 FAC species 45 x 3 = 135
4				FAC species45 x 3 =135 FACU species 5 x 4 =20
5		Total Cov		UPL species 0 x 5 = 0
Herb Stratum (Plot Size: 5' radius)	15	= Total Cov	еі	Column Totals: <u>150</u> (A) <u>355</u> (B)
1. Symphyotrichum lanceolatum	25	Yes	FAC	Prevalence Index = B/A =2.37
2. Elymus riparius	15	Yes	FACW	Living why sie Veresteien Indicators
3				Hydrophytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation:
4				X 2-Dominance Test is >50%
5.				$\frac{x}{x}$ 3-Prevalence Index is <=3
6. 7.				4-Morphological Adaptations (Provide supporting
8.				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
9.				1 Indicators of hydric soil and wetland hydrology must
10				be present, unless disturbed or problematic
(5) (6)	40	= Total Cov	er	
Vine Stratum (Plot Size: 30' radius) 1. Campsis radicans	5	Yes		Hydrophytic Vegetation
2	5	= Total Cov	 er	Present? Yes X No No
Demontos (Includo phata acceptant have been a		10101000	~ .	
Remarks: (Include photo numbers here or on a separate s	ыоо <i>ы</i>			

SOIL Sampling Point HB02A-1W1

Depth (Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc 2	Toytur		Remarks		
0-6	10YR4/2	100	Color (moist)		Туре	LOC -	Textur silty clay l		Remarks		
6-12	10YR4/3	100					silty clay				
12-20	10YR4/3	100					silty clay				
12 20	10111112										
7.	Concentration, D= De	pletion, RM	=Reduced Matrix,	CS=Cover	red or Coa	ted Sand			.=Pore Lining, M=		3
Histoso	I (A1)		Sandy	Gleved M	1atrix (S4)			Coast Prairie F	_		
	pipedon (A2)			Redox (S				Dark Surface (
	istic (A3)			ed Matrix			_	_	se Masses (F12)	
	en Sulfide (A4)				lineral (F1)		Very Shallow [Dark Surface (TF	12)	
Stratifie	d Layers (A5)		Loam	Gleyed N	Лatrix (F2)			Other Soil (Exp	plain in Remarks)	
	uck (A10)			ted Matrix	. ,						
	d Below Dark Surfac	e (A11)		Dark Sur		_,	2				
	ark Surface (A12)				Surface (F	7)			ydrophytic vegeta gy must be prese		
	Mucky Mineral (S1) uck Peat or Peat (S3	1	Redox	Depressi	ons (F8)			, ,	ed or problemation		
	,	,							-		
	Layer (If observed)	i									
Type:											
Type: Depth (in emarks:	nches):						Hydri	ic Soil present?	? Yes	No _	X
Depth (ii emarks:							Hydri	ic Soil present?	? Yes	No _	X
Depth (in emarks:	GY	:					Hydri	ic Soil present?	P Yes	No _	<u>x</u>
Depth (in emarks:			red; check all that	apply)					Yes		
Depth (in emarks: YDROLO Wetland H Primary Inc	GY ydrology Indicators licators (minimum of				ves (B9)			Secondary Indica	ators (minimum d		X
Depth (in emarks: YDROLO Wetland H Primary Inc. X Surface	GY ydrology Indicators dicators (minimum of Water (A1)		X Water Sta		` '				ators (minimum o		
Depth (in emarks: YDROLO Wetland H Primary Inc. X Surface	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		X Water Sta Aquatic F	ained Leav	3)			Secondary Indica _ Surface Soil (_ Drainage Patt	ators (minimum o		
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Project/Site: I-69 Section 6 Wetland S6W070A	C	ity/County:	Morgan	Sampling Date: 9/21/2016
Applicant/Owner: INDOT/HNTB				State: Indiana Sampling Point NT04A-1D1
Investigator(s): R. Connolly, A. Grisel	S	ection, Tow	nship, Rar	nge: Sec 4-T12N-R2E
Landform (hillslope, terrace, etc.): roadside			Local relie	ef (concave, convex, none): convex
Slope (%): 0-2 Lat: 39.507746	Lo	ng: -86.32	1828	Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam				NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this ti	me of year?	Yes	X No	(If no, explain Remarks.)
Are Vegetation, Soil or Hydrologysignif	-			lormal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology nature				ded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin				
Hydrophytic Vegetation Present? Yes No	X			
Hydric Soils Present? Yes No	X	Is the	e Sampled	Area
Wetland Hydrology Present? Yes No	Х	withi	in a Wetlar	nd? Yes NoX
Remarks		•		
VEGETATION - Use scientific names of plants				
Tree Stratum (Plot Size:)	Absolute E % Cover S		ndicator Status	Dominance Test worksheet:
1		•	Otatao	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That are OBL, FACW, or FAC: 33 (A/B)
Capling/Chruh Stratum (Plot Siza:	0 =	Total Cove	er	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot Size:)				Total % Cover of: Multiply by:
1. 2.				OBL species $0 \times 1 = 0$
3.				FACW species $0 x 2 = 0$
4.				FAC species 20 x 3 = 60
5				FACU species 80 x 4 = 320 UPL species 0 x 5 = 0
	0 =	Total Cove	er	Column Totals: 100 (A) 380 (B)
Herb Stratum (Plot Size:)	40	.,	E4 011	· · ·· · ··
Trifolium repens Schedonorus arundinaceus	40	Yes Yes	FACU FACU	Prevalence Index = B/A = 3.80
3. Plantago major	20	Yes	FAC	Hydrophytic Vegetation Indicators:
4.		100	17.0	1-Rapid Test for Hydrophytic Vegetation:
5.				2-Dominance Test is >50%
6.				3-Prevalence Index is <=\$ 4-Morphological Adaptation\$ (Provide supporting
7				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9				¹ Indicators of hydric soil and wetland hydrology must
10				be present, unless disturbed or problematic
Vine Stratum (Plot Size:	100 =	Total Cove	er	
<u> </u>				Hydrophytic
1. 2.			-	Vegetation Present? Yes No _X
		Total Cove	er	
Remarks: (Include photo numbers here or on a separate sh	eet.)			
The state of the separate of the separate of	,			

SOIL Sampling Point NT04A-1D1

Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Company Comp	(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ture		Remarks	
Secondary Indicators Surface (A11) Sandy Reduced Matrix, CS=Covered or Costed Sand Grains. 2 Location: PL=Pore Lining, M=Matrix (Soli Indiactors: Indiactors for Problematic Hydric Soli Indiactors: Indiactors for Problematic Hydric Soli Indiactors: Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Problematic Hydric Soli Indiactors for Hydrophytic vegetation.	0-5	10YR3/2		`								
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Black Histic (A3)	-	· ,										
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Stratified Layers (A5) 2 cm Muck (A10) Depleted Bow Dark Surface (A11) Per Bown Surface (A12) Sandy Mucky Mineral (S1) Som Muck Peat or Peat (S3) Strictive Layer (If observed): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): De		` '					1					
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Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Som Muck Peat or Peat (S3) Strictive Layer (If observed): Type: Depth (inches): Type: Depth (inches): Mydric Soil present? Water Stained Leaves (B9) Saturation Visible on Aerial Imagery (B7) Sediment Visible Present? Water Table (A2) Drift Deposits (B3) Presence of Reduced Iron (C4) Reduced Iron Reduction in Tilled Soils (C6) Iron Deposits (B3) Presence Of Reduced Iron Reduction in Tilled Soils (C6) Iron Deposits (B3) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Depth (inches): Depth (inches): Mydric Soil present? Water Ash (A3) Secondary Indicators (minimum of two interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting interesting		, ,	e (A11)			. ,						
Sandy Mucky Mineral (S1)	-		(,)	_			7)		³ Indica	ators of hyd	Irophytic vegeta	ation and
strictive Layer (If observed): Type: Depth (inches): Imarks: Page	•						,			d hydrology	must be prese	ent, unless
Type:	-		5)	_		,				disturbed	d or problemati	C.
Depth (inches):	strictive	Layer (If observed)	:									
PROLOGY Setland Hydrology Indicators: Imary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Stained Leaves (B9) High Water Table (A2) Saturation (A3) Water Stained Leaves (B9) For Aquatic Fauna (B13) Saturation (A3) Secondary Indicators (minimum of two surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Seturation Visible on Aerial Imagery Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Postion (D2) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Set Observations: Intrace Water Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturation Present? Yes No X Depth (inches): Inturatio	_											
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Surface Water (A1)	Depth (ir							Hye	dric Soil	present?	Yes	No _
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Saturation (A3)	Depth (in marks:	GY ydrology Indicators		ired; check all that	apply)			Нус				
Water Marks (B1)	Depth (ir marks: DROLO etland H imary Inc	GY ydrology Indicators dicators (minimum of				ves (B9)		Нус	Second	lary Indicat	tors (minimum o	
Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Sparsely Vegetated Concave Surface (B8) Determined Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present? The surface Water Present Present? The surface Water Present? The surface Water Present Presen	Depth (ir marks: DROLO etland H imary Inc. Surface	GY ydrology Indicators dicators (minimum of		Water St	ained Lea			Hyd	Second	lary Indicat	tors (minimum oracks (B6)	
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Iron Deposits (B5)	DROLO Vetland H rimary Inc Surface High Wal Saturati Water N	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)		Water St Aquatic F True Aqu Hydroger	ained Lea Fauna (B1 natic Plant n Sulfide (3) s (B14) Odor (C1)	ving Roots		Second Surf Drai Dry- Cray	lary Indicat ace Soil Cr nage Patte Season Wa	tors (minimum oracks (B6) erns (B10) ater Table (C2) ws (C8)	of two requ
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Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Concave Surface (B8) Other (Explain in Remarks)	DROLO Vetland H rimary Inc Surface High Water M Sedime Drift De Algal M	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water St Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea Fauna (B1 latic Plant Sulfide (Rhizosph of Reduct on Reduct	3) s (B14) Odor (C1) eres on Lived Iron (C	(4)	s (C3)	Second Surf Drai Dry- Cray Satu Stur	dary Indicate ace Soil Cranage Patte Season Warfish Burrowartion Visil ated or Streemorphic Po	tors (minimum oracks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial In essed Plants (Dostion (D2)	of two requ
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	DROLO Petland H rimary Inc Surface High Water N Sedime Drift De Algal M Iron De Inundat Sparsel Peld Obse	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) fon (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations:	one is requi	Water St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gauge o Other (E:	ained Lea Fauna (B1 latic Plant n Sulfide (Rhizosph e of Reduc on Reduc sk Surface r Well Data kplain in R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	(4)	s (C3)	Second Surf Drai Dry- Cray Satu Stur	dary Indicate ace Soil Cranage Patte Season Warfish Burrowartion Visil ated or Streemorphic Po	tors (minimum oracks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial In essed Plants (Dostion (D2)	of two requ
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marks:	DROLO etland H imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse urface Wa ater Tabl ituration cludes c	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Present? Apillary fringe)	Imagery (B7 e Surface (E	Water St Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gauge o Other (E: No X Depth No X Depth No X Depth	ained Lea Fauna (B1 latic Plant of Sulfide (Rhizosph e of Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (C	s (C3) C6)	Second Surf Drai Dry- Cray Satu Stur Geo FAC	lary Indicat ace Soil Cr nage Patte Season Wa fish Burrov Iration Visil ated or Stre morphic Po	tors (minimum of racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial In essed Plants (Dostion (D2) est (D5)	nagery (C
nano.	Depth (ir marks: DROLO etland H imary Inc Surface High W: Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Obse arface Wa ater Tabl aturation cludes c scribe Re	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Present? Apillary fringe)	Imagery (B7 e Surface (E	Water St Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gauge o Other (E: No X Depth No X Depth No X Depth	ained Lea Fauna (B1 latic Plant of Sulfide (Rhizosph e of Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	ed Soils (C	s (C3) C6)	Second Surf Drai Dry- Cray Satu Stur Geo FAC	lary Indicat ace Soil Cr nage Patte Season Wa fish Burrov Iration Visil ated or Stre morphic Po	tors (minimum of racks (B6) erns (B10) ater Table (C2) ws (C8) bile on Aerial In essed Plants (Dostion (D2) est (D5)	nagery (C

Project/Site: I-69 Section 6 Wetland S6W070A		City/Count	y: Morgan		Sampling Date: 9/21/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point NT04A-1W1
Investigator(s): R. Connolly, A. Grisel		Section, To	ownship, Ra	nge: Sec 4-T12N-R2E	
Landform (hillslope, terrace, etc.): roadside			Local reli	ef (concave, convex, no	ne): concave
Slope (%): 0-2 Lat: 39.507771	L	_ong: -86.	321731		Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam				NWI classit	fication: N/A
Are climatic/hydrologic conditions on the site typical for this t	ime of year	r? Yes	X No	(If no, explain Re	marks.)
Are Vegetation , Soil or Hydrology signit		-			oresent? Yes X No:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showing					
Hydrophytic Vegetation Present? Yes X No					
Hydric Soils Present? Yes X No			he Sample		
Wetland Hydrology Present? Yes X No		wit	hin a Wetla	nd? Yes	X No
Remarks Data point is located approximately 64 feet off of	SR 37.				
VEGETATION - Use scientific names of plants					
Tree Stratum (Plot Size: 30' radius)		Dominant Species?		Dominance Test wor	ksheet:
1	70 0010.	орос.ос.	Ciaiao	Number of Dominant S That Are OBL, FACW,	
2.				Total Number of Domi	 -
3.				Species Across All Str	
4				Percent of Dominant S	
5				That are OBL, FACW,	or FAC: 100 (A/B)
Carlia (Charle Charles / Diet Size: 15' redius	0	= Total Co	ver	Prevalence Index wo	 orksheet:
Sapling/Shrub Stratum (Plot Size: 15' radius)				Total % Cover o	
1				OBL species	$\frac{1}{5} x = 5$
2. 3.					85 x 2 = 170
4.				FAC species	0 x 3 = 0
5.				FACU species	5 x 4 = 20
	0	= Total Co	ver	UPL species Column Totals:	$ \begin{array}{c} 0 & x 5 = 0 \\ 95 & (A) & 195 & (B) \end{array} $
Herb Stratum (Plot Size: 5' radius)					
1. Phalaris arundinacea	30	Yes	FACW	Prevalence Ind	ex = B/A = 2.05
Impatiens capensis Mentha arvensis	30	Yes	FACW	Hydrophytic Vegetat	ion Indicators:
inventina arvensis Cyperus esculentus	15 10	No No	FACW FACW	1-Rapid Test for H	ydrophytic Vegetation:
5. Eupatorium perfoliatum	5	No	OBL	X 2-Dominance Test	is >50%
6. Cirsium arvense	5	No	FACU	X 3-Prevalence Index	
7.					daptations (Provide supporting ron a separate sheet)
8.					phytic Vegetation ¹ (Explain)
9				1Indicators of hydric so	oil and wetland hydrology must
10				be present, unless dis	
Vi Oi i (Dist Circa 20) redice	95	= Total Co	ver		
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1				Vegetation Present?	es X No
2	0	= Total Co	ver		
Pomorko: (Includo photo numboro haza az an a conserta sh					
Remarks: (Include photo numbers here or on a separate sh	ieet.)				

SOIL Sampling Point NT04A-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR2/1	100					clay loam	
6-20	10YR4/1	70	10YR4/6	30	С	М	clay loam	
ydric So Histoso Histic E Black H Hydrog	Concentration, D= De il Indiactors: I (A1) ipipedon (A2) listic (A3) en Sulfide (A4) ad Layers (A5)	pletion, F	Sand Sand Stripp Loam	y Gleyed M y Redox (S ped Matrix y Mucky M	Matrix (S4))	Indiac Coa Dar Iror Ver	pocation: PL=Pore Lining, M=Matrix tors for Problematic Hydric Soils ast Prairie Redox (A16) ast Prairie Redox (F12) ast Prairie Redox (F12) ast Prairie Redox (F12) ast Prairie Redox (F12) by Shallow Dark Surface (TF12) are Soil (Explain in Remarks)
2 cm M Deplete Thick D Sandy I 5 cm M	uck (A10) ed Below Dark Surfac eark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3)	Deple Redo Deple	eted Matrix x Dark Su	(F3) rface (F6) Surface (F3		3 India	cators of hydrophytic vegetation and nd hydrology must be present, unless disturbed or problematic.
strictive Type:	Layer (If observed):							
	nches):						Hydric So	il present? Yes X No _
marks:							Hydric So	il present? Yes X No _
DROLO			quired; check all that	apply)				
DROLO etland H imary Ind Surface High W Saturat Water M Sedime Drift De Algal M Iron De Inundat	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)	one is rec	— Water St — Aquatic I — True Aqu — Hydroge — Oxidized — Presence — Recent I — Thin Muc B7) — Gauge o	ained Leave Fauna (B1: Juatic Plants In Sulfide C Rhizospher	3) s (B14) Odor (C1) eres on Lived Iron (C- tion in Tille (C7) a (D9)	4)	Secon	ndary Indicators (minimum of two requ Irface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
DROLO etland H imary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse	ydrology Indicators dicators (minimum of wWater (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is rec	— Water St — Aquatic I — True Aqu — Hydroge — Oxidized — Presence — Recent I — Thin Muc B7) — Gauge o	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduct ron Reduct ck Surface r Well Data	3) s (B14) Odor (C1) eres on Lived Iron (C- tion in Tille (C7) a (D9)	4)	Secon	ndary Indicators (minimum of two requirface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1)
DROLO etland H imary Ind Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsee eld Obse ater Table aturation	ydrology Indicators dicators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	magery (e Surface	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge o (B8) Other (E	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduct ron Reduct ck Surface r Well Data	3) s (B14) Odor (C1) eres on Lived Iron (C- tion in Tille (C7) a (D9)	4) Ad Soils (C	Secon	ndary Indicators (minimum of two requirface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1) eomorphic Postion (D2) .C-Neutral Test (D5)
DROLO etland H imary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse eld Obse urface W ater Table aturation includes c	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I by Vegetated Concave ervations: ater Present? Present? Ye Present?	magery (e Surface	Water St Aquatic I Aquatic I True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge o (B8) Other (E	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduct ron Reduct ck Surface r Well Data xplain in R (inches): (inches):	3) s (B14) Odor (C1) eres on Lived Iron (C- tion in Tille (C7) a (D9) emarks)	4) d Soils (C	Secon	ndary Indicators (minimum of two requ orface Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1) eomorphic Postion (D2) C-Neutral Test (D5)

