

APPENDIX G

WINDSHIELD SURVEY DATA

Elkhart River Watershed Windshield Survey Data

General Location	Site ID	Nature of Problem
Yellow Creek	Subwatershed	Waste management and septic issues in the subwatershed
Elkhart Co.	Concentrated along US 33 corridor (Elkhart to Waterford--see map)	Current construction sites--possible sources of runoff, sediment
Elkhart Co.	City of Elkhart, City of Goshen, New Paris	Urbanized areas
Elkhart Co.	CR 17 south (SR 19 west to CR 17 and south to CR 32; and CR 17 corridor south to US 6); between north parts of CR 17 and SR 15; north of Millersburg along SR 13	Likely to be developed/urbanized
Nappanee	Elkhart Co.	Construction sites/soils unfavorable for infiltration
Kendallville	Noble Co.; south of SR 6, west of 1000E	Likely to be developed/urbanized
Kendallville	Noble Co.; SR 6 west out of Kendallville	Development/construction sites
Kendallville	Noble Co.; west of SR 35, north of 600N	Construction site w/failing BMPs
Henderson Lake Ditch	Noble Co.; Wayne TWP; Along SR 6 and SR 3	Construction sites w/o BMPs
Noble Co.	Albion (north side); Ligonier (US 33 at SR 5 and US 33 at SR 6)	under development/likely to be developed
Ligonier	Noble Co.; West Noble Schools	Construction site
Ligonier	Noble Co.; SR 5	Construction site (funeral home) w/o BMPs, severe erosion
Noble Co.		Various old dump sites along river
South Branch	Noble Co. (especially where the flow slows)	Notable silting. Soil types: MsC3 and MrB2 = morley silty loams, eroded to severely eroded
Yellow Creek	Elkhart Co; area under US20 bypass	A few years ago, work was done to replace a meander in the channel. Trees removed and the landscaping material is failing and being undercut, creating concern that the meander will be lost and cut through the peninsula.
Warner and Sons Construction Waste Dump	Elkhart Co.; Concord TWP, S22; CR 45, west of CR 13	Adjacent to Yellow Creek
Elkhart Co. Landfill	Elkhart Co.; Concord TWP, S29; north of CR 26, west of CR 9;	Good management practices; few incidences of erosion
Earthmovers Landfill	Elkhart Co.; Concord TWP, S32; south of CR 26, west of CR 9	
Logan St.	Elkhart Co.; Goshen, (businesses in the area)	sediment and nutrients flowing offsite and directly into river
Rock Run Creek	Elkhart Co.; Abshire Park, Goshen	Streambank erosion
Rock Run Creek	Elkhart Co.; CR 34, bridge west of Blackport Dr. (Riverwatch Monitoring Site)	Extremely high concentrations of <i>E. coli</i> .
Boyer Ditch	Elkhart Co.; N 41.61 297, W 85.75812; north side of CR 28 b/t CR 127 and CR 33. (ditch is parallel to CR 28)	Moderate to severe erosion along ditch
Boyer Ditch	Elkhart Co.; N 41.61 297, W 85.75812; NW corner of CR 28 and CR 33.	Cattle access to stream
Horn Ditch	Elkhart Co.; Elkhart TWP, S25; CR 31 b/t CR 38 and CR 40	Lacking buffer
Rock Run Creek	Elkhart Co.; Clinton TWP, S7; CR 33 just north of CR 131	Cattle access to stream