Project/Site: I-69 Section 6 Wetland S6W071A	Ci	ty/County: Morgar	1	Sampling Date: 9/21/2016
Applicant/Owner: INDOT/HNTB			State: Indiana	Sampling Point NT06A-1D1
Investigator(s): R. Connolly, A. Grisel	Se	ection, Township, I	Range: Sec 4-T12N-R2E	
Landform (hillslope, terrace, etc.): roadside	_	Local r	relief (concave, convex, no	ne): none
Slope (%): 35-82 Lat: 39.510148	Loi	ng: -86.317573		Datum: GCS NAD83
Soil Map Unit Name Berks channery silt loam			NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for the	this time of year?	Yes X No		-
Are Vegetation , Soil or Hydrology				present? Yes X No:
Are Vegetation , Soil or Hydrology			eeded, explain answers in	
<u> </u>				
SUMMARY OF FINDINGS - Attach site map sho	owing sampling	g point location	is, transects, importar	it reatures, etc.
Hydrophytic Vegetation Present? Yes	No X	Is the Samp	aled Area	
Hydric Soils Present? Yes Wetland Hydrology Present? Yes	No X No X	within a We		No X
Remarks Data point is located along a roadside ditch	approximately 16	feet east of SR 37	'.	
VEGETATION - Use scientific names of plants				
<u> </u>	Absolute D	ominant Indicato	r Dominance Test wor	
Tree Stratum (Plot Size:)	% Cover S	species? Status		
1			That Are OBL, FACW	
2.			Total Number of Domi	
3			Species Across All Str	rata: 2 (B)
4			 Percent of Dominant S That are OBL, FACW, 	
5		Total Cover	- That are OBL, FACW,	, or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot Size:	,	Total Cover	Prevalence Index wo	orksheet:
· ·	,		Total % Cover of	of: Multiply by:
1. 2.			OBL species	0 x 1 = 0
3.			FACW species	5 x 2 = 10
4.			FAC species	0 x 3 = 0
5			· · · · · · · · · · · · · · · · · · ·	$ \begin{array}{ccc} 70 & x 4 = & 280 \\ 25 & x 5 = & 125 \end{array} $
	0 =	Total Cover		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Herb Stratum (Plot Size:)			-	 ``
1. Schedonorus arundinaceus	65	Yes FACU	Prevalence Ind	dex = B/A = 4.15
Securigeria varia Urtica dioica	25	Yes UPL	Hydrophytic Vegetat	ion Indicators:
Solidago canadensis	<u>5</u> 	No FACU	1 Donid Toot for II	lydrophytic Vegetation:
		17.00	2-Dominance Test	: is >50%
5			_ 3-Prevalence Inde	
7.				daptations (Provide supporting r on a separate sheet)
8.				phytic Vegetation ¹ (Explain)
9.			-	oil and wetland hydrology must
10			be present, unless dis	
		Total Cover		
Vine Stratum (Plot Size:)			Hydrophytic	
1			Vegetation	/oo Na V
2		Total Carrar	Present?	/es No _X_
	0 =	Total Cover		
Remarks: (Include photo numbers here or on a separa	ite sheet.)			
1				

SOIL Sampling Point NT06A-1D1

O-3 10YR3/2 100 clay loam 3-17 10YR4/4 100 clay loam 17-20 10YR4/6 100 clay loam Type: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: Indicators of Problematic Hydric Soils Coast Prairie Redox (A16) Dark Surface (S3) Stripped Matrix (S4) Dark Surface (S5) Indicators of Problematic Hydric Soils Coast Prairie Redox (A16) Dark Surface (S3) Stripped Matrix (S6) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12) Other Soil (Explain in Remarks) Type: Opeleted Dark Surface (F6) Type: Opeleted Dark Surface (F7) Redox Depressions (F8) Type: Opeletion Dark Surface (F7) Redox Depressions (F8) Hydric Soil present? Yes No Type: No Type: Open Hydric Soil present? Yes No Type: Open Hydric Soil present? Yes No	Color (moist)	Sandy Gleyed M Sandy Redox (S Stripped Matrix (.oamy Mucky M .oamy Gleyed M Depleted Matrix Redox Dark Surf Depleted Dark S	Matrix (S4) (S5) (S6) (Inneral (F1) Matrix (F2) (F3) face (F6) Surface (F7)	(clay loam clay loam clay loam clay loam clay loam 2 Location: PL=Pore Lining, M=Matrix Indiactors for Problematic Hydric Soils Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12) Other Soil (Explain in Remarks) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
107R446	3-17 10YR4/4 100 17-20 10YR4/6 100 Type: C=Concentration, D= Depletion, RM=Reduced Maydric Soil Indiactors: Histosol (A1) SHatic Epipedon (A2) Shack Histic (A3) Shydrogen Sulfide (A4) Stratified Layers (A5) Logon Sulfide (A10) Depleted Below Dark Surface (A11) Rhick Dark Surface (A12) Depleted Below Dark Surface (A12) Shandy Mucky Mineral (S1) Restrictive Layer (If observed): Type: Depth (inches):	Sandy Gleyed M Sandy Redox (S Stripped Matrix (.oamy Mucky M .oamy Gleyed M Depleted Matrix Redox Dark Surf Depleted Dark S	Matrix (S4) (S5) (S6) lineral (F1) Matrix (F2) (F3) face (F6) Surface (F7)		clay loam clay loam clay loam 2 Location: PL=Pore Lining, M=Matrix Indiactors for Problematic Hydric Soils Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12) Other Soil (Explain in Remarks) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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Secondary Indicators (minimum of two red standards) PROLOGY Settland Hydrology Indicators: Imarks:	Strictive Layer (If observed): Type: Depth (inches): marks: DROLOGY				
Type:	Depth (inches):				Hydric Soil present? Yes No _
Depth (inches):	Depth (inches): marks: DROLOGY				Hydric Soil present? Yes No _
PROLOGY Setland Hydrology Indicators: mary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Drainage Patterns (B10) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Bed Observations: Irface Water Present? Yes No X Depth (inches): Ituration Present? Yes No X Depth (inches): Ituration Present? Yes No X Depth (inches): Ituration Present? Yes No X Depth (inches): Ituration Present? Yes No X Depth (inches): Ituration Present? Yes No X Depth (inches): Ituration Fresent? Yes No X Depth (inches): Ituration Fresent? Yes No X Depth (inches): Ituration Fresent? Yes No X Depth (inches): Ituration Fresent? Yes No S Wettland Hydrology Present? Yes No Scribe Recorded Data (Stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLOGY				<u> </u>
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Surface Water (A1)					
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Saturation (A3)	· '		` '		
Water Marks (B1)		•	•		
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visibile on Aerial Imagery (Ca) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Page 1 No	• ,				
Drift Deposits (B3)	• • • • • • • • • • • • • • • • • • • •	•	. ,	a Roots (C	_ ` ` ` `
Algal Mat or Crust (B4)	• • • •	•		•	· —
Iron Deposits (B5)	· ` ` /		` ,		
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scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		epth (inches):		Wetla	nd Hydrology Present? Yes No _
marks:		aerial photos, p	revious insp	ections), if	available:
	marks:				

Project/Site: I-69 Section 6 Wetland S6W071A		City/Count	y: <u>Morgan</u>	Sampling Date: 9/21/2016
Applicant/Owner: INDOT/HNTB				State: Indiana Sampling Point NT06A-1W1
Investigator(s): R. Connolly, A. Grisel		Section, To	ownship, Ra	inge: Sec 4-T12N-R2E
Landform (hillslope, terrace, etc.): roadside			Local reli	ief (concave, convex, none): concave
Slope (%): 35-80 Lat: 39.510142		Long: -86.	- 317649	Datum: GCS NAD83
Soil Map Unit Name Berks channery silt loam		<u> </u>		NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for th	is time of ve	ar? Vas	Y No	
Are Vegetation, Soil or Hydrologysignature		-		Normal Circumstances" present? Yes X No:
				· — —
Are Vegetation, Soil or Hydrologyn				ded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map show	wing samp	ling point	locations,	transects, important features, etc.
	No	lo 4	iha Campla	d Avec
	No		the Sample thin a Wetla	
Wetland Hydrology Present? Yes X	No		ann a wene	163 <u>X</u> 160
Remarks Data point is located alon ga roadside ditch ap	pproximately	31 feet eas	t of SR 37.	
VEGETATION - Use scientific names of plants				
Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table 1 Table	Absolute	e Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot Size: 30' radius)		r Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2		_		Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5		= Total Co		That are OBL, FACW, or FAC:100(A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)		= 10tal C0	vei	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
1. 2.				OBL species 0 x 1 = 0
3.				FACW species 100 x 2 = 200
4.	· · · · · · · · · · · · · · · · · · ·			FAC species 0 x 3 = 0
5				FACU species 0 x 4 = 0 UPL species 0 x 5 = 0
	0	= Total Co	ver	UPL species 0 x 5 = 0 Column Totals: 100 (A) 200 (B)
Herb Stratum (Plot Size: 5' radius)				``
1. Phalaris arundinacea	85	Yes	FACW	Prevalence Index = B/A = 2.00
2. Persicaria pensylvanica	5	No No	FACW	Hydrophytic Vegetation Indicators:
Impatiens capensis Cyperus esculentus	<u>5</u> 5	No No	FACW FACW	1-Rapid Test for Hydrophytic Vegetation:
5.			TACV	2-Dominance Test is >50%
				3-Prevalence Index is <=3
6				4-Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
8.				Problematic Hydrophytic Vegetation ¹ (Explain)
9.				¹Indicators of hydric soil and wetland hydrology must
10				be present, unless disturbed or problematic
	100	= Total Co	ver	
Vine Stratum (Plot Size: 30 radius)				Hydrophytic
1				Vegetation
2				Present? Yes X No
	0	_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate	e sheet.)			

SOIL Sampling Point NT06A-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR3/2	100					clay loam	
4-20	10YR6/1	80	10YR5/6	20	С	М	clay loam	
-	Concentration, D= De	pletion, F		CS=Cove		ted Sand	Indiact	cation: PL=Pore Lining, M=Matrix cors for Problematic Hydric Soils st Prairie Redox (A16)
Histic E	pipedon (A2)			ly Redox (S				Surface (S7)
Black H	listic (A3)		Strip	ped Matrix	(S6)			-Manganese Masses (F12)
	en Sulfide (A4)			ny Mucky N	•	•		/ Shallow Dark Surface (TF12)
	ed Layers (A5)			ny Gleyed I	, ,		Othe	er Soil (Explain in Remarks)
-	uck (A10)	- (0.44)		eted Matrix				
	ed Below Dark Surfac	e (A11)		ox Dark Sui	, ,	7)	3 India	eators of hydrophytic vegetation and
	ark Surface (A12) Mucky Mineral (S1)			eted Dark S ox Depress	,	<i>(</i>)		ators of hydrophytic vegetation and nd hydrology must be present, unless
-	uck Peat or Peat (S3)	Nedd	v nehiess	110113 (ITO)			disturbed or problematic.
	Layer (If observed):							
	, (5.250. 150).							
Type:								
Depth (i	nches):						Hydric Soil	I present? Yes X No
Type:							Hydric Soil	I present? Yes X No
Depth (imarks:	·GY ydrology Indicators						Hydric Soil	I present? Yes X No
Depth (imarks:	GY		quired; check all that	t apply)				
DROLO etland H imary Ind Surface	ydrology Indicators dicators (minimum of water (A1)		Water St	tained Lea	` '		Secon Sur	dary Indicators (minimum of two requ
DROLO etland H imary Inc Surface High W	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water St	tained Lea Fauna (B1	3)		<u>Secon</u> Sur Dra	dary Indicators (minimum of two requiface Soil Cracks (B6) ninage Patterns (B10)
DROLO etland H imary Inc Surface High W Saturat	lydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3)		Water Si Aquatic True Aqu	tained Lear Fauna (B1: uatic Plants	3) s (B14)		Secon Sur Dra Dry	dary Indicators (minimum of two requ face Soil Cracks (B6) ainage Patterns (B10) -Season Water Table (C2)
DROLO etland H imary Inc Surface High W Saturat Water I	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water Si Aquatic True Aqu Hydroge	tained Lear Fauna (B1: uatic Plants n Sulfide C	3) s (B14) Odor (C1)	ving Roots	Secon Sur Dra Dry Cra	idary Indicators (minimum of two requiface Soil Cracks (B6) ninage Patterns (B10) r-Season Water Table (C2) nyfish Burrows (C8)
DROLO etland H imary Inc Surface High W Saturat Water N Sedime	ydrology Indicators dicators (minimum of water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)		Water Si Aquatic True Aqu Hydroge Oxidized	tained Leaver Fauna (B1) uatic Plants on Sulfide Colors	3) s (B14) Odor (C1) eres on Liv		Secon Sur Dra Dry Cra s (C3) Sat	dary Indicators (minimum of two requiface Soil Cracks (B6) hinage Patterns (B10) r-Season Water Table (C2) hyfish Burrows (C8) huration Visibile on Aerial Imagery (C8)
DROLO Vetland H Timary Inc Surface High W Saturat Water N Sedime Drift De	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water Si Aquatic True Aqu Hydroge Oxidized Presenc	tained Lear Fauna (B1: uatic Plants n Sulfide C	3) s (B14) Odor (C1) eres on Liv ced Iron (C	4)	Secon Sur Dra Dry Cra s (C3) Sat	idary Indicators (minimum of two requiface Soil Cracks (B6) ninage Patterns (B10) r-Season Water Table (C2) nyfish Burrows (C8)
DROLO Petland H Imary Inc Surface High W Saturat Water I Sedime Drift De Algal M	ydrology Indicators dicators (minimum of water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)		Water Si Aquatic True Aqu Hydroge Oxidized Presenc Recent I	tained Leaver Fauna (B1) watic Plants on Sulfide Control Rhizospher of Reduce	3) s (B14) Odor (C1) eres on Lived Iron (C	4)	Secon	idary Indicators (minimum of two requiface Soil Cracks (B6) sinage Patterns (B10) r-Season Water Table (C2) syfish Burrows (C8) turation Visibile on Aerial Imagery (C9)
DROLO etland H imary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat	ydrology Indicators dicators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4)	one is red	Water Si Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mut B7) Gauge o	tained Lear Fauna (B1: uatic Plants in Sulfide C I Rhizosph e of Reduc ron Reduc	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	Secon	dary Indicators (minimum of two requirects Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2) ayfish Burrows (C8) curation Visibile on Aerial Imagery (C9) inted or Stressed Plants (D1) comorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse	ydrology Indicators dicators (minimum of wWater (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is red	Water Si Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mut B7) Gauge o	tained Lear Fauna (B1: uatic Plants on Sulfide C I Rhizosph e of Reduct ron Reduct ck Surface or Well Data	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	Secon	dary Indicators (minimum of two requirects Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2) ayfish Burrows (C8) curation Visibile on Aerial Imagery (C9) inted or Stressed Plants (D1) comorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse	ydrology Indicators dicators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is red	Water Si Aquatic i True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) Other (E	tained Lear Fauna (B1: uatic Plants on Sulfide C I Rhizosph e of Reduct ron Reduct ck Surface or Well Data	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	Secon	dary Indicators (minimum of two requirece Soil Cracks (B6) sinage Patterns (B10) r-Season Water Table (C2) syfish Burrows (C8) curation Visibile on Aerial Imagery (Csinted or Stressed Plants (D1) comorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundar Sparse eld Obse	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial by Vegetated Concave ervations: ater Present? Ye	one is red	Water Si Aquatic Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) Other (E	tained Lear Fauna (B1: uatic Plants In Sulfide C I Rhizosph e of Reduc ron Reduc ck Surface or Well Data xplain in R I (inches):	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) Lemarks)	4)	Secon	dary Indicators (minimum of two requirece Soil Cracks (B6) sinage Patterns (B10) r-Season Water Table (C2) syfish Burrows (C8) curation Visibile on Aerial Imagery (C9) inted or Stressed Plants (D1) comorphic Postion (D2)
DROLO etland H imary Inc Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse eld Obse urface W ater Tab	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial by Vegetated Concave	one is red	Water Si Aquatic Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) Other (E	tained Lear Fauna (B1: uatic Plants In Sulfide C I Rhizosph e of Reduc ron Reduc ck Surface or Well Data xplain in R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4) ad Soils (C	Secon	dary Indicators (minimum of two requirece Soil Cracks (B6) sinage Patterns (B10) r-Season Water Table (C2) syfish Burrows (C8) curation Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2) C-Neutral Test (D5)
DROLO etland H imary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundar Sparse eld Obser utater Tab	ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial I by Vegetated Concave ervations: ater Present? Present? Ye Present?	Imagery (e Surface	Water Si Aquatic Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) Other (E	tained Lear Fauna (B1: uatic Plants in Sulfide C I Rhizosph e of Reduc ron Reduc ck Surface or Well Data xplain in R i (inches): i (inches):	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (C	Secon	dary Indicators (minimum of two requirece Soil Cracks (B6) sinage Patterns (B10) r-Season Water Table (C2) syfish Burrows (C8) curation Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2) C-Neutral Test (D5)
DROLO etland H imary Inc Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundar Sparse eld Obser urface W ater Tab	ydrology Indicators dicators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial dy Vegetated Concave ervations: ater Present? Present? Ye apillary fringe)	Imagery (e Surface	Water Si Aquatic Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) Other (E	tained Lear Fauna (B1: uatic Plants in Sulfide C I Rhizosph e of Reduc ron Reduc ck Surface or Well Data xplain in R i (inches): i (inches):	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (C	Secon	dary Indicators (minimum of two requiface Soil Cracks (B6) sinage Patterns (B10) r-Season Water Table (C2) syfish Burrows (C8) suration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2) C-Neutral Test (D5)

Project/Site: I-69 Section 6 Wetland S6W077A		City/County	/: Morgan C	ounty	Sampling	Date: 9/16/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling	Point SC02A-1D1
Investigator(s): A. Grisel, L. Barnhart		Section, To	wnship, Rai	nge: Sec 34-T13N-R2E		
Landform (hillslope, terrace, etc.): roadside			Local reli	ef (concave, convex, nor	ne): none	
Slope (%): 0-2% Lat: 39.527426	L	.ong: -86.2	- 28998		Datum: GC	S NAD 1983
Soil Map Unit Name Princeton fine sandy loam		<u> </u>		_	ication: N/A	
Are climatic/hydrologic conditions on the site typical for this ti	ime of vear	? Yes	X No			
Are Vegetation , Soil or Hydrology signif		_		lormal Circumstances" p		es y No:
Are Vegetation, Soil or Hydrology natu				ded, explain answers in		Δ <u>Λ</u> Νο.
SUMMARY OF FINDINGS - Attach site map showin				•	,	etc
	ig sampii		iocations,	transects, importan		, 610.
Hydrophytic Vegetation Present? Yes X No		ls t	he Sampled	l Area		
Hydric Soils Present? Yes No Wetland Hydrology Present? Yes No	<u>X</u>		hin a Wetla		No	Χ
Remarks Data point is located in forested area approximat	ely 73 feet	west of SR	37.			
VEGETATION - Use scientific names of plants						
- (DL - O' - OOL - I'		Dominant	_	Dominance Test wor	ksheet:	
Tree Stratum (Plot Size: 30' radius)		Species?	Status	Number of Dominant S		
Acer saccharinum Prunus serotina	- 60 10	Yes No	FACW FACU	That Are OBL, FACW,	or FAC: _	4 (A)
3. Ulmus rubra	10	Yes	FAC	Total Number of Domin		6 (D)
4				Species Across All Str	_	6 (B)
5.				Percent of Dominant S That are OBL, FACW,		67 (A/B)
	80	= Total Cov	/er			`` /
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index wo	rksheet:	
1. Acer saccharinum	10	Yes	FACW	Total % Cover of	f:	Multiply by:
2. Lonicera X bella	20	Yes	FACU	OBL species		=0
3				· -	70 x 2	
4				· · · · · · · · · · · · · · · · · · ·	15 x 3 35 x 4	
5				UPL species	0 x 5	
Llank Charters (Diot Sizo: El rodius	30	= Total Cov	/er	Column Totals: 1	20 (A)	
Herb Stratum (Plot Size: 5' radius) 1. Toxicodendron radicans	5	Yes	FAC	Prevalence Inde	ex = B/A =	2.71
2.	·	103	170	1 Tevalence inte		2.7 1
3.				Hydrophytic Vegetati	on Indicato	ors:
4.			-	1-Rapid Test for Hy		egetation:
5.				X 2-Dominance Test X 3-Prevalence Index		
6				4-Morphological Ac		Provide supporting
7				data in Remarks or		
8				Problematic Hydro	ohytic Veget	tation ¹ (Explain)
9				¹ Indicators of hydric so		
10		Total Co		be present, unless dist	urbed or pro	oblematic
Vine Stratum (Plot Size: 30' radius)	5	= Total Cov	/ei			
1. Parthenocissus quinquefolia	5	Yes		Hydrophytic		
2.				Vegetation Present?	es X	No
	5	= Total Cov	/er	· - -		
Remarks: (Include photo numbers here or on a separate sh	neet)					
Tremands. (morado prioto namboro noro di di a separate si						

SOIL Sampling Point SC02A-1D1

Profile Desc	cription: (Describe to	the depth nee	eded to documne	et the indi	cator or co	nfirm the	e absend	e of indic	ators.)			
Depth	Matrix		Red	ox Featu	res		_					
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Te	xture		Remark	S	
0-4	10YR4/3	100					clay	/ loam				
	•											
-	-			. ———					-			
	-	<u> </u>		· ———								
-												
	· 											
									-			
-	· 			. ———					-			
1 Type: C=C	Concentration, D= De	epletion, RM=R	Reduced Matrix.	CS=Cove	red or Coa	ited San	nd Grains	s. ² Lo	cation: PL=	Pore Lining, I	M=Matrix	
	I Indiactors:	,	<u>, </u>							blematic Hyd		3
			Const		M=+=:- (C 4)					-	an 10 00115	
Histoso	` '				Matrix (S4)				ist Prairie Ro k Surface (S			
_	pipedon (A2)			/ Redox (ed Matrix				_		e Masses (F1	10)	
_	listic (A3) en Sulfide (A4)				. (ວັດ) Mineral (F1	`				ark Surface (1		
	d Layers (A5)				Matrix (F2)					ain oanace (I		
_	uck (A10)			ted Matrix		,			ci coli (Expi	an in iteman	(0)	
	d Below Dark Surfac	ce (A11)			rface (F6)							
	ark Surface (A12)	,			Surface (F	7)		³ Indic	cators of hyd	drophytic vege	etation and	
	Mucky Mineral (S1)				sions (F8)	,		wetlar		must be pre		i
	uck Peat or Peat (S3	3)							disturbe	d or problema	itic.	
Restrictive	Layer (If observed)):										
Type:												
Depth (ir	nches):		<u> </u>				H	ydric Soi	I present?	Yes	No _	X
Remarks:							•					
HYDROLO	GY											
Watland H	valuata av tu alianta u											
	ydrology Indicators		d: abook all that	annlu)						, , , ,		
Primary inc	dicators (minimum of	one is require								tors (minimum	n of two requ	ured)
	Water (A1)		Water Sta		` ,			_	rface Soil C	. ,		
_	ater Table (A2)		Aquatic F		- /				ainage Patte			
Saturati			True Aqu							ater Table (C	2)	
_	Marks (B1)				Odor (C1)	· D	-1- (00)		ayfish Burro		1(00	٥)
_	nt Deposits (B2) posits (B3)		_		eres on Liv	-	ots (C3)			bile on Aerial		9)
	at or Crust (B4)		_		ced Iron (C ction in Tille		(C6)		omorphic P	essed Plants ((וט	
	posits (B5)		Thin Muc			ou ouis	(00)		C-Neutral T			
_	ion Visible on Aerial	Imagery (B7)	Gauge or		, ,			-''	O Noullai I	001 (00)		
_	y Vegetated Concav											
			_ `									
Field Obse												
		es No		(inches):								
Water Tabl		es No		(inches):								
Saturation (includes c	Present?	es No	X Depth	(inches):		\	Wetland	Hydrolo	gy Present	Yes	No _	X
-	ecorded Data (strear	n gauge, monit	toring well, aeria	l photos,	previous in	spection	ns), if av	ailable:				
	,						,.					
Remarks:												_

Project/Site: I-69 Section 6 Wetland S6W077A		City/County	: Morgan C	ounty	Sampling Date: 9/16/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point SC02A-1W1
Investigator(s): A. Grisel, L. Barnhart		Section, To	wnship, Ra	nge: Sec 34-T13N-R2E	
Landform (hillslope, terrace, etc.): Roadside			Local reli	ef (concave, convex, no	ne): Concave
Slope (%): 0-2% Lat: 39.527426	L	ong: -86.2	8998		Datum: GCS NAD 1983
Soil Map Unit Name Princeton fine sandy loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this	time of year	·2 Yes	X No		
	ificantly dist				present? Yes X No:
				ded, explain answers in	
Are Vegetation, Soil or Hydrology nat SUMMARY OF FINDINGS - Attach site map showi				•	•
			ocations,	transects, importar	it leatures, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soils Present? Yes X No		ls th	ne Sampleo	d Area	
Wetland Hydrology Present? Yes X No		with	nin a Wetla	nd? Yes	X No
Remarks Soil, hydrology, and vegetation are disturbed wi	thin the wet	land as rin r	an was nlad	end within a portion of th	ne wetland
Remarks 30ii, flydrology, and vegetation are disturbed wi	umi die wed	ianu as np i	ap was piac	bed within a portion of the	ie welialiu
VEGETATION - Use scientific names of plants					
(Dist Obs. 00) residue	Absolute	Dominant		Dominance Test wor	rksheet:
Tree Stratum (Plot Size: 30' radius)	% Cover 20	•	Status FAC	Number of Dominant	Species
1. Acer negundo 2. Acer saccharinum		Yes No	FACW	That Are OBL, FACW	, or FAC: <u>10</u> (A)
3. Populus deltoides	40	Yes	FAC	Total Number of Dom	
4 Salix interior	10	No	FACW	Species Across All St	
5.				Percent of Dominant S That are OBL, FACW	
	80	= Total Cov	er	,	·
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index wo	orksheet:
1. Acer negundo	5	Yes	FAC	Total % Cover of	of: Multiply by:
2. Asimina triloba	5	Yes	FAC	OBL species	55 x 1 = 55
3. Populus deltoides	5	Yes	FAC	FACW species	$\frac{35}{30}$ x 2 = $\frac{70}{340}$
4. Salix interior	5	Yes	FACW	FAC species FACU species	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
5				UPL species	0 x5 = 0
(Diet Cine) 5 and inc	20	= Total Cov	er		180 (A) 405 (B)
Herb Stratum (Plot Size: 5' radius) 1. Carex muskingumensis	20	Yes	OBL	Prevalence Ind	dex = B/A = 2.25
Carex muskingumensis Carex lurida	20	Yes	OBL	i revalence inc	16X - D/A - 2.23
3. Impatiens capensis	10	Yes	FACW	Hydrophytic Vegetat	ion Indicators:
4. Eupatorium perfoliatum	10	Yes	OBL	1-Rapid Test for H	ydrophytic Vegetation:
5. Toxicodendron radicans	5	No	FAC	X 2-Dominance Test	
6. Solidago canadensis	5	No	FACU	X 3-Prevalence Inde	x is <=3 daptations (Provide supporting
7. Scirpus atrovirens	5	No	OBL		r on a separate sheet)
8. Sanicula canadensis	5	No	FACU	Problematic Hydro	phytic Vegetation ¹ (Explain)
9				¹ Indicators of hydric so	oil and wetland hydrology must
10				be present, unless dis	sturbed or problematic
Vine Stratum (Plot Size: 30' radius)	80	= Total Cov	er		
				Hydrophytic	
1. 2.				Vegetation Present?	'es X No
		= Total Cov	er		
Pamarka: (Include photo numbers have as an a service					
Remarks: (Include photo numbers here or on a separate s	nieet.)				

SOIL Sampling Point SC02A-1W1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-4	10YR4/1	100					sandy loa	m		
4-20	N6/	90	10YR4/4	10			silty clay lo	am		
	Concentration, D= De	pletion, RI	M=Reduced Matrix,	CS=Cove	red or Coa	ted Sand			Pore Lining, M=Ma	
Histoso	I Indiactors:		Y Sand	v Gleved N	Matrix (S4)			Coast Prairie Re	olematic Hydric S	ons
	pipedon (A2)			y Redox (S				Dark Surface (S7		
	istic (A3)			ed Matrix				Iron-Manganese		
	en Sulfide (A4)				∕lineral (F1)			rk Surface (TF12)	
	d Layers (A5)				Matrix (F2)			Other Soil (Expla		
2 cm M	uck (A10)		Deple	eted Matrix	(F3)		_			
	d Below Dark Surfac	e (A11)		x Dark Su						
	ark Surface (A12)				Surface (F	7)			rophytic vegetation must be present, i	
-	Mucky Mineral (S1)		Redo	x Depress	ions (F8)		W		or problematic.	uniess
	uck Peat or Peat (S3 Layer (If observed):								·	
trictive	I aver ut onservedi									
	Layer (ii observea)									
Type: Depth (ir			<u> </u>				Hydric	Soil present?	Yes X	No _
Type: Depth (ir marks:	nches):						Hydric	Soil present?	Yes X	No _
Type:	GY ydrology Indicators		uirodi okooli oll thot	onaly)						
Type:	GY ydrology Indicators dicators (minimum of						Se	econdary Indicato	ors (minimum of tw	
Type:	GY ydrology Indicators dicators (minimum of		Water St	ained Lea	` '		Se	econdary Indicato Surface Soil Cra	ors (minimum of twacks (B6)	_
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water St Aquatic F	ained Lea	3)		Se	econdary Indicato Surface Soil Cra Drainage Patter	ors (minimum of twacks (B6)	_
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3)		Water St Aquatic F True Aqu	ained Lear Fauna (B1) Jatic Plant	3) s (B14)		Se	econdary Indicato Surface Soil Cra Drainage Patter Dry-Season Wa	ors (minimum of twacks (B6) rns (B10) tter Table (C2)	
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)		Water St Aquatic F True Aqu Hydroger	ained Lea Fauna (B1: uatic Plants n Sulfide C	3) s (B14) Odor (C1)	ving Roo	<u>S</u> 6	econdary Indicato Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow	ors (minimum of twacks (B6) rns (B10) uter Table (C2) vs (C8)	vo requ
Type:Depth (ir narks:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water St Aquatic F True Aqu Hydrogel Oxidized	ained Lear Fauna (B1) Jatic Plants In Sulfide C Rhizosph	3) s (B14)	_	<u>S</u> 6	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib	ors (minimum of twacks (B6) rns (B10) tter Table (C2)	√o requ
DROLO Petland H Imary Inc Surface High W Saturati Water M Sedime Drift De	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		Water St Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea Fauna (B1 Jatic Plants n Sulfide (Rhizosph e of Reduc	3) s (B14) Odor (C1) eres on Liv	4)	<u>Se</u> ts (C3)	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib	ors (minimum of twacks (B6) rns (B10) rter Table (C2) rs (C8) rile on Aerial Image	√o requ
DROLO Petland H mary Inc Saturati Water M Sedime Drift De Algal M Iron De	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is req	Water St Aquatic F True Aqu Hydrogel Oxidized Presence Recent Is	ained Lear Fauna (B1: uatic Plante n Sulfide C Rhizosph e of Reduct ron Reduct ck Surface	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille	4)	Se 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres	ors (minimum of twacks (B6) rns (B10) tter Table (C2) vs (C8) ille on Aerial Images ssed Plants (D1) stion (D2)	vo requ
Depth (ir narks: DROLO Petland H mary Inc Surface High W: Saturati Water M Sedime Drift De Algal M Iron De Inundat	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	one is req	Water St Aquatic F True Aqu Hydroger Oxidized Presencer Recent In Thin Muc	ained Lear Fauna (B1 Jatic Plants on Sulfide C Rhizosph e of Reducton Reduc	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	Se 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	ors (minimum of twacks (B6) rns (B10) tter Table (C2) vs (C8) ille on Aerial Images ssed Plants (D1) stion (D2)	√o requ
DROLO Petland H mary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	one is req	Water St Aquatic F True Aqu Hydroger Oxidized Presencer Recent In Thin Muc	ained Lear Fauna (B1: Jatic Plants In Sulfide C Rhizosph Te of Reductor Fon Reductor In Sulface	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	4)	Se 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	ors (minimum of twacks (B6) rns (B10) tter Table (C2) vs (C8) ille on Aerial Images ssed Plants (D1) stion (D2)	√o requ
Type:Depth (ir marks:	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave	one is req Imagery (E e Surface	Water St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc 37) Gauge o (B8) Other (E:	ained Lear Fauna (B1: Jatic Plants In Sulfide C Rhizosph Te of Reductor Fon Reductor In Sulface	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	4)	Se 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	ors (minimum of twacks (B6) rns (B10) tter Table (C2) vs (C8) ille on Aerial Images ssed Plants (D1) stion (D2)	√o requ
DROLO Petland H Imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel Peld Obse	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave	one is required in the imagery (E) and its second in the imagery (E) and its second in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image in the image	Water St Aquatic F True Aqu Hydroger Oxidized Presence Recent It Thin Muc Gauge o (B8) Other (Ex	ained Lear Fauna (B1: uatic Plants n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface r Well Data xplain in R (inches): (inches):	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	4)	Se 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	ors (minimum of twacks (B6) rns (B10) tter Table (C2) vs (C8) ille on Aerial Images ssed Plants (D1) stion (D2)	√o requ
DROLO Petland H Imary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel Peld Obse Irface Water Table Inturation	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations:	Imagery (Ee Surface	Water St Aquatic F True Aqu Hydroger Oxidized Presence Recent It Thin Muc Gauge o (B8) Other (Ex	ained Lear- Fauna (B1: latic Plants in Sulfide C Rhizosph e of Reduction Reduction ck Surface ir Well Data explain in R	3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	4) ed Soils (ss (C3)	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po	ors (minimum of twacks (B6) rns (B10) tter Table (C2) vs (C8) iile on Aerial Image ssed Plants (D1) stion (D2) est (D5)	√o requ
DROLO Patland H Mary Inc Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel Pid Obse rface Water Tabl turation cludes c	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Present? Ye Present?	Imagery (Ee Surface	Water St Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gar) Gauge o (B8) Other (E: No Depth No Depth No Depth	ained Lear Fauna (B1 patric Plants on Sulfide C Rhizosph of Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) emarks)	4) dd Soils (Se Se Se Se Se Se Se Se	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po FAC-Neutral Te	ors (minimum of twacks (B6) rns (B10) tter Table (C2) vs (C8) iile on Aerial Image ssed Plants (D1) stion (D2) est (D5)	vo requ
DROLO Petland H Mary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel Peld Obse rface Water Tabl turation cludes c	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concave ervations: ater Present? Present? Present? Ye apillary fringe)	Imagery (Ee Surface	Water St Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gar) Gauge o (B8) Other (E: No Depth No Depth No Depth	ained Lear Fauna (B1 patric Plants on Sulfide C Rhizosph of Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct on Reduct	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) emarks)	4) dd Soils (Se Se Se Se Se Se Se Se	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres Geomorphic Po FAC-Neutral Te	ors (minimum of twacks (B6) rns (B10) tter Table (C2) vs (C8) iile on Aerial Image ssed Plants (D1) stion (D2) est (D5)	vo requ

Applicant/Owner: INDOT/HNTB Investigator(s): A. Grisel, L. Barnhart Landform (hillslope, terrace, etc.): roadside Slope (%): 0-2% Lat: 39.536876		Section, To	wnship, Ra	State: Indiana Sampling Point SC05A-1E
Landform (hillslope, terrace, etc.): roadside Slope (%): 0-2% Lat: 39.536876		Section, To	wnship, Ra	nge: Sec 26-T13N-R2E
Slope (%): 0-2% Lat: 39.536876				
· · · · · 			Local reli	ef (concave, convex, none): none
0.314 11.324 8.3	L	ong: -86.2	77837	Datum: GCS NAD 1983
Soil Map Unit Name Princeton fine sandy loam				NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this tim	ne of vear	? Yes	X No	
Are Vegetation, Soil or Hydrologysignific				Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology natura				ded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing				
Hydrophytic Vegetation Present? Yes No	×			·
Hydric Soils Present? Yes No	X	ls t	he Sample	d Area
Wetland Hydrology Present? Yes No	X	witl	hin a Wetla	nd? Yes NoX
Remarks Data point located within a residentiasl yard adjace	ent to wet	land approx	kimately 44	feet east of SR 37.
VEGETATION - Use scientific names of plants	Absolute	Dominant	Indicator	Daminanas Tast warksheet
/= · · = · · · · · · · · · · · · · · · ·		Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5		= Total Cov		That are OBL, FACW, or FAC:0 (A/E
Sapling/Shrub Stratum (Plot Size: 15' radius)		= Total Cov	/EI	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
1				OBL species $0 \times 1 = 0$
3.				FACW species 0 x 2 = 0
4.				FAC species 0 x 3 = 0
5.				FACU species 105 x 4 = 420
	0	= Total Cov	/er	UPL species 0 x 5 = 0 Column Totals: 105 (A) 420 (B
Herb Stratum (Plot Size: 5' radius)				Column Totals. 105 (A) 420 (B
1. Schedonorus arundinaceus	90	Yes	FACU	Prevalence Index = B/A = 4.00
2. Trifolium repens	5	No	FACU	Hydrophytic Vegetation Indicators:
3. Taraxacum officinale	5	No	FACU	1-Rapid Test for Hydrophytic Vegetation:
4				2-Dominance Test is >50%
5				3-Prevalence Index is <=3
6				4-Morphological Adaptations (Provide supporting
7 8				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
8. 9.				_
10.				Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic
		= Total Cov	/er	, , , , , , , , , , , , , , , , , , , ,
Vine Stratum (Plot Size: 30' radius)				Undrambatio
1. Parthenocissus quinquefolia	5	Yes		Hydrophytic Vegetation
2	5	= Total Cov		Present? Yes No _X
Remarks: (Include photo numbers here or on a separate she				

SOIL Sampling Point SC05A-1D1

(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textur	е		Remarks		
0-16	10YR4/3	100					silty clay I	oam				
16-20	10YR4/3	90	10YR4/6	10	С	М	silty clay I					
				. ——								
	-			·								
7.	<u> </u>	pletion, F	RM=Reduced Matrix,	CS=Cove	red or Coa	ited San				ore Lining, N		3
•	I Indiactors:		0 1	. 0111	A-15 (OA)		Ir			lematic Hyd	ric Soils	3
_ Histoso	` '				Matrix (S4)		_	Coast Pr Dark Sur				
_	pipedon (A2) istic (A3)			Redox (Sed Matrix			_	_) Masses (F1:	2)	
_	en Sulfide (A4)				√ineral (F1	1	_			k Surface (T		
_	d Layers (A5)				Matrix (F2)	•	_	_		n in Remark		
_	uck (A10)			ted Matrix		'	_	_ 011101 00	ii (Explai	II III Koman	3)	
	d Below Dark Surfac	e (A11)			rface (F6)							
_	ark Surface (A12)	- (,			Surface (F	7)	3	Indicators	of hydro	phytic veget	ation and	
_	Mucky Mineral (S1)			c Depress		,		wetland hy	drology r	nust be pres	ent, unles	
_	uck Peat or Peat (S3)	_	•	. ,			di	isturbed (or problemat	ic.	
	Layer (If observed)											
T												
Type:	\.						Uvdri	c Sail pro	cont?	Voc	No	V
Depth (ii emarks:	nches):						Hydri	c Soil pre	sent?	Yes	_ No	X
Depth (ii							Hydri	c Soil pre	sent?	Yes	_ No	X
Depth (ii emarks:	GY						Hydri	c Soil pre	sent?	Yes	No	X
Depth (in emarks:	GY ydrology Indicators		quired; check all that	apply								
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Project/Site: I-69 Section 6 Wetland S6W082A		City/Count	ty: Morgan C	County	Sampling Date	9/16/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Poin	t SC05A-1W1
Investigator(s): A. Grisel, L. Barnhart		Section, T	ownship, Ra	nge: Sec 26-T13N-R2E	<u> </u>	
Landform (hillslope, terrace, etc.): roadside			Local reli	ef (concave, convex, no	ne): concave	
Slope (%): 0-2% Lat: 39.536898	L	ong: -86.	277905		Datum: GCS NA	
Soil Map Unit Name Princeton fine sandy loam				NWI classi	fication: N/A	
Are climatic/hydrologic conditions on the site typical for this ti	me of year	? Yes	X No	(If no, explain Re	emarks.)	
Are Vegetation X , Soil X or Hydrology X signif	-	•		Normal Circumstances" p		X No:
Are Vegetation, Soil or Hydrology natur				ded, explain answers in		
SUMMARY OF FINDINGS - Attach site map showin			locations,	transects, importan	it features, etc	
Hydrophytic Vegetation Present? Yes X No						
Hydric Soils Present? Yes X No			the Sample			
Wetland Hydrology Present? Yes X No		Wi	thin a Wetla	ind? Yes	<u>X</u> No	<u> </u>
Remarks Data point is located along a roadside ditch approved wetland as it is located at the base of the roadwa						d within the
VEGETATION - Use scientific names of plants						
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	t Indicator Status	Dominance Test wor	ksheet:	
1	70 00001	орсоюз.	Olalas	Number of Dominant S That Are OBL, FACW,		1 (A)
2.	·	-		Total Number of Domi		<u> </u>
3.				Species Across All Str		1 (B)
4				Percent of Dominant S		
5				That are OBL, FACW,	or FAC: 1	00 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Co	over	Prevalence Index wo	 orksheet:	
				Total % Cover o	of Multi	ply by:
1. 2.				OBL species	0 x 1 =	
3.		-		'	95 x 2 =	190
4.		-		FAC species	5 x 3 =	15
5.				FACU species UPL species	0 x 4 =	0
	0	= Total Co	over	· <u> </u>	0 x 5 = (A)	205 (B)
Herb Stratum (Plot Size: 5' radius)		.,	=. 0			
Phalaris arundinacea Setaria pumila	<u>85</u> 5	Yes No	FACW FAC	Prevalence Ind	ex = B/A =	2.05
Setaria purma Helianthus nuttallii	5	No	FACW	Hydrophytic Vegetat	ion Indicators:	
4. Brunnichia ovata	5	No	FACW	X 1-Rapid Test for H	ydrophytic Vegeta	ation:
5.			-	X 2-Dominance Test		
6.				X 3-Prevalence Index 4-Morphological Ad		ido oupportina
7				data in Remarks of		
8				Problematic Hydro	phytic Vegetation	¹ (Explain)
9				¹ Indicators of hydric so		
10	100	Total Co		be present, unless dis	turbed or problem	natic
Vine Stratum (Plot Size: 30' radius)	100	= Total Co	over			
1				Hydrophytic		
2.				Vegetation Present?	es X N	0
	0	= Total Co	over			
Remarks: (Include photo numbers here or on a separate sh	neet.)			L		
and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	,					

SOIL Sampling Point SC05A-1W1

Depth _	Matrix		Re							
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	<u> </u>	Remarks	
0-20	10YR3/1	100					silty clay lo	oam		
										
ype: C=Cor	ncentration, D= De	pletion, RM:	=Reduced Matrix	, CS=Cove	ered or Coa	ated Sand	d Grains.	² Location: PL=F	Pore Lining, M=M	atrix
ydric Soil II	ndiactors:						Inc	diactors for Prol	blematic Hydric	Soils 3
Histosol (A	Δ1)		San	dy Gleyed	Matrix (S4)			Coast Prairie Re	dox (A16)	
	pedon (A2)			dy Redox (X	Dark Surface (S		
Black Hist				ped Matrix				Iron-Manganese		
-	Sulfide (A4)			ny Mucky I	. ,)			ark Surface (TF12)
	Layers (A5)			ny Gleyed			_	Other Soil (Expla		,
2 cm Muc	• , ,			leted Matri		•	_	(=pit		
	Below Dark Surface	e (A11)		ox Dark Su	. ,					
	k Surface (A12)	,		leted Dark	, ,	7)	3	Indicators of hyd	rophytic vegetation	n and
	ıcky Mineral (S1)			ox Depress	•	,	W		must be present,	unless
-	k Peat or Peat (S3))		·	, ,			disturbed	d or problematic.	
strictive La	ayer (If observed):									
Туре:										
Danth /inch										
Depth (inchemarks:	hes):						Hydric	: Soil present?	Yes X	No _
• •							Hydric	: Soil present?	Yes X	NO _
emarks:	Y						Hydric	: Soil present?	Yes X	NO _
marks: DROLOG etland Hyd	Y drology Indicators		red: check all tha	at apply)						
DROLOG detland Hydrimary Indica	Y drology Indicators ators (minimum of				ayos (RO)			econdary Indicate	ors (minimum of t	
DROLOG Vetland Hydrimary Indica	Y drology Indicators: ators (minimum of water (A1)		Water S	Stained Lea	` '			econdary Indicate Surface Soil Cra	ors (minimum of tacks (B6)	
DROLOG etland Hyd rimary Indica Surface W High Water	Y drology Indicators eators (minimum of eators (A1) er Table (A2)		Water S Aquatio	Stained Lea Fauna (B1	3)			econdary Indicato Surface Soil Cra Drainage Pattel	ors (minimum of tacks (B6)	
DROLOG Tetland Hydrimary Indica Surface W High Wate Saturation	Y drology Indicators: eators (minimum of eators (A1) er Table (A2) en (A3)		Water S Aquatic True Ad	Stained Lea Fauna (B1 quatic Plant	3) ts (B14)			econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa	ors (minimum of t acks (B6) rns (B10) ater Table (C2)	
PROLOG Vetland Hydrimary Indica Surface W High Wate Saturation Water Mal	Y Irology Indicators ators (minimum of a Vater (A1) er Table (A2) n (A3) rks (B1)		Water S Aquatic True Ac Hydrog	Stained Lea Fauna (B1 quatic Plant en Sulfide (3) ts (B14) Odor (C1)	vina Roo	<u>s</u>	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow	ors (minimum of t acks (B6) rns (B10) ater Table (C2) vs (C8)	wo requ
PROLOG Vetland Hydrimary Indica Surface W High Wate Saturation Water Mai Sediment	Y Irology Indicators: ators (minimum of all Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)		Water S Aquatic True Ac X Hydrog Oxidize	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph	3) ts (B14) Odor (C1) neres on Li	_	<u>s</u>	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) oile on Aerial Imaç	wo requ
Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing Processing	Y Irology Indicators ators (minimum of a Vater (A1) er Table (A2) in (A3) irks (B1) Deposits (B2) osits (B3)		Water S Aquatic True Ac X Hydrog Oxidize Presence	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Redu	3) ts (B14) Odor (C1) neres on Li ced Iron (C	(4)	<u>S</u> 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imaç ssed Plants (D1)	wo requ
PROLOG' Vetland Hydrimary Indicates Surface W High Water Saturation Water Man Sediment Drift Depo	Y Irology Indicators. eators (minimum of a vater (A1) er Table (A2) in (A3) irks (B1) Deposits (B2) issits (B3) or Crust (B4)		Water S Aquatic True Ac X Hydrog Oxidize Presenc	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph	3) ts (B14) Odor (C1) neres on Lir ced Iron (C	(4)	S 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stres	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imag ssed Plants (D1) ostion (D2)	wo requ
PROLOG Vetland Hydrimary Indica Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depo	Y Irology Indicators. eators (minimum of a vater (A1) er Table (A2) in (A3) irks (B1) Deposits (B2) issits (B3) or Crust (B4)	one is requi	Water S Aquatic True Ac X Hydrog Oxidize Presenc Recent Thin Mu	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc	a) ts (B14) Odor (C1) neres on Li ced Iron (C ction in Tille	(4)	S 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imag ssed Plants (D1) ostion (D2)	wo requ
DROLOG Vetland Hydrimary Indication Surface W High Water Mair Saturation Water Mair Sediment Drift Depo Algal Mat Iron Depo Inundation	Y Irology Indicators sators (minimum of a Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) ssits (B5)	one is requi	Water S Aquatic True Ac X Hydrog Oxidize Presenc Recent Thin Mc Gauge	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc	3) is (B14) Odor (C1) neres on Li ced Iron (C ction in Tille e (C7) ia (D9)	(4)	S 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imag ssed Plants (D1) ostion (D2)	wo requ
DROLOG' Estland Hydrimary Indicators Surface W. High Water Saturation Water Man Sediment Drift Depo Algal Mat Iron Depo Inundatior Sparsely Water Sediment	Y Irology Indicators. ators (minimum of a vater (A1) er Table (A2) in (A3) irks (B1) Deposits (B2) isits (B3) or Crust (B4) isits (B5) in Visible on Aerial I Vegetated Concave	one is requi	Water S Aquatic True Ac X Hydrog Oxidize Presenc Recent Thin Mc Gauge	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc ick Surface or Well Dat	3) is (B14) Odor (C1) neres on Li ced Iron (C ction in Tille e (C7) ia (D9)	(4)	S 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imag ssed Plants (D1) ostion (D2)	wo requ
DROLOG Vetland Hydrimary Indica Surface W High Water Man Sediment Drift Depo Algal Mat Iron Depo Inundatior Sparsely W eld Observ	Y Irology Indicators eators (minimum of or vater (A1) er Table (A2) en (A3) erks (B1) Deposits (B2) exits (B3) en Crust (B4) exits (B5) en Visible on Aerial I Vegetated Concaver evations:	one is requi magery (B7 e Surface (E	Water S Aquatic True Ac X Hydrog Oxidize Present Recent Thin Mc Gauge Other (I	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc ick Surface or Well Dat	3) is (B14) Odor (C1) neres on Li ced Iron (C ction in Tille e (C7) ia (D9)	(4)	S 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imag ssed Plants (D1) ostion (D2)	wo requ
PROLOG Vetland Hydrimary Indica Surface W High Water Saturation Water Man Sediment Drift Depo Algal Mat Iron Depo Inundatior	Y Irology Indicators: ators (minimum of all ators) Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) posits (B3) or Crust (B4) sits (B5) n Visible on Aerial I Vegetated Concave Vations: er Present?	magery (B7 e Surface (B	Water S Aquatic True Ac X Hydrog Oxidize Present Recent Thin Mc Gauge 88) Other (I	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Reduct Iron Reduct uck Surface or Well Dat Explain in F	3) is (B14) Odor (C1) neres on Li ced Iron (C ction in Tille e (C7) ia (D9)	(4)	S 	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imag ssed Plants (D1) ostion (D2)	wo requ
DROLOG Vetland Hydrimary Indication Surface Water Man Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Water Cater Table Indication Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Production Productio	Y Irology Indicators: ators (minimum of all all all all all all all all all al	magery (B7	Water S Aquatic True Ac X Hydrog Oxidize Presenc Recent Thin Mc Gauge S8) Other (I	Stained Lea Fauna (B1 quatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc uck Surface or Well Dat Explain in F	3) is (B14) Odor (C1) neres on Li ced Iron (C ction in Tille e (C7) ia (D9)	ed Soils (ts (C3)	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imag ssed Plants (D1) ostion (D2) est (D5)	wo requ
PROLOGIA Metland Hydrimary Indication Surface W. High Water Mar. Sediment Drift Depo Algal Mat. Iron Depo Inundation Sparsely Well of the Communication Procession of the Communication Procession of the Communication Procession of the Communication Procession of the Communication Procession of the Communication Procession of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication of the Communication o	Y Irology Indicators ators (minimum of a Vater (A1) er Table (A2) er (A3) erks (B1) Deposits (B2) esits (B3) er Crust (B4) esits (B5) en Visible on Aerial I Vegetated Concave vations: er Present? Ye Present?	magery (B7 e Surface (E	Water S	Stained Lea Fauna (B1 Juatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Iron Iron Iron Iron Iron Iron Iron	3) Its (B14) Odor (C1) Ineres on Li Ced Iron (C Ction in Tille (C7) Ita (D9) Remarks)	ed Soils (S S S S S S S S S S	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree Geomorphic Po	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imag ssed Plants (D1) ostion (D2) est (D5)	wo requ
PROLOGIA Metland Hydrimary Indica Surface W High Water Mai Sediment Drift Depo Inundation Sparsely Water Table I atturation Procludes capescribe Recommendation Recommendation Procludes capescribe Recommendation Recommendation Procludes capescribe Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation Recommendation	Y Irology Indicators. ators (minimum of a vater (A1) er Table (A2) in (A3) irks (B1) Deposits (B2) isits (B3) or Crust (B4) isits (B5) in Visible on Aerial I Vegetated Concave vations: er Present? Present? Ye esent? Ye esent? Ye esent? Ye esent?	magery (B7 e Surface (E	Water S	Stained Lea Fauna (B1 Juatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Iron Iron Iron Iron Iron Iron Iron	3) Its (B14) Odor (C1) Ineres on Li Ced Iron (C Ction in Tille (C7) Ita (D9) Remarks)	ed Soils (S S S S S S S S S S	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree Geomorphic Po	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imag ssed Plants (D1) ostion (D2) est (D5)	wo requ
DROLOG' Vetland Hydrimary Indication Surface W. High Water Man Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Water Water Vetla Observ Varface Water Vater Table In Baturation Princludes cap	Y Irology Indicators. ators (minimum of a vater (A1) er Table (A2) in (A3) irks (B1) Deposits (B2) isits (B3) or Crust (B4) isits (B5) in Visible on Aerial I Vegetated Concave vations: er Present? Present? Ye esent? Ye esent? Ye esent? Ye esent?	magery (B7 e Surface (E	Water S	Stained Lea Fauna (B1 Juatic Plant en Sulfide (d Rhizosph ce of Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Reduc Iron Iron Iron Iron Iron Iron Iron Iron	3) Its (B14) Odor (C1) Ineres on Li Ced Iron (C Ction in Tille (C7) Ita (D9) Remarks)	ed Soils (S S S S S S S S S S	econdary Indicate Surface Soil Cra Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Stunted or Stree Geomorphic Po	ors (minimum of to acks (B6) rns (B10) ater Table (C2) vs (C8) bile on Aerial Imag ssed Plants (D1) ostion (D2) est (D5)	wo requ

Project/Site: I-69 Section 6 Wetland S6W089A		City/County	: Johnson (County	Sampling Date: <u>9/14/2016</u>
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point TP01A-1D1
Investigator(s): R. Hook, A. Grisel		Section, To	wnship, Ra	nge: Sec 32-T14N-R3E	<u>:</u>
Landform (hillslope, terrace, etc.):			Local reli	ef (concave, convex, no	ne): none
Slope (%): 0-2 Lat: 39.609001	L	ong: -86.2	17833		Datum: GCS NAD 1983
Soil Map Unit Name Genesse silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this ti	me of vear	·? Yes	X No		
Are Vegetation , Soil or Hydrology signifi		_			present? Yes X No:
Are Vegetation, Soil or Hydrology natur				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showin				transects, importar	nt features, etc.
Hydrophytic Vegetation Present? Yes No	Х				
Hydric Soils Present? Yes No	X		ne Sampled nin a Wetla		No. V
Wetland Hydrology Present? Yes No	X	With	iin a wetia	nd? Yes	NoX
Remarks Data point is located approximately 328 feet west data point could be considered to be within a wet		This site is	part of a w	etland complex adjacen	it to an open water pond. This
VEGETATION - Use scientific names of plants					
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test wor	ksheet:
1		•	Otatus	Number of Dominant S That Are OBL, FACW	-1
2.			-	Total Number of Domi	
3.				Species Across All St	
4				Percent of Dominant S	Species
5				That are OBL, FACW,	, or FAC: 50 (A/B)
Continue (Ohra La Otra Larra (Plot Sizon 45) radius	0	= Total Cov	er	Prevalence Index wo	orksheet:
Sapling/Shrub Stratum (Plot Size: 15' radius)				Total % Cover of	
1				OBL species	$\frac{0}{0} x = 0$
2. 3.				FACW species	0 x 2 = 0
4.				FAC species	40 x 3 = 120
5.				FACU species UPL species	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	0	= Total Cov	er		$\frac{0}{100}$ x 5 = $\frac{0}{360}$ (B)
Herb Stratum (Plot Size: 5' radius)					 ```
1. Schedonorus arundinaceus	30	Yes	FACU FAC	Prevalence Ind	dex = B/A = 3.60
Plantago major Setaria parviflora	10	Yes No	FAC	Hydrophytic Vegetat	ion Indicators:
4. Poa annua	10	No	FACU	1-Rapid Test for H	lydrophytic Vegetation:
5.				X 2-Dominance Test	
6.				X 3-Prevalence Inde	
7.					daptations (Provide supporting r on a separate sheet)
8				Problematic Hydro	ophytic Vegetation ¹ (Explain)
9				¹ Indicators of hydric so	oil and wetland hydrology must
10				be present, unless dis	turbed or problematic
Vine Stratum (Plot Size: 15' radius)	100	= Total Cov	er		
1				Hydrophytic	
2.				Vegetation Present?	res No X
		= Total Cov	er		
Remarks: (Include photo numbers here or on a separate sh	eet.)				
This data point passes test for hydrophytic vegetation and ca	,	sidered to be	e within a w	vetland.	

SOIL Sampling Point TP01A-1D1

Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc 2	Texture	е	Remarks
0-20	10YR3/3	100	,				sandy clay		
				-					
··		epletion, RM	I=Reduced Matrix,	CS=Cove	red or Coa	ited San			=Pore Lining, M=Matrix oblematic Hydric Soils
			Sand	y Gleyed N	Matrix (S4)			Coast Prairie F	
Histic E	pipedon (A2)		Sand	y Redox (S5)		_	Dark Surface (S7)
•	Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)		ed Matrix			_		se Masses (F12)	
	pe: C=Concentration, D= Depletion, RM= Iric Soil Indiactors: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10)			Mineral (F1		_		Dark Surface (TF12)	
				y Gieyed i eted Matrix	Matrix (F2))	_	Otner Soil (Exp	olain in Remarks)
	d Below Dark Surfac	e (A11)		x Dark Su					
	ark Surface (A12)	(****)			Surface (F	7)	3	Indicators of hy	drophytic vegetation and
Sandy N	Mucky Mineral (S1)		Redo	x Depress	ions (F8)		V		gy must be present, unless ed or problematic.
5 cm Mı	uck Peat or Peat (S3	3)						distuibi	ed of problematic.
strictive	Layer (If observed)	:							
	, ,								
Туре:							Hydri	c Soil present?	Yes No _
Type: Depth (ir marks:		a for Redox	Dark Surface (F6)	and can b	e consider	ed to be		-	Yes No _
Type: Depth (ir marks:	nches):	a for Redox	Dark Surface (F6)	and can b	e consider	red to be		-	Yes No
Type:	onches): pint meets the criteria		Dark Surface (F6)	and can b	e consider	red to be		-	Yes No
Type:	nches):	s:			e consider	red to be	within a we	itland.	Yes No _
Type:	orches): Dint meets the criteria GY ydrology Indicators	s:		apply)		ed to be	within a we	itland.	ators (minimum of two requ
Type:	GY ydrology Indicators dicators (minimum of	s:	iired; check all that	apply)	ves (B9)	red to be	within a we	stland. Secondary Indicate Surface Soil (Drainage Patt	ators (minimum of two requ Cracks (B6) erns (B10)
Type:Depth (ir marks: s data po	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3)	s:	ired; check all that X Water St Aquatic F True Aqu	apply) ained Lea Fauna (B1 latic Plant	ves (B9) 3) s (B14)	red to be	within a we	Secondary Indica Surface Soil C Drainage Patt Dry-Season V	ators (minimum of two requ Cracks (B6) terns (B10) Vater Table (C2)
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)	s:	ired; check all that X Water St Aquatic F True Aqu Hydrogei	apply) ained Lea Fauna (B1 latic Plant n Sulfide (ves (B9) 3) s (B14) Odor (C1)		within a we	Secondary Indica Surface Soil (Drainage Patt Dry-Season V Crayfish Burro	ators (minimum of two requ Cracks (B6) eerns (B10) Vater Table (C2) ows (C8)
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)	s:	ired; check all that X Water St Aquatic F True Aqu Hydroger X Oxidized	apply) ained Lea Fauna (B1 atic Plant n Sulfide (Rhizosph	ves (B9) 3) s (B14) Odor (C1) eres on Li [*]	ving Roo	within a we	Secondary Indica Surface Soil (Drainage Patt Dry-Season V Crayfish Burro Saturation Vis	ators (minimum of two requ Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sibile on Aerial Imagery (Cs
Type:	GY ydrology Indicators dicators (minimum of water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)	s:	ired; check all that X Water St Aquatic F True Aqu Hydroger X Oxidized Presence	apply) ained Lea Fauna (B1 latic Plante n Sulfide C Rhizosph	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (C	ving Roo 4)	within a we	Secondary Indica Surface Soil (Drainage Patt Dry-Season V Crayfish Burro Saturation Vis	ators (minimum of two requesters (B6) Perns (B10) Vater Table (C2) Dows (C8) Sibile on Aerial Imagery (Cstressed Plants (D1)
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)	s:	ired; check all that X Water St Aquatic F True Aqu Hydrogei X Oxidized Presence Recent Ir	apply) ained Lea Fauna (B1 latic Plante n Sulfide C Rhizosph	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (C	ving Roo 4)	within a we ts (C3)	Secondary Indica Surface Soil (Drainage Patt Dry-Season V Crayfish Burro Saturation Vis	ators (minimum of two requesters (B6) Elerns (B10) Vater Table (C2) Dows (C8) Sibile on Aerial Imagery (Cstressed Plants (D1) Postion (D2)
Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	s: one is requ	ired; check all that X Water St Aquatic F True Aqu Hydroger X Oxidized Presence Recent Ir	apply) ained Lea Fauna (B1 latic Plante n Sulfide C Rhizosph e of Reduc	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille	ving Roo 4)	within a we ts (C3)	Secondary Indica Surface Soil (Drainage Patt Dry-Season V Crayfish Burro Saturation Vis Stunted or Sti X Geomorphic F	ators (minimum of two requesters (B6) Elerns (B10) Vater Table (C2) Dows (C8) Sibile on Aerial Imagery (Cstressed Plants (D1) Postion (D2)
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Type:	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations: ater Present? Y	Imagery (Bree Surface (I	x Water St Aquatic F True Aqu Hydroger X Oxidized Presence Recent Ir Thin Muc Gauge or B8) Other (Ex	apply) ained Lea Fauna (B1 tatic Plantin Sulfide C Rhizosph of Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Reduction Red	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	ving Roo 4) ed Soils (within a we ts (C3) (C6) 2	Secondary Indica Surface Soil (Drainage Patt Dry-Season V Crayfish Burro Saturation Vis Stunted or Sti X Geomorphic F	ators (minimum of two requestracks (B6) perns (B10) Vater Table (C2) pows (C8) sibile on Aerial Imagery (Cs pessed Plants (D1) Postion (D2) Test (D5)
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Project/Site: I-69 Section 6 Wetland S6W089A		City/County	: Johnson	Sampling Date: 9/14/2016
Applicant/Owner: INDOT/HNTB				State: Indiana Sampling Point TP01A-1W1
Investigator(s): R. Hook, A. Grisel		Section, To	wnship, Ra	inge: Sec 32-T14N-R3E
Landform (hillslope, terrace, etc.):			Local reli	ief (concave, convex, none): concave
Slope (%): 0-2 Lat: 39.609024	L	ong: <u>-86.2</u>	17783	Datum: GCS NAD83
Soil Map Unit Name Genesee silt loam				NWI classification: PEM
Are climatic/hydrologic conditions on the site typical for th	is time of year	? Yes	X No	(If no, explain Remarks.)
Are Vegetation , Soil or Hydrology sig	gnificantly dist	urbed?	Are "l	Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology n	aturally proble	matic?	If nee	eded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map show			ocations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No			
	No		ne Sample	
Wetland Hydrology Present? Yes X	No	With	nin a Wetla	nd? Yes X No
Remarks Wetland is part of a larger complex adjacent t	o an open wat	er pond. D	ata point is	located approximately 320 feet west of SR 37.
VEGETATION - Use scientific names of plants				
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Salix interior	5	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
2.				Total Number of Dominant
3.				Species Across All Strata: 4 (B)
4				Percent of Dominant Species
5				That are OBL, FACW, or FAC:100 (A/B)
O II (OI I O I (Dist Circa AF) redice	5	= Total Cov	er	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot Size: 15' radius)	5	Yes	FACW	Total % Cover of: Multiply by:
			TACV	OBL species 20 x 1 = 20
2. 3.				FACW species 70 x 2 = 140
4.				FAC species 10 x 3 = 30
5				FACU species 0 x 4 = 0 UPL species 0 x 5 = 0
	5	= Total Cov	er	UPL species 0 x 5 = 0 Column Totals: 100 (A) 190 (B)
Herb Stratum (Plot Size: 5' radius)	50	V	E4014/	``
Phalaris arundinacea Typha latifolia	50	Yes Yes	FACW OBL	Prevalence Index = B/A = 1.90
3. Setaria parviflora	10	No	FAC	Hydrophytic Vegetation Indicators:
4. Impatiens capensis	10	No	FACW	1-Rapid Test for Hydrophytic Vegetation:
5.				X 2-Dominance Test is >50% X 3-Prevalence Index is <=3
6				4-Morphological Adaptations (Provide supporting
7				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
10		= Total Cov	er	be present, unless disturbed of problematic
Vine Stratum (Plot Size: 30' radius)				Understadio
1				Hydrophytic Vegetation
2				Present? Yes X No
	0	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate	e sheet.)			

SOIL Sampling Point TP01A-1W1

(Inches)	Color (moist)	%	Color (moist)	% Type ¹	Loc ²	Texture	Remarks
0-20	10YR3/2	70	10YR4/4	30 C	PL	clay loam	distinct redox concentrations
ydric So Histosco Histic E Black F Hydrog Stratified 2 cm M Deplete	pipedon (A2) distic (A3) en Sulfide (A4) ed Layers (A5) uck (A10) ed Below Dark Surfac		Sandy Sandy Stripp Loam Loam Deple X_ Redo:	/ Gleyed Matrix (S4) / Redox (S5) ed Matrix (S6) y Mucky Mineral (F1 y Gleyed Matrix (F2) ted Matrix (F3) x Dark Surface (F6))	Indiactor Coas Dark Iron- Very Othe	cation: PL=Pore Lining, M=Matrix ors for Problematic Hydric Soils st Prairie Redox (A16) c Surface (S7) -Manganese Masses (F12) or Shallow Dark Surface (TF12) or Soil (Explain in Remarks)
Sandy	Park Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3	3)		ted Dark Surface (F x Depressions (F8)	7)		ators of hydrophytic vegetation and id hydrology must be present, unless disturbed or problematic.
strictive	Layer (If observed)):					
	nches):					Hydric Soil	present? Yes X No _
Type: _ Depth (i emarks:	nches):					Hydric Soil	present? Yes X No _
Depth (i						Hydric Soil	present? Yes X No
Depth (i			uired; check all that	apply)			dary Indicators (minimum of two requ
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Project/Site: I-69 Section 6 Wetland S6W103A		City/County	: Marion		Sampling	Date: 9/14/2016	
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling	Point LB01A-1D	1
Investigator(s): R. Hook, A. Grisel		Section, To	wnship, Rai	nge: Sec 10-T14N-R3E			
Landform (hillslope, terrace, etc.): roadside			Local relie	ef (concave, convex, noi	ne): conca	ve	
Slope (%): 0-1% Lat: 39.669595	L	.ong: -86.1	96103		Datum: GC	S NAD 1983	
Soil Map Unit Name Ockley silt loam		-			fication: N/A		_
Are climatic/hydrologic conditions on the site typical for this ti	me of year	? Yes	X No	(If no, explain Re	marks.)		
Are Vegetation X , Soil or Hydrology X signifi	-	_		 Normal Circumstances" p		es X No:	
Are Vegetation , Soil or Hydrology natur				ded, explain answers in			
SUMMARY OF FINDINGS - Attach site map showin			ocations,	transects, importan	it features,	, etc.	
Hydrophytic Vegetation Present? Yes No	Х			-		-	
Hydric Soils Present? Yes No	X		he Sampled				
Wetland Hydrology Present? Yes No	Χ	with	hin a Wetla	nd? Yes	No _	X	
Remarks This data point is taken within the median for State the investigation. This data point passes tests for						vident at the time	of
VEGETATION - Use scientific names of plants							
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test wor	ksheet:		
1	70 COVE	Opecies:	Status	Number of Dominant S That Are OBL, FACW,		1 (A)	
2.					_	1 (A)	
3.				Total Number of Domi Species Across All Str		2 (B)	
4				Percent of Dominant S	Species		
5				That are OBL, FACW,	or FAC:	50 (A/B	•)
(D) (D) (D)	0 :	= Total Cov	er er	Prevalence Index wo	rkshoot		
Sapling/Shrub Stratum (Plot Size: 15' radius)						Multiply by:	
1				Total % Cover of OBL species		= 0	
2			-	FACW species	^``	= 0	
3. 4.				FAC species		= 150	
5.	· ———				50 x 4		
	0 :	= Total Cov	ver	UPL species	0 x 5		
Herb Stratum (Plot Size: 5' radius)				Column Totals: 1	00 (A)	350 (B))
1. Setaria parviflora	50	Yes	FAC	Prevalence Ind	ex = B/A = _	3.50	
2. Schedonorus arundinaceus	50	Yes	FACU	Hydrophytic Vegetati	ion Indicato	rs.	
3				1-Rapid Test for Hy			
4				2-Dominance Test		-9	
5				3-Prevalence Index			
6				4-Morphological Ad			g
7. 8.				data in Remarks or Problematic Hydro	•		
9.				¹ Indicators of hydric so	-		+
10.				be present, unless dist			
	100	= Total Cov	er er				
Vine Stratum (Plot Size: 30' radius)				Hydrophytic			
1				Vegetation	' 00	No. V	
2		Total Car		Present? Y	'es	No X	
		= Total Cov	rel				
Remarks: (Include photo numbers here or on a separate sh	eet.)						

SOIL Sampling Point LB01A-1D1

	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textu	re		Remarks	;
0-6	10YR4/2	100					silty cl	ay			
6-20	10YR4/2	80	10YR4/4	20	D	М	silty cl	ay			
ype: C=C	Concentration, D= De	pletion, R	M=Reduced Matrix.	CS=Cove	red or Coa	ated Sand	Grains.	² Locati	on: PL=F	Pore Lining, N	l=Matrix
-	il Indiactors:	,	,							olematic Hyd	
Black H Hydrogo Stratifie 2 cm M Deplete	pipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5) uck (A10) ed Below Dark Surfac	e (A11)	Sandy Stripp Loam Loam X Deple	r Redox (Sed Matrix r Mucky Mucky Matrix r Gleyed I r Matrix r Dark Su	(S6) Mineral (F1) Matrix (F2) ((F3) rface (F6))	- - - -	Dark S Iron-Ma Very Si Other S	urface (S anganese nallow Da Soil (Expla	Masses (F1 irk Surface (T ain in Remark	F12) s)
Sandy I	ark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3	١		ted Dark : c Depress	Surface (F ions (F8)	7)		wetland h	nydrology	rophytic vege must be pres I or problema	ent, unless
	•	,									
SUICUVE	Layer (If observed)										
Type: _		•					Hydr	ic Soil n	esent?	Yes	Nο
Type: Depth (inemarks:			epleted Matrix (F3) ar	nd can be	considere	d to be wit		ic Soil pi	esent?	Yes	_ No _
Type:	pint meets the indicat	ors for De	epleted Matrix (F3) ar	nd can be	considere	d to be wit			resent?	Yes	No _
Type:	pint meets the indicate	ors for De			considere	d to be wit	thin a wet	land.			
DROLO Tetland H Timary Inc Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundati	pint meets the indicat	ors for De	quired; check all that Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc	apply) ained Lea fauna (B1 atic Plante n Sulfide C Rhizosph	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (Ction in Tille (C7) a (D9)	ving Roots 4)	thin a wet	Secondal Surface Draina Dry-Se Crayfie Satura Stunte Geom	ry Indicato se Soil Cra age Patter eason Wa sh Burrow ation Visib ad or Stres	ors (minimum acks (B6) rns (B10) ater Table (C2 vs (C8) oile on Aerial I ssed Plants (I stion (D2)	of two req
Depth (in marks: is data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possible data possi	point meets the indicated by the posits (B4) posits (B4) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B5) posits (B	ors for De	quired; check all that Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or (B8) Other (Ex	apply) ained Lea fauna (B1 atic Plant a Sulfide C Rhizosph of Reduc on Reduc k Surface Well Date	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9) emarks)	ving Roots 4)	thin a wet	Secondal Surface Draina Dry-Se Crayfie Satura Stunte Geom	ry Indicate se Soil Cra sege Patter season Wa sh Burrow stion Visib sed or Stres orphic Po	ors (minimum acks (B6) rns (B10) ater Table (C2 vs (C8) oile on Aerial I ssed Plants (I stion (D2)	of two req
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Project/Site: I-69 Section 6 Wetland S6W103A		City/Coun	ty: Marion		Sampling Date: <u>9/14/2016</u>
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point LB01A-1W
Investigator(s): R. Hook, A. Grisel		Section, T	ownship, Ra	ange: Sec 10-T14N-R3E	<u> </u>
Landform (hillslope, terrace, etc.): roadside	<u> </u>		Local reli	ief (concave, convex, no	ne): concave
Slope (%): 0-2 Lat: 39.669457	l	Long: -86.	 196111		Datum: GCS NAD83
Soil Map Unit Name Ockley silt loam				NWI classi	fication: N/A
Are climatic/hydrologic conditions on the site typical for this	time of year	r? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation , Soil or Hydrology sign		•			present? Yes X No:
Are Vegetation, Soil or Hydrology nat				eded, explain answers in	
SUMMARY OF FINDINGS - Attach site map show				•	•
Hydrophytic Vegetation Present? Yes X No	0			<u> </u>	
Hydric Soils Present? Yes X No		Is	the Sample	d Area	
Wetland Hydrology Present? Yes X No	0	wi	thin a Wetla	and? Yes	X No
Remarks Data poin t is wihtin the median of SR 37. Mow	ing and alte	ration to th	ie drainage v	were evident at the time	of the investigation.
VEGETATION - Use scientific names of plants					
T O (Dist Cine) 201 redice			Indicator	Dominance Test wor	ksheet:
Tree Stratum (Plot Size: 30' radius) 1	% Cover	Species?	Status	Number of Dominant S That Are OBL, FACW,	
2. 3.				Total Number of Domi Species Across All Str	
4 5				Percent of Dominant S That are OBL, FACW,	
	0	= Total Co	over		
Sapling/Shrub Stratum (Plot Size: 15' raduis)				Prevalence Index wo	
1			<u> </u>	Total % Cover o	
2				· —	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
3					$\frac{60}{10}$ $\times 3 = \frac{10}{30}$
4				FACU species	0 x 4 = 0
5		= Total Co	nver	UPL species	0 x 5 = 0
Herb Stratum (Plot Size: 5' radius)		- 10101 00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Column Totals: 1	100 (A) 175 (B)
1. Cyperus esculentus	55	Yes	FACW	Prevalence Ind	lex = B/A =1.75
2. Juncus effusus	25	Yes	OBL		
3. Typha angustifolia	10	No	OBL	Hydrophytic Vegetat	
4. Juncus tenuis	10	No	FAC	X 2-Dominance Test	ydrophytic Vegetation:
5				X 3-Prevalence Index	
6					daptations (Provide supporting
7.			·	data in Remarks or	r on a separate sheet)
8				_	phytic Vegetation ¹ (Explain)
9		-		¹ Indicators of hydric so be present, unless dis	oil and wetland hydrology must
10	100	= Total Co	over	be present, unless dis	turbed or problematic
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1 2	<u> </u>		· ———	Vegetation Present?	'es X No
	0	= Total Co	over		
Remarks: (Include photo numbers here or on a separate	sheet.)			<u>, </u>	

SOIL Sampling Point LB01A-1W1

	ription: (Describe to	the depth	n needed to documne	t the indic	cator or cor			atore)
D //						ntirm the a	absence of indica	ators.)
Depth	Matrix		Red	ox Featur	es			
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR4/1	100		· · · · · · · · · · · · · · · · · · ·			silty clay	
4-16	10YR4/1	60	10YR4/6	40	С	М	clay loam	prominent redox concentrations
16-20	10YR3/1	80	10YR4/6	20	С	М	clay loam	prominent redox concentrations
		· ——						
								
				. ——				-
Type: C=C	oncentration, D= De	epletion, R	RM=Reduced Matrix,	CS=Cove	red or Coa	ted Sand	Grains. ² Loc	cation: PL=Pore Lining, M=Matrix
lydric Soil	I Indiactors:						Indiacto	ors for Problematic Hydric Soils 3
Histosol			Sand	, Gleved I	Matrix (S4)			st Prairie Redox (A16)
_	oipedon (A2)			Redox (Surface (S7)
	istic (A3)			ed Matrix				Manganese Masses (F12)
_	en Sulfide (A4)				Mineral (F1)		Shallow Dark Surface (TF12)
-	d Layers (A5)				Matrix (F2)		Othe	er Soil (Explain in Remarks)
2 cm Mu	uck (A10)		Deple	ted Matrix	(F3)			
-	d Below Dark Surfac	e (A11)			rface (F6)			
_	ark Surface (A12)				Surface (F	7)	³ Indica	ators of hydrophytic vegetation and dhydrology must be present, unless
_	Mucky Mineral (S1)		Redox	c Depress	sions (F8)		wellan	disturbed or problematic.
	uck Peat or Peat (S3	<u> </u>						
	Layer (If observed):	:						
Type: Depth (in	appool:						Hydric Soil	present? Yes X No
emarks:							,	· · · · · · · · · · · · · · · · · · ·
Wetland Hy	ydrology Indicators							
Wetland Hy	ydrology Indicators		quired; check all that	apply)				
Wetland Hy Primary Ind X Surface	ydrology Indicators icators (minimum of Water (A1)		Water Sta	ained Lea	` '		Surf	dary Indicators (minimum of two require face Soil Cracks (B6)
Vetland Hy Primary Ind Surface High Wa	ydrology Indicators icators (minimum of Water (A1) ater Table (A2)		Water Sta Aquatic F	ained Lea auna (B1	3)		Suri	face Soil Cracks (B6) inage Patterns (B10)
Vetland Hy Primary Ind Surface High Wa Saturatio	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3)		Water Sta Aquatic F True Aqu	ained Lea auna (B1 atic Plant	3) s (B14)		Suri Dra Dry-	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2)
Wetland Hy Primary Ind X Surface High Wa Saturatio Water N	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1)		Water Sta Aquatic F True Aqu Hydroger	ained Lea auna (B1 atic Plant n Sulfide (3) s (B14) Odor (C1)	ing Poots	Surl Dra Dry- Cra	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8)
Wetland Hy Primary Ind X Surface High Wa Saturation Water M Sedimer	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)		Water Sta Aquatic F True Aqu Hydroger Oxidized	ained Lea fauna (B1 atic Plant n Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Liv	•	Surf Dra Dry- Cra s (C3) Sate	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9)
Wetland Hy Primary Ind X Surface High Wa Saturati Water M Sedimer Drift Dep	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)		Water State Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea auna (B1 atic Plant Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Liv ced Iron (C	4)	Surf Drai Dry- Cra s (C3) Satu	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1)
Wetland Hy Primary Ind X Surface High Wa Saturatio Water M Sedimer Drift Dep X Algal Ma	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduction	3) s (B14) Odor (C1) heres on Lived Iron (C	4)	Surfa	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2)
Wetland Hy Primary Ind X Surface High Wa Saturati Water M Sedimer Drift Dep X Algal Ma Iron Dep	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one is red	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface	3) s (B14) Odor (C1) eres on Liv ced Iron (C ction in Tille	4)	Surfa	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1)
Vetland Hy Primary Ind Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	one is red	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or	ained Lea fauna (B1 atic Plant Sulfide (Rhizosph of Reduction Reduction k Surface	3) s (B14) Odor (C1) heres on Lived Iron (C etion in Tille (C7) a (D9)	4)	Surfa	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2)
Wetland Hy Primary Ind X Surface High Wa Saturati Water M Sedimer Drift Dep X Algal Ma Iron Dep Inundati Sparsely	ydrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial	one is red	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or	ained Lea fauna (B1 atic Plant Sulfide (Rhizosph of Reduction Reduction k Surface	3) s (B14) Odor (C1) heres on Lived Iron (C etion in Tille (C7) a (D9)	4)	Surfa	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2)
Wetland Hy Primary Ind X Surface High Wa Saturation Water M Sedimen Drift Dep X Algal Ma Iron Dep Inundati Sparsely	wdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial by Vegetated Concavervations:	one is red	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or Other (Ex	ained Lea fauna (B1 atic Plant Sulfide (Rhizosph of Reduction Reduction k Surface	3) s (B14) Odor (C1) heres on Lived Iron (C etion in Tille (C7) a (D9)	4)	Surfa	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2)
Wetland Hy Primary Ind X Surface High Wa Saturation Water M Sedimen Drift Dep X Algal Ma Iron Dep Inundati Sparsely Field Obse	wdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concave rvations:	one is red	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat cplain in R	3) s (B14) Odor (C1) heres on Lived Iron (C etion in Tille (C7) a (D9)	4)	Surfa	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2)
Wetland Hy Primary Ind X Surface High Wa Saturati Water M Sedimer Drift Dep X Algal Ma Iron Dep Inundati Sparsely Field Obse Surface Wa Water Table	wdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concave crvations: ater Present? Yes	Imagery (e Surface	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat cplain in R	3) s (B14) Odor (C1) heres on Lived Iron (C etion in Tille (C7) a (D9)	4) ed Soils (C	Surf Dra Cra Cra Stur Stur Stur Geo X_ FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2) C-Neutral Test (D5)
Primary Ind X Surface High Wa Saturation Water M Sedimer Drift Dep X Algal Ma Iron Dep Inundati Sparsely Field Obse Surface Wa Water Table Saturation I	wdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concave crvations: ater Present? Yes	Imagery (e Surface	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat cplain in R	3) s (B14) Odor (C1) heres on Lived Iron (C etion in Tille (C7) a (D9)	4) ed Soils (C	Surfa	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2) C-Neutral Test (D5)
Wetland Hy Primary Ind X Surface High Wa Saturati Water M Sedimer Drift Dep X Algal Ma Iron Dep Inundati Sparsely Field Obse Surface Wa Water Table Saturation I	wdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concave rvations: ater Present? Present? Are Present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present.	Imagery (e Surface es X es es	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat cplain in R (inches): (inches):	3) s (B14) Ddor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (C	Surf Dra Cra Stur Stur Stur Geo X FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2) C-Neutral Test (D5)
Wetland Hy Primary Ind X Surface High Wa Saturation Water M Sedimen Drift Dep X Algal Ma Iron Dep Inundatin Sparsely Field Obse Surface Wa Water Table Saturation Fincludes ca	wdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concave rvations: ater Present? Present? Are Present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present.	Imagery (e Surface es X es es	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat cplain in R (inches): (inches):	3) s (B14) Ddor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (C	Surf Dra Cra Stur Stur Stur Geo X FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2) C-Neutral Test (D5)
Wetland Hy Primary Ind X Surface High Wa Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obse Surface Wa Water Table Saturation Fincludes ca	wdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concave rvations: ater Present? Present? Are Present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present.	Imagery (e Surface es X es es	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat cplain in R (inches): (inches):	3) s (B14) Ddor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (C	Surf Dra Cra Stur Stur Stur Geo X FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2) C-Neutral Test (D5)
Wetland Hy Primary Ind X Surface High Wa Saturati Water M Sedimer Drift Dep X Algal Ma Iron Dep Inundati Sparsely Field Obse Surface Wa Water Table Saturation Fincludes ca	wdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concave rvations: ater Present? Present? Are Present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present.	Imagery (e Surface es X es es	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat cplain in R (inches): (inches):	3) s (B14) Ddor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (C	Surf Dra Cra Stur Stur Stur Geo X FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2) C-Neutral Test (D5)
Vetland Hy Primary Ind Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation Sparsely Field Obse Surface Wa Vater Table Saturation Fincludes ca	wdrology Indicators icators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concave rvations: ater Present? Present? Are Present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present? Are present.	Imagery (e Surface es X es es	Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc B7) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat cplain in R (inches): (inches):	3) s (B14) Ddor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) temarks)	4) ed Soils (C	Surf Dra Cra Stur Stur Stur Geo X FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visibile on Aerial Imagery (C9) nted or Stressed Plants (D1) omorphic Postion (D2) C-Neutral Test (D5)

Project/Site: I-69 Section 6 Wetland S6W113A	City/Cour	nty: Marion		Sampling Date: <u>9/14/2016</u>
Applicant/Owner: INDOT/HNTB			State: Indiana	Sampling Point HC01A-1D1
Investigator(s): R. Hook, A. Grisel	Section,	Township, Ra	ange: Sec 10-T14N-R3E	<u> </u>
Landform (hillslope, terrace, etc.): roadside		Local reli	ief (concave, convex, no	one): none
Slope (%): <u>0-1%</u> Lat: <u>39.698183</u>	Long: -86	6.182465		Datum: GCS NAD 1983
Soil Map Unit Name Genesse silt loam			NWI classi	ification: N/A
Are climatic/hydrologic conditions on the site typical for this time of y	year? Yes	X No	(If no, explain Re	emarks.)
Are Vegetation X , Soil or Hydrology X significantly	disturbed?	Are "I	Normal Circumstances"	present? Yes X No:
Are Vegetation, Soil or Hydrology naturally pro	oblematic?	If nee	eded, explain answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sam		nt locations,	, transects, importar	nt features, etc.
Hydrophytic Vegetation Present? Yes No _X				
Hydric Soils Present? Yes No X		s the Sample vithin a Wetla		Na V
Wetland Hydrology Present? Yes No X	. **	/Itiiiii a vveua	ind: ies	NoX
Remarks This data point was taken in an edge row between an are planting and spraying activities. Data point is located ap				on is likley disturbed due to
VEGETATION - Use scientific names of plants				
- (5) (6) (6)	ute Dominar ver Species		Dominance Test wor	
1	•		Number of Dominant That Are OBL, FACW	-1
2.			Total Number of Dom	
3			Species Across All St	
4			Percent of Dominant	
5			That are OBL, FACW	, or FAC: 0 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)) = Total C	over	Prevalence Index wo	orksheet:
			Total % Cover of	
1. 2.			OBL species	0 x 1 = 0
3.			FACW species	0 x 2 = 0
4.			FAC species	0 x 3 = 0
5.			FACU species UPL species	30 x 4 = 120
0	= Total C	over	Column Totals:	$ \begin{array}{ccccccccccccccccccccccccccccccccc$
Herb Stratum (Plot Size: 5' radius)				 ``
1. Solidago canadensis 30 2. Daucus carota 15		<u>FACU</u> UPL	Prevalence Inc	dex = B/A = 4.45
2. Daucus carota 15 3. Glycine max 10		UPL	Hydrophytic Vegetat	tion Indicators:
4			1-Rapid Test for H	lydrophytic Vegetation:
5			2-Dominance Test	
6.			3-Prevalence Inde	
7.				daptations (Provide supporting or on a separate sheet)
8				ophytic Vegetation ¹ (Explain)
9				oil and wetland hydrology must
10.			be present, unless dis	sturbed or problematic
Vine Stratum (Plot Size: 30' radius)	= Total C	over		
1			Hydrophytic	
2.			Vegetation Present?	Yes No _X_
	= Total C	Cover		<u> </u>
Remarks: (Include photo numbers here or on a separate sheet.)			<u> </u>	
This point was taken in an edge row along an active soybean field. a wetland.	. There are no	o idicators for	hydrophytic vegetation	and is not considered to be within

SOIL Sampling Point HC01A-1D1

Profile Desc	ription: (Describe	e to the depth	needed to d	ocumnet t	he indic	ator or cor	nfirm the	e absend	ce of indic	cators.)
Depth	Matri	Х		Redox	Feature	es				
(Inches)	Color (moist)	%	Color (m	oist)	%	Type ¹	Loc ²	Te	xture	Remarks
0-20	10YR4/2	100						clay	/ loam	
	-							-		
-	-							-		
-								-		
-										
¹ Type: C=0	Concentration, D=	Depletion, RI	M=Reduced	Matrix, CS	S=Cove	ed or Coa	ted Sar	nd Grains	s. ² Lo	cation: PL=Pore Lining, M=Matrix
Hydric Soi	I Indiactors:								Indiact	tors for Problematic Hydric Soils ³
Histoso	I (A1)			Sandy G	leved N	Matrix (S4)				ast Prairie Redox (A16)
_	pipedon (A2)		_	Sandy F						k Surface (S7)
_	istic (A3)		_	Stripped						-Manganese Masses (F12)
_	en Sulfide (A4)		_			lineral (F1)			y Shallow Dark Surface (TF12)
	d Layers (A5)		_	-	-	Matrix (F2)				er Soil (Explain in Remarks)
	uck (A10)		_	Deplete	-	, ,				, ,
	d Below Dark Sui	face (A11)	_			face (F6)				
Thick D	ark Surface (A12))	_	Deplete	d Dark S	Surface (F	7)			cators of hydrophytic vegetation and
Sandy I	Mucky Mineral (S ²	1)	_	Redox D	Depress	ions (F8)			wetlar	nd hydrology must be present, unless
5 cm M	uck Peat or Peat	(S3)								disturbed or problematic.
Restrictive	Layer (If observe	ed):								
Type:										
Depth (ir	nches):							H	ydric Soi	I present? Yes No _X
Remarks:										
HYDROLO	GY									
	ydrology Indicat									
Primary Inc	licators (minimum	of one is req	uired; check	all that ap	pply)				Secon	ndary Indicators (minimum of two required)
_	Water (A1)		_	/ater Stain		` ,				rface Soil Cracks (B6)
High W	ater Table (A2)			quatic Faι					Dra	ainage Patterns (B10)
_	on (A3)		_	rue Aquati						y-Season Water Table (C2)
	/larks (B1)			ydrogen S		` '				ayfish Burrows (C8)
_	nt Deposits (B2)		_			eres on Liv	-	ots (C3)		turation Visibile on Aerial Imagery (C9)
_	posits (B3)		_			ed Iron (C		(0.0)		unted or Stressed Plants (D1)
_	at or Crust (B4)					tion in Tille	d Soils	(C6)		omorphic Postion (D2)
_	posits (B5)	:	_	hin Muck S					FA	C-Neutral Test (D5)
_	ion Visible on Aer			auge or W						
_ Sparser	y Vegetated Cond	cave Surface	(66) _ (ther (Expl	am m K	emarks)				
Field Obse	ervations:									
Surface Wa	ater Present?	Yes	No X	Depth (in	ches):					
Water Tabl	e Present?	Yes	No X	Depth (in	ches):					
Saturation	Present?	Yes	No X	Depth (in			_ ,	Netland	Hydrolo	gy Present? Yes No X
	apillary fringe)			. `					, a . 0 10	gjddciit. 103 140
Describe Re	ecorded Data (stre	eam gauge, m	onitoring we	ll, aerial p	hotos, p	revious in	spectio	ns), if av	ailable:	
Remarks:										

Project/Site: I-69 Section 6 Wetland S6W113A		City/County:	Marion		Samplin	ng Date: 9/14/20	ე16
Applicant/Owner: INDOT/HNTB				State: Indiana	Samplin	ng Point HC01A	₹-1W1
Investigator(s): R. Hook, A. Grisel	;	Section, Tov	wnship, Raı	nge: Sec 10-T14N-R3E	Ξ		
Landform (hillslope, terrace, etc.): roadside			Local relie	ef (concave, convex, no	ne): none		
Slope (%): 0-1 Lat: 39.697752	L	.ong: -86.18	32694		Datum: C	GCS NAD 1983	
Soil Map Unit Name Genesse silt loam				NWI classi	ification: N		
Are climatic/hydrologic conditions on the site typical for the	his time of year	2 Vac	Y No			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Are Vegetation , Soil or Hydrology s				lormal Circumstances"		Voc V No	
							-
Are Vegetation, Soil or Hydrology				ded, explain answers in	,		
SUMMARY OF FINDINGS - Attach site map sho	wing sampii	ng point id	ocations,	transects, importar	nt reature	s, etc.	
Hydrophytic Vegetation Present? Yes X	No	le th	e Sampled	l Δrea			
Hydric Soils Present? Wetland Hydrology Present? Yes X Yes X	No		in a Wetla		X No	,	
	No						
Remarks This data point was taken in a site that has e problematic due to the layer of asphalt. The						can be conside	∍red
,				·			
VEGETATION - Use scientific names of plants							
T O (Dist Circa 20) redice		Dominant		Dominance Test wo	rksheet:		
Tree Stratum (Plot Size: 30' radius) 1. Populus heterophylla	% Cover 10	Species? Yes	Status OBL	Number of Dominant			
2. Salix interior	20	Yes	FACW	That Are OBL, FACW	, or FAC:	7((A)
3.				Total Number of Dom Species Across All St		9 ((B)
				·		((0)
45.				Percent of Dominant 3 That are OBL, FACW		78 ((A/B)
	30	= Total Cove	er .	·			` ,
Sapling/Shrub Stratum (Plot Size: 15' radius				Prevalence Index wo	orksheet:		
1. Populus heterophylla	10	Yes	OBL	Total % Cover of	of:	Multiply by:	_
2. Salix interior	10	Yes	FACW	OBL species		1 = 30	_
3				FACW species		2 = 110	_
4				FAC species FACU species		3 = 0 $4 = 100$	_
5				UPL species		5 = 25	_
(Diet Cines 5) and inc	20 :	= Total Cove	er		115 (A		(B)
Herb Stratum (Plot Size: 5' radius)	15	Voo	FACU	Prevalence Inc	10x - B/A -	2.30	_
Sorghum halepense Solidago canadensis	<u>15</u> 10	Yes Yes	FACU	Frevalence inc	16X = D/A =	2.30	_
3. Persicaria sagittata	10	Yes	OBL	Hydrophytic Vegetat	ion Indica	tors:	
4. Persicaria bicornis	10	Yes	FACW	1-Rapid Test for H	lydrophytic	Vegetation:	
5. Impatiens capensis	10	Yes	FACW	X 2-Dominance Test			
6. Phalaris arundinacea	5	No	FACW	X 3-Prevalence Inde		(Duarrida arraga	
7. Daucus carota	5	No	UPL	4-Morphological A data in Remarks o			orting
8				Problematic Hydro	•	•	in)
9				¹ Indicators of hydric s	oil and wet!	land hydrology r	must
10				be present, unless dis			
Vine Charter (Plot Size: 20) redii:	65	= Total Cove	er				
Vine Stratum (Plot Size: 30' radius)				Hydrophytic			
1				Vegetation Present?	Yes X	No	
2		= Total Cove	er	i icaciil!	. 30 <u>//</u>		
		. Star Oove					
Remarks: (Include photo numbers here or on a separate	te sneet.)						

SOIL Sampling Point HC01A-1W1

Inches) 0-6	Color (moist) 10YR4/1	100	Color (moist)	% Type ¹	Loc ²	Texture silty clay loam	Remarks
•	oncentration, D= De Indiactors: (A1)	pletion, RM=l	<u> </u>	CS=Covered or Co		Indiac Coa	ocation: PL=Pore Lining, M=Matrix tors for Problematic Hydric Soils ast Prairie Redox (A16)
Black His Hydroge Stratified 2 cm Mu Depleted Thick Da	n Sulfide (A4) d Layers (A5)	e (A11)	Sandy Stripp Loam Loam Deple Redo:	r Redox (S5) ed Matrix (S6) y Mucky Mineral (F y Gleyed Matrix (F2) ted Matrix (F3) c Dark Surface (F6) ted Dark Surface (c Depressions (F8)	1) 2)	Iron Ver Oth 3 India	k Surface (S7) h-Manganese Masses (F12) y Shallow Dark Surface (TF12) er Soil (Explain in Remarks) cators of hydrophytic vegetation and
strictive L Type: as Depth (incomarks:		:	_			Hydric Soi	il present? Yes X No
	re problematic due t nd can be considered			on top of asphalt.	This site ha	as indicators for	hydrophytic vegetation and wetland
DROLOC	GY vdrology Indicators	d to be within	a wetland.		This site ha	as indicators for	hydrophytic vegetation and wetland
DROLOC etland Hy mary Indi Surface ' High Wa Saturatio Water M Sediment Drift Dep Algal Ma Iron Dep Inundatio	GY rdrology Indicators icators (minimum of Water (A1) tter Table (A2)	to be within c: one is require	ed; check all that X Water Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc		iving Roots C4)	Secon	ndary Indicators (minimum of two requirect face Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8)
DROLOG Etland Hy mary Indi Surface of High Wa Saturation Water M Sediment Drift Dep Algal Ma Iron Dep Inundation Sparsely Etd Observation Face Water Table Sturation Feludes ca	d can be considered and can be considered and can be considered and cators (reflected by the considered and cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators (minimum of the cators	Imagery (B7) e Surface (B8 es N es N	ed; check all that X Water Standard Aquatic Factor In Thin Muchand Gauge or Other (Expression of X Depth of X Depth	apply) ained Leaves (B9) fauna (B13) atic Plants (B14) a Sulfide Odor (C1) Rhizospheres on Learn (Con Reduction in Tilk Surface (C7) Well Data (D9) Explain in Remarks) (inches): (inches):	iving Roots C4) led Soils (C	Secon	ndary Indicators (minimum of two requires Soil Cracks (B6) ainage Patterns (B10) y-Season Water Table (C2) ayfish Burrows (C8) turation Visibile on Aerial Imagery (C9 unted or Stressed Plants (D1) comorphic Postion (D2) i.C-Neutral Test (D5)

Project/Site: I-69 Section 6 Wetland S6W116A	(City/County	: Marion		Sampling Date: 9/14/2016
Applicant/Owner: INDOT/HNTB				State: Indiana	Sampling Point LC03A-1D1
Investigator(s): R. Hook, A. Grisel	;	Section, To	wnship, Rai	nge: Sec 36-T15N-R3E	
Landform (hillslope, terrace, etc.): roadside	_		Local relie	ef (concave, convex, no	ne): concave
Slope (%): 0-1% Lat: 39.701862	L	ong: -86.1	49668		Datum: GCS NAD 1983
Soil Map Unit Name Udorthents, cut and filled				NWI classif	fication: N/A
Are climatic/hydrologic conditions on the site typical for this t	ime of year	? Yes	X No	(If no, explain Re	marks.)
Are Vegetation , Soil or Hydrology signit		_			present? Yes X No:
Are Vegetation , Soil or Hydrology natu				ded, explain answers in	
SUMMARY OF FINDINGS - Attach site map showin				•	,
Hydrophytic Vegetation Present? Yes No	X			<u> </u>	
Hydric Soils Present? Yes No	$\frac{X}{X}$	ls ti	he Sampled	l Area	
Wetland Hydrology Present? Yes No	X	witl	hin a Wetla	nd? Yes	NoX
Remarks This data point is located on the upland area nea data point did not have an indicators for wetland					
VEGETATION - Use scientific names of plants	Absoluto	Dominant	Indicator	Barria Tarria	la la art
Tree Stratum (Plot Size: 30' radius)	% Cover	Dominant Species?	Status	Dominance Test wor	
1				Number of Dominant S That Are OBL, FACW,	
2				Total Number of Domi	
3				Species Across All Str	rata: 2 (B)
4				Percent of Dominant S	
5				That are OBL, FACW,	or FAC: 0 (A/B)
Conline/Chruh Ctratum (Plot Size: 15' radius	0 =	= Total Cov	er .	Prevalence Index wo	rksheet:
Sapling/Shrub Stratum (Plot Size: 15' radius)				Total % Cover o	
1		-		OBL species	$\frac{1}{0} \qquad x = 0$
2				FACW species	0 x 2 = 0
3. 4.				FAC species	0 x 3 = 0
5.				· —	00 x 4 = 400
		= Total Cov	er	UPL species	$\frac{0}{0}$ x 5 = $\frac{0}{0}$
Herb Stratum (Plot Size: 5' radius)				Column Totals: 1	00 (A) <u>400</u> (B)
1. Cirsium arvense	60	Yes	FACU	Prevalence Ind	ex = B/A = 4.00
2. Schedonorus arundinaceus	40	Yes	FACU	Hydrophytic Vegetati	ion Indicators:
3				, , ,	ydrophytic Vegetation:
4				2-Dominance Test	
5.				3-Prevalence Index	
6					daptations (Provide supporting
7 8.					r on a separate sheet)
9.				_	phytic Vegetation ¹ (Explain)
10				¹ Indicators of hydric so be present, unless dis	oil and wetland hydrology must turbed or problematic
	100 =	= Total Cov	er		
Vine Stratum (Plot Size: 30' radius)				Hydrophydia	
1				Hydrophytic Vegetation	
2					es No _X_
	0 =	= Total Cov	er er		
Remarks: (Include photo numbers here or on a separate sh	neet.)				

SOIL Sampling Point LC03A-1D1

Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure		Remarks	
0-20	10YR4/3	100	()		- 7 -		silt lo				
	-										
	-										
ype: C=0	Concentration, D= De	pletion, RM	I=Reduced Matrix,	CS=Cove	red or Coa	ited Sand	Grains.	² Locat	ion: PL=P	ore Lining, M	l=Matrix
dric Soi	l Indiactors:							Indiactor	s for Prob	lematic Hyd	ric Soils ³
Histoso	, ,				Matrix (S4)				Prairie Re		
	pipedon (A2)			Redox (urface (S7	′) Masses (F1:	2)
	istic (A3) en Sulfide (A4)			ed Matrix	(ວ _{ຽ)} /lineral (F1)				rk Surface (T	
	d Layers (A5)				Matrix (F2)	•				in in Remark	
	uck (A10)			ted Matrix				_	(-,
Deplete	d Below Dark Surfac	e (A11)	Redo	x Dark Su	rface (F6)						
	ark Surface (A12)				Surface (F	7)				ophytic veget	
-	Mucky Mineral (S1)	,	Redo	x Depress	ions (F8)			wetiand		must be pres or problemat	
	uck Peat or Peat (S3 Layer (If observed)	,								<u>'</u>	
	Layer (ir observed)	•									
Tvne:											
Type: Depth (ir marks: s point d	nches): id not meet any of th	e hydric soi	I indicators and is r	ot consid	ered to be	within a w		dric Soil po	resent?	Yes	_ No _
Depth (ir marks: s point d	id not meet any of th	e hydric soi	I indicators and is r	ot consid	ered to be	within a w			resent?	Yes	No
Depth (ir marks: s point d	id not meet any of th		I indicators and is r	ot consid	ered to be	within a w			resent?	Yes	No _
Depth (ir narks: s point d	id not meet any of th	· ·			ered to be	within a w		area.		Yes	
Depth (ir marks: s point d	GY ydrology Indicators	· ·		apply)		within a w		Seconda		ors (minimum	
Depth (ir narks: s point d DROLO etland H mary Inc Surface High W	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2)	· ·	ired; check all that Water State Aquatic F	apply) ained Lea Fauna (B1	ves (B9) 3)	within a w		Seconda Surfac	ry Indicato ce Soil Cra age Patteri	ors (minimum acks (B6) ns (B10)	of two requ
Depth (ir narks: s point d DROLO etland H mary Inc Surface High W. Saturati	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3)	· ·	iired; check all that Water Sta Aquatic F True Aqu	apply) ained Lea fauna (B1 atic Plant	ves (B9) 3) s (B14)	within a w		Seconda Surfac Draina Dry-S	ry Indicato ce Soil Cra age Patteri eason Wa	ors (minimum acks (B6) ns (B10) ter Table (C2	of two requ
Depth (ir marks: s point d DROLO etland H mary Inc Surface High W: Saturati Water M	GY ydrology Indicators licators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)	· ·	iired; check all that Water Standaric F Aquatic F True Aqu Hydroger	apply) ained Lea Fauna (B1 atic Plant n Sulfide (ves (B9) 3) s (B14) Odor (C1)		retland a	Seconda Surfac Draina Dry-Sı	ry Indicato ce Soil Cra age Patter eason Wa sh Burrow	ors (minimum acks (B6) ns (B10) ter Table (C2 s (C8)	of two requ
Depth (ir narks: s point d DROLO Detland H mary Inc Surface High W Saturati Water N Sedime	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)	· ·	ired; check all that Water Sta Aquatic F True Aqu Hydroger Oxidized	apply) ained Lea fauna (B1 atic Plant n Sulfide (Rhizosph	ves (B9) 3) s (B14) Odor (C1) eres on Li [*]	ving Roots	retland a	Seconda Surfac Draina Dry-Si Crayfi Satura	ry Indicato ce Soil Cra age Patter eason Wa sh Burrow ation Visib	ors (minimum acks (B6) ns (B10) ter Table (C2 s (C8) ile on Aerial I	of two requ
Depth (ir narks: s point d DROLO Detland H mary Inc Surface High W Saturati Water M Sedime Drift De	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)	· ·	uired; check all that Water Standard Frue Aquatic Formula Aquadic Formula Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aquadic Aqu	apply) ained Lea fauna (B1 atic Plant o Sulfide (Rhizosph	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (C	ving Roots 4)	retland a	Seconda Surfac Draina Dry-Si Crayfi Satura	ry Indicato ce Soil Cra age Patten eason Wa sh Burrow ation Visib ed or Stres	ors (minimum acks (B6) ns (B10) ter Table (C2 s (C8) ile on Aerial I ssed Plants (I	of two requ
Depth (ir narks: s point d DROLO Detland H mary Inc Saturati Water M Sedime Drift De Algal M	GY ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)	· ·	ired; check all that Water Standard Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aquatic Frue Aq	apply) ained Lea fauna (B1 atic Plant o Sulfide (Rhizosph	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (C	ving Roots 4)	retland a	Seconda Surfac Draina Dry-Sa Crayfi Satura Stunte Geom	ry Indicato ce Soil Cra age Patter eason Wa sh Burrow ation Visib	ors (minimum acks (B6) ns (B10) ter Table (C2 s (C8) ile on Aerial I ssed Plants (I stion (D2)	of two requ
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Depth (ir marks: s point d DROLO Detland H mary Inc. Surface High W. Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	gy ydrology Indicators dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavervations:	one is requ	water Standard Water Standard Water Standard Frue Aquatic Formula Water Standard Water Standard Presence Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water Standard Water	apply) ained Lea fauna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface	ves (B9) 3) s (B14) Odor (C1) eres on Lived Iron (C tion in Tille (C7) a (D9)	ving Roots 4)	retland a	Seconda Surfac Draina Dry-Sa Crayfi Satura Stunte Geom	ry Indicato ce Soil Cra age Patter eason Wa sh Burrow ation Visib ed or Stres orphic Pos	ors (minimum acks (B6) ns (B10) ter Table (C2 s (C8) ile on Aerial I ssed Plants (I stion (D2)	of two requ
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Project/Site: I-69 Section 6 Wetland S6W116A		City/County	: Marion Co	ounty Sampling Date: 9/14/2016	3
Applicant/Owner: INDOT/HNTB				State: Indiana Sampling Point LC03A-1V	N1
Investigator(s): R. Hook, A. Grisel		Section, To	wnship, Ra	inge: Sec 36-T15N-R3E	
Landform (hillslope, terrace, etc.): roadside			Local reli	ief (concave, convex, none): concave	
Slope (%): 0-1% Lat: 39.701902	L	ong: <u>-86.1</u>	49537	Datum: GCS NAD 1983	
Soil Map Unit Name Udorthents, cut and filled	·			NWI classification: N/A	
Are climatic/hydrologic conditions on the site typical for this ti	me of year	? Yes	X No	(If no, explain Remarks.)	
Are Vegetation, Soil or Hydrologysignifi	cantly dist	urbed?	Are "N	Normal Circumstances" present? Yes X No:	
Are Vegetation , Soil or Hydrology natur	ally proble	matic?	If nee	eded, explain answers in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showin	g sampli	ng point l	ocations,	transects, important features, etc.	
Hydrophytic Vegetation Present? Yes X No					
Hydric Soils Present? Yes X No			ne Sampleo nin a Wetla		
Wetland Hydrology Present? Yes X No		Witi	iii a wella	nd? Yes X No	
Remarks This site is located along the right of way for the wetland area. There were no signs of signifcant d					
VEGETATION - Use scientific names of plants					
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test worksheet:	
1		•		Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)	
2.				Total Number of Dominant	
3.				Species Across All Strata: 2 (B)	
4				Percent of Dominant Species	
5				That are OBL, FACW, or FAC:100 (A/t	B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Cov	er	Prevalence Index worksheet:	
				Total % Cover of: Multiply by:	
1. 2.				OBL species 70 x 1 = 70	
3.				FACW species 25 x 2 = 50	
4				FACIL progress 0 x 3 = 0	
5				FACU species 0 x 4 = 0 UPL species 0 x 5 = 0	
(Dist O'rea El restina	0	= Total Cov	er		3)
Herb Stratum (Plot Size: 5' radius) 1. Schoenoplectus tabernaemontani	60	Yes	OBL	Prevalence Index = B/A = 1.26	
Phalaris arundinacea	20	Yes	FACW	Trevalence index = B/A = 1.20	
3. Typha angustifolia	10	No	OBL	Hydrophytic Vegetation Indicators:	
4. Cyperus esculentus	5	No	FACW	1-Rapid Test for Hydrophytic Vegetation:	
5				X 2-Dominance Test is >50% X 3-Prevalence Index is <=\$	
6				4-Morphological Adaptations (Provide supporting	ng
7				data in Remarks or on a separate sheet)	•
8				Problematic Hydrophytic Vegetation ¹ (Explain)	
9				¹ Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic	st
	95	= Total Cov	er	20 processing attraction of processing and	
Vine Stratum (Plot Size: 30' radius)				Hydrophytic	
1				Vegetation	
2				Present? Yes X No	
	0	= Total Cov	er		
Remarks: (Include photo numbers here or on a separate sh This data point meets hydrophytic vegetation and is conside	,	vithin a wetl	and.		

SOIL Sampling Point LC03A-1W1

Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR2/1	100	Color (moist)	70	Турс	LOC	silty clay loam	Remarks
4-12	10YR3/1	100					silty clay loam	_
12-20	10YR4/1	70	10YR4/4	30		M	silty clay loam	
•	Concentration, D= De	pletion, RI	——————————————————————————————————————	CS=Cove	red or Coa	ted Sand		ocation: PL=Pore Lining, M=Matrix
Histoso	I (A1)		Sand	y Gleyed I	Matrix (S4)		Co	ast Prairie Redox (A16)
Histic E	pipedon (A2)		Sand	y Redox (S5)			rk Surface (S7)
	listic (A3)			oed Matrix				n-Manganese Masses (F12)
	en Sulfide (A4)				Mineral (F1	•		ry Shallow Dark Surface (TF12)
	ed Layers (A5) uck (A10)			ny Gleyed eted Matrix	Matrix (F2)		_ Oth	ner Soil (Explain in Remarks)
	ed Below Dark Surfac	e (A11)		x Dark Su				
	ark Surface (A12)	- (//			Surface (F	7)		cators of hydrophytic vegetation and
	Mucky Mineral (S1)			x Depress				and hydrology must be present, unles
5 cm M	uck Peat or Peat (S3)	_ _					disturbed or problematic.
strictive	Layer (If observed):	:						
							Hydric So	il present? Ves V No.
	nches):	soil indica	tor for Depleted Bel	ow Dark S	Surface (A1	1) and is		pe within a wetland.
Depth (in marks:	pint meets the hyrdic	soil indica	tor for Depleted Bel	ow Dark S	Surface (A1	1) and is		
Depth (in marks: s data po	Dint meets the hyrdic	:			Surface (A1	1) and is	considered to b	pe within a wetland.
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Project/Site: I-69 Section 6 Wetland S6W126A		City/County	y: Marion		Sampling Date: 7/26/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point LB02A-1D1
Investigator(s): R. Yeager		Section, To	ownship, Ra	nge: Sec 10-T14N-R3E	
Landform (hillslope, terrace, etc.): plain			Local reli	ef (concave, convex, none	e): concave
Slope (%): <u>0-1</u> Lat: <u>39.664106</u>		_ong:86.	188958		Datum: GCS NAD83
Soil Map Unit Name Whitaker silt loam				NWI classific	cation: N/A
Are climatic/hydrologic conditions on the site typical for this	time of year	? Yes	X No	(If no, explain Rem	narks.)
Are Vegetation , Soil or Hydrology sign	ificantly dist	urbed?	Are "N	—— Normal Circumstances" pr	esent? Yes X No:
Are Vegetation , Soil or Hydrology nat				ded, explain answers in R	emarks.)
SUMMARY OF FINDINGS - Attach site map showi			locations,	transects, important	features, etc.
Hydrophytic Vegetation Present? Yes No	X X				
Hydric Soils Present? Yes No			he Sample hin a Wetla		No. V
Wetland Hydrology Present? Yes No	<u> </u>	Wit	iiii a vveua	illu? res	NoX
Remarks					
VEGETATION - Use scientific names of plants					
Table 1	Absolute	Dominant	Indicator	Dominance Test work	
Tree Stratum (Plot Size: 30' radius)		Species?	Status	Number of Dominant Sp	
1				That Are OBL, FACW, of	
2				Total Number of Domina	
3				Species Across All Stra	``
4				Percent of Dominant Sp That are OBL, FACW, or	
5		= Total Co	ver	mat are OBE, 1710VV, o	(775)
Sapling/Shrub Stratum (Plot Size: 15' radius)				Prevalence Index work	ksheet:
1. Platanus occidentalis	2	No	FACW	Total % Cover of:	Multiply by:
2.					0 x 1 =0
3				FACW species 1	
4				FAC species 5	$\frac{1}{7}$ $x = 3$ $x = 4$ $x = 228$
5				UPL species 3	
Herb Stratum (Plot Size: 5' radius)	2	= Total Co	ver	Column Totals: 10	3 (A) 426 (B)
1. Solidago canadensis	55	Yes	FACU	Prevalence Inde	x = B/A = 4.14
2. Daucus carota	35	Yes	UPL		
3. Symphyotrichum racemosum	5	No	FACW	Hydrophytic Vegetatio	
4. Asclepias syriaca	2	No	FACU	1-Rapid Test for Hyd	
5. Rumex crispus	1	No	FAC	2-Dominance Test is 3-Prevalence Index	
6					aptations (Provide supporting
7				data in Remarks or o	on a separate sheet)
8				Problematic Hydropl	hytic Vegetation ¹ (Explain)
9. 10.		·		¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must
16.	98	= Total Co	ver	be present, unless dista	
Vine Stratum (Plot Size: 15' radius)				Hadaan 2	
1. Vitis riparia	3	No		Hydrophytic Vegetation	
2					s No _X
	3	= Total Co	ver		
Remarks: (Include photo numbers here or on a separate s	sheet.)				
Also included Rubus sp. 1%					

SOIL Sampling Point LB02A-1D1

i ione besc	cription: (Describe to							,	
Depth	Matrix			lox Featur					
(Inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture		Remarks
0-20	10YR4/4	100					silty clay loa	<u>m</u>	
	-, - <u></u>								
-									
	-, - <u></u>								
¹ Type: C=0	Concentration, D= De	epletion, RM=	Reduced Matrix,	CS=Cove	red or Coa	ated San	d Grains. ²	Location: PL=Po	ore Lining, M=Matrix
Hydric Soi	il Indiactors:						Indi	actors for Probl	ematic Hydric Soils 3
Histoso	l (A1)		Sand	v Gleved I	Matrix (S4))	C	Coast Prairie Red	lox (A16)
_	pipedon (A2)			y Redox (,		Dark Surface (S7)	
_	listic (A3)			ed Matrix				ron-Manganese N	
Hydrog	en Sulfide (A4)				Nineral (F	1)			k Surface (TF12)
Stratifie	ed Layers (A5)		Loam	y Gleyed	Matrix (F2)	_ c	Other Soil (Explai	n in Remarks)
2 cm M	uck (A10)		Deple	eted Matrix	(F3)				
Deplete	ed Below Dark Surfac	ce (A11)	Redo	x Dark Su	rface (F6)				
Thick D	ark Surface (A12)		Deple	eted Dark	Surface (F	7)			phytic vegetation and
_	Mucky Mineral (S1)		Redo	x Depress	sions (F8)		we		nust be present, unless or problematic.
5 cm M	uck Peat or Peat (S3	3)						disturbed	or problematic.
Restrictive	Layer (If observed)):							
Type:							I le calada d	2-:1	Vaa Na
Depth (in Remarks:	nches):						Hydric	Soil present?	Yes No
HYDROLO	GY								
	GY lydrology Indicators	s:							
Wetland H			ed; check all that	apply)			Sec	condary Indicator	rs (minimum of two requi
Wetland H	lydrology Indicators			apply) ained Lea	ves (B9)			condary Indicator Surface Soil Crac	
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Project/Site: I-69 Section 6 Wetland S6W126A		City/County	/: Marion		Sampling Date: 7/26/2017
Applicant/Owner: INDOT/Lochumueller				State: Indiana	Sampling Point LB02A-1W1
Investigator(s): R. Yeager		Section, To	wnship, Ra	nge: Sec 10-T14N-R3E	:
Landform (hillslope, terrace, etc.): plain			Local reli	ef (concave, convex, no	ne): concave
Slope (%): <u>0-1</u> Lat: <u>39.664135</u>	L	.ong: <u>-86.1</u>	89058		Datum: GCS NAD83
Soil Map Unit Name Whitaker silt loam				NWI classit	fication: N/A
Are climatic/hydrologic conditions on the site typical for this	time of year	? Yes	X No	(If no, explain Re	marks.)
Are Vegetation , Soil or Hydrology sign	nificantly dist	urbed?	Are "I	Normal Circumstances"	oresent? Yes X No:
Are Vegetation , Soil or Hydrology nat			If nee	ded, explain answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map show			locations,	transects, importan	t features, etc.
Hydrophytic Vegetation Present? Yes X No	0				
Hydric Soils Present? Yes X No	0		he Sample		
Wetland Hydrology Present? Yes X No	o	Witi	hin a Wetla	ind? Yes	X No
Remarks					
VECETATION. Has acionstitic margin of migrate					
VEGETATION - Use scientific names of plants	A1 1 /	<u> </u>	1 2 .	T	
Tree Stratum (Plot Size: 30' radius)		Dominant Species?	Indicator Status	Dominance Test wor	
1		•		Number of Dominant S That Are OBL, FACW,	
2.				Total Number of Domi	 -
3				Species Across All Str	
4				Percent of Dominant S	
5				That are OBL, FACW,	or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0	= Total Cov	/er	Prevalence Index wo	orksheet:
				Total % Cover o	f: Multiply by:
1. 2.				•	00 x 1 = 100
3.				FACW species	0 x 2 = 0
4			-	FAC species	0 x 3 = 0
5				FACU species UPL species	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
(Dist Circ. Flording	0	= Total Cov	/er	· · 	00 (A) 100 (B)
Herb Stratum (Plot Size: 5' radius) 1. Typha latifolia	95	Yes	OBL	Prevalence Ind	ex = B/A = 1.00
2. Asclepias incarnata	95	No	OBL	i revalence ind	EX = D/A = 1.00
3.				Hydrophytic Vegetat	on Indicators:
4.				_ ·	ydrophytic Vegetation:
5.				X 2-Dominance Test X 3-Prevalence Index	
6				_	daptations (Provide supporting
7.				data in Remarks or	r on a separate sheet)
8				-	phytic Vegetation ¹ (Explain)
9				¹ Indicators of hydric so be present, unless dis	oil and wetland hydrology must
1 · · · ·	100	= Total Cov	/er	Do prodein, unicas uis	
Vine Stratum (Plot Size: 15' radius)				Headness boards	
1				Hydrophytic Vegetation	
2					es X No
	0	= Total Cov	/er		
Remarks: (Include photo numbers here or on a separate	sheet.)				

SOIL Sampling Point LB02A-1W1

nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Text	ure		Rem	narks	
0-20	10YR3.5/2	98	5YR5/6	2	С	М	silty clay	y loam				
		· 										
		-										
		pletion, R	RM=Reduced Matrix,	CS=Cove	red or Coa	ated San			ation: PL=			
	Indiactors:		0 1	01 11					ors for Pro			Soils
Histosol	(A1) ipedon (A2)			/ Gleyed I / Redox (\$	Matrix (S4)				t Prairie Ro Surface (S		5)	
Black His				ed Matrix					Manganese		(F12)	
	n Sulfide (A4)				/lineral (F1)			Shallow D			2)
	Layers (A5)				Matrix (F2)			Othe	r Soil (Expl	ain in Rer	marks)	
2 cm Mu	` '		X Deple	ted Matrix	(F3)							
	Below Dark Surfac	e (A11)			rface (F6)							
	rk Surface (A12)				Surface (F	7)			itors of hyd d hydrology			
-	ucky Mineral (S1)	`	Redox	x Depress	sions (F8)			welland		d or proble		, uniess
5 cm iviu	ck Peat or Peat (S3	<u> </u>										
triotivo I												
	.ayer (If observed)	-										
Type: Depth (inc							Hyd	Iric Soil	present?	Yes _	X	No _
Type: Depth (ind narks:	ches):						Hyd	Iric Soil	present?	Yes _	X	No _
Type:	ches):						Hyd	Iric Soil	present?	Yes _	X	No _
Depth (inconarks:	ches): SY drology Indicators	:	quired; check all that	apply)			Hyd		present?			_
PROLOG tland Hy	ches): GY drology Indicators cators (minimum of	:			ves (B9)		Hyd	Second	lary Indicat	cors (minir	num of t	_
Depth (inconarks: DROLOG tland Hy mary India Surface \	ches): SY drology Indicators	:	Water Sta				Hyd	Second		cors (minin	num of t	_
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Project/Site: I-69 Section 6 Wetland S6W127A	City/0	County: Marion	_	Sampling Date: <u>7/26/2017</u>
Applicant/Owner: INDOT/Lochumueller			State: Indiana	Sampling Point SD02A-1W1
Investigator(s): R. Yeager	Secti	on, Township, Ra	nge: Sec 31-T15N-R3E	
Landform (hillslope, terrace, etc.): disturbed highway		Local reli	ef (concave, convex, noi	ne): concave
Slope (%): 1-2 Lat: 39.692651	Long:	-86.240942		Datum: GCS NAD83
Soil Map Unit Name Udorthents			NWI classif	fication: N/A
Are climatic/hydrologic conditions on the site typical for this tir	me of year?	Yes X No	(If no, explain Re	marks.)
Are Vegetation , Soil X or Hydrology signifi	cantly disturbed	d? Are "N	 Normal Circumstances" p	present? Yes X No:
Are Vegetation , Soil or Hydrology natur	ally problemation	? If nee	ded, explain answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map showing			transects, importan	t features, etc.
Hydrophytic Vegetation Present? Yes X No		la dia Camada	J. A	
Hydric Soils Present? Yes X No		Is the Sampled within a Wetla		X No
Wetland Hydrology Present? Yes X No				
Remarks Wetland contained within ditch along north side of	f I-465.			
VEGETATION - Use scientific names of plants				
·	Absolute Dom	ninant Indicator	Daminana Taat wan	leah a at
	% Cover Spe		Dominance Test wor	
1			Number of Dominant S That Are OBL, FACW,	
2			Total Number of Domi	nant
3			Species Across All Str	 ``'
4			Percent of Dominant S That are OBL, FACW,	
5	0 = Tot	al Cover	That are OBL, I AOW,	011 AC. 100 (A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)		.a. 00101	Prevalence Index wo	rksheet:
1			Total % Cover o	f: Multiply by:
2.			· -	00 x 1 = 100
3			FACW species FAC species	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
4			FACU species	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
5			UPL species	0 x = 0
Herb Stratum (Plot Size: 5' radius)	0 = Tot	al Cover	Column Totals: 1	00 (A) 100 (B)
1. Typha latifolia	100 Y	es OBL	Prevalence Ind	ex = B/A = 1.00
2.				
3.			Hydrophytic Vegetati	
4			X 2-Dominance Test	ydrophytic Vegetation:
5			X 3-Prevalence Index	
6			4-Morphological Ac	daptations (Provide supporting
7				r on a separate sheet) phytic Vegetation 1 (Explain)
8. 9.			-	· · · · · · · · · · · · · · · · · · ·
10.			be present, unless dist	oil and wetland hydrology must turbed or problematic
	100 = Tot	al Cover		
Vine Stratum (Plot Size: 15' radius)			Hydrophytic	
1			Vegetation	/aa V Na
2	0 = Tot	al Cover	Present? Y	'es <u>X</u> No
Remarks: (Include photo numbers here or on a separate shi	eet.)			
	,			

SOIL Sampling Point SD02A-1W1

(Inches)	Color (moist)	%	Color (r	noist)	%	Type ¹	Loc ²	Textu	re		Rem	arks	
0-2	10YR3/1	100						silt loa	am				
2-16	10YR4/1	100			. ——			silt loa	am —				
/dric So Histoso Histic E Black H	Concentration, D= De il Indiactors: Il (A1) Epipedon (A2) Ilistic (A3) en Sulfide (A4)	pletion, RM	1=Reduced	Sandy Sandy	/ Gleyed N / Redox (Sed Matrix	Matrix (S4)			ndiactors Coast P Dark Su Iron-Ma	on: PL=P for Prob Prairie Red Irface (S7 nganese allow Dai	lematic I dox (A16) ') Masses (Hydric) (F12)	Soils ³
2 cm M Deplete Thick D Sandy	ed Layers (A5) uck (A10) ed Below Dark Surfac eark Surface (A12) Mucky Mineral (S1) uck Peat or Peat (S3		- - - -	Deple Redox Deple	ted Matrix x Dark Su	rface (F6) Surface (F7			Indicator		ophytic ve must be p	egetation	
strictive	Layer (If observed)												
	, ,												
								Hvdi	ic Soil nr	esent?	Yes	X	Nο
Type: _ Depth (i								Hydi	ic Soil pre	esent?	Yes _	X	No _
Depth (i	nches):							Hydı	ic Soil pro	esent?	Yes _	X	No _
Depth (ii emarks: 'DROLO Vetland H	nches): OGY lydrology Indicators	:	nired; chec	k all that	apply)								
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Project/Site: I-69 Section 6 Wetland S6W128A	City/County: Marion	Sampling Date: 7/26/2017
Applicant/Owner: INDOT/Lochumueller		State: Indiana Sampling Point SD01A-1W1
Investigator(s): R. Yeager	Section, Township, Ra	ange: Sec 31-T15N-R3E
Landform (hillslope, terrace, etc.): disturbed highway	Local reli	ief (concave, convex, none): shallow depression
Slope (%): 0-1 Lat: 39.692916	Long: -86.242193	Datum: GCS NAD83
Soil Map Unit Name Udorthents		NWI classification: N/A
Are climatic/hydrologic conditions on the site typical for this t	ime of year? Yes X No	(If no, explain Remarks.)
Are Vegetation, Soil or Hydrologysignif		Normal Circumstances" present? Yes X No:
Are Vegetation , Soil or Hydrology natu		eded, explain answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin		, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soils Present? Yes X No	Is the Sample	d Area
Wetland Hydrology Present? Yes X No	within a Watla	and? Yes X No
Remarks	<u> </u>	
VEGETATION - Use scientific names of plants		
	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot Size: 30' radius) 1.	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2. 3.		Total Number of Dominant Species Across All Strata: 1 (B)
4		Percent of Dominant Species
5		That are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot Size: 15' radius)	0 = Total Cover	Prevalence Index worksheet:
		Total % Cover of: Multiply by:
1 2		OBL species 0 x 1 = 0
3.		FACW species 100 x 2 = 200
4.		FAC species 0 x 3 = 0
5		FACU species 0 x 4 = 0 UPL species 0 x 5 = 0
	0 = Total Cover	UPL species 0 x 5 = 0 Column Totals: 100 (A) 200 (B)
Herb Stratum (Plot Size: 5' radius) 1. Juncus torreyi	100YesFACW	Prevalence Index = B/A = 2.00
2		Hydrophytic Vegetation Indicators:
3		1-Rapid Test for Hydrophytic Vegetation:
4		X 2-Dominance Test is >50%
5		X 3-Prevalence Index is <=3
6		4-Morphological Adaptation (Provide supporting
7		data in Remarks or on a separate sheet)
8. 9.		Problematic Hydrophytic Vegetation ¹ (Explain)
10.		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
	100 = Total Cover	
Vine Stratum (Plot Size: 15' radius)		Hydrophytic
1		Vegetation
2	0 = Total Cover	Present? Yes X No
Remarks: (Include photo numbers here or on a separate sh	neet.)	1
	,	

SOIL Sampling Point SD01A-1W1

(Inches)	Color (moist)	%	Color (moist)	% Type ¹	Loc ²	Texture	Remarks
0-6	10YR4/1	95	10YR4/6	5 C	M	silt loam	
ydric So Histoso Histic E Black H Hydrog Stratifie 2 cm M Deplete Thick D Sandy	pipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5) uck (A10) ed Below Dark Surface eark Surface (A12) Mucky Mineral (S1)	ce (A11)	Sand Sand Stripp Loam Loam Loam Redo Deple	CS=Covered or Coa / Gleyed Matrix (S4) / Redox (S5) ed Matrix (S6) y Mucky Mineral (F1 y Gleyed Matrix (F2) ted Matrix (F3) x Dark Surface (F6) ted Dark Surface (F8))	Indiact Coa Darl Iron Very Othe	cation: PL=Pore Lining, M=Matrix tors for Problematic Hydric Soils ast Prairie Redox (A16) k Surface (S7) -Manganese Masses (F12) y Shallow Dark Surface (TF12) er Soil (Explain in Remarks) cators of hydrophytic vegetation and hydrology must be present, unless disturbed or problematic.
	uck Peat or Peat (S3	3)					disturbed or problematic.
	Layer (If observed)):					
Depth (i	nches): <u>6 inches</u>					Hydric Soi	I present? Yes X No _
Depth (i	nches): <u>6 inches</u>					Hydric Soi	I present? Yes X No
Depth (imarks:	nches): 6 inches		uired: check all that	annly)			<u>-</u>
DROLO etland Herimary Inc	nches): 6 inches GY Vydrology Indicators dicators (minimum of					Secon	ndary Indicators (minimum of two requ
DROLO etland H imary Ind Surface	nches): 6 inches		Water St	apply) ained Leaves (B9) auna (B13)		Secon Sui	
DROLO etland H imary Inc Surface High W Saturat	Inches): 6 inches OGY Indicators Gicators (minimum of the Water (A1) ater Table (A2) ion (A3)		Water St Aquatic F True Aqu	ained Leaves (B9) Fauna (B13) atic Plants (B14)		Secon Sur Dra Dry	ndary Indicators (minimum of two requ rface Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2)
DROLO etland H imary Inc Surface High W Saturat Water I	riches): 6 inches OGY Vydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water St Aquatic F True Aqu Hydroger	ained Leaves (B9) Fauna (B13) atic Plants (B14) of Sulfide Odor (C1)	vina Poots	Secon Sui Dra Dry Cra	ndary Indicators (minimum of two requ rface Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2) ayfish Burrows (C8)
DROLO etland H imary Inc Surface High W Saturat Water N Sedime	riches): 6 inches PGY Addicators (minimum of a Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)		Water St Aquatic F True Aqu Hydrogel Oxidized	ained Leaves (B9) fauna (B13) atic Plants (B14) n Sulfide Odor (C1) Rhizospheres on Li	-	Secon Sui Dra Dry Cra (C3) Sat	ndary Indicators (minimum of two requ rface Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2) ayfish Burrows (C8) turation Visibile on Aerial Imagery (CS
DROLO etland H imary Inc Surface High W Saturat Water N Sedime Drift De	riches): 6 inches OGY Vydrology Indicators dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)		Water St Aquatic F True Aqu Hydroger Oxidized Presence	ained Leaves (B9) Fauna (B13) atic Plants (B14) of Sulfide Odor (C1)	(4)	Secon Sui Dra Dry Cra (C3) Stu	ndary Indicators (minimum of two requ rface Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2) ayfish Burrows (C8)
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