Tributary to Rock Run Creek	Elkhart Co.; CR 34 east of CR 33; N 41° 35' 52", W 85° 44' 55.8"	Horse access to stream; several Amish farms in this area allow access
Rock Run Creek	Elkhart Co.; Clinton TWP, S4/3; CR 37, north of CR 30	Cattle access and lacking buffers; buffers also lacking up to SR 13/SR 4 west of CR 39
Rock Run Creek	Elkhart Co.; SR 13 south of CR 30; N 41° 35' 38.2", W 85° 41' 41.5"	Buffers lacking (cropped to bank); animal access on east and west
Tributary to Rock Run Creek	Elkhart Co.; Clinton TWP, S9/10; CR 37, south of CR 30; N 41° 34' 52", W 85° 42' 51"	Severe erosion and animal access to stream
Tributary to Rock Run Creek	Elkhart Co.; SR 13 north of CR 34; N 41° 35' 14.1", W 85° 41' 41"	Erosion on west side
Stoney Creek	Elkhart Co.; east of Millersburg, Benton and Clinton TWP line	Cattle access to stream (H. Hutchison/H. Oberlin)
Elkhart River Main Branch	Elkhart Co.; CR 44 b/t CR 43 and Noble Co. line; north of River	Fall tillage w/ slight slope
Yellow Creek	Elkhart Co.; Harrison TWP; CR 40 between CR 9 and CR 11	Cattle access to stream
Yellow Creek/Yellow Creek Lake	Elkhart Co.; Harrison TWP, S34; CR 40 b/t CR 11 and CR 13 (and adjacent area)	Old gravel pit used as liquid manure storage, broken tiles; improper manure spreading on land causing runoff to lake and creek. Land owner cited by IDEM.
Dausman Ditch	Elkhart Co.; CR 44 b/t CR 13 and Cr 15; Foraker	Manure drainage to ditch
Wisler Ditch	Elkhart Co.; Union TWP, S18; CR 46 west of CR 7	Manure drainage to ditch
Turkey Creek	Kosciusko Co.; Milford; Main St.	Log jam slightly inhibiting passage; trees line banks
Turkey Creek	Kosciusko Co.; Van Buren TWP, S2; 150E and 1300N	Log jam slightly inhibiting passage; trees line banks
Turkey Creek	Kosciusko Co.; Van Buren TWP, S2; 250E and 1400N	Log jam moderately inhibiting passage (water still flows)
Turkey Creek	Kosciusko Co.; CR 127 & S.Elkh. CR (Elkhart/Kosciusko Line)	Log jam located in highly visible/usable spot
Turkey Creek	Kosciusko Co.; south of Syracuse Cemetery	Log jam slightly inhibiting passage; trees line banks
Timberhurst Ramblewood Addition	LaGrange Co.;	west side of road--wooded wetland w/tile inlet and severe gullies through the woods--not much can be done b/c of topography
Spectacle Lakes area, south of Big Long Lake	LaGrange Co.; Milford TWP, S26; 700S and 1075E; east side of road	wooded w/gullies going into pond; very steep topography
J.O. Mory Warehouse, Tri-State and Weible Lumber Companies	LaGrange Co.; Millford TWP; South Millford area; 700 S going west near State Road 3	large amounts of impervious surface
LaGrange Co.		Proposed Soy Diesel Plant--delineated wetlands on property; ~160 in crops; project on hold, but need to watch
	LaGrange Co.; 700S, north and south side of road	CFO: 4 chicken houses ~20,000 birds/house
LaGrange Co.	LaGrange Co.; Johnson TWP; 700S and 400E	Septic cluster; propped 5 lot housing development; no construction at this time
	LaGrange Co.; 700S and 2600 E	Septic cluster; small housing development
Dallas/Witmer Lake	LaGrange Co.; Johnson TWP, S 32; 150E south of 700S	CFO: 26,500 chicken house--broilers
North Branch	LaGrange Co.; Clearspring TWP; 700S and 200W	2 livestock operations
	LaGrange Co.	Farm dump in woods--small
North Branch	LaGrange Co.; 450S	Animal access to stream
	LaGrange Co.;	Septic cluster; housing development (15-20 houses)

Oliver Lake Resort	LaGrange Co.; Johnson TWP	Urban development on Oliver Lake--many problems with permits for wetlands; project on hold
Dove Creek	LaGrange Co.; Ditch on north side of Oliver Lake	closed landfill in watershed above this
	LaGrange Co.	Septic cluster; housing development (15-20 houses)
	LaGrange Co.; above Oliver Lake	closed landfill; area of concern
	LaGrange Co.; 300S	CFO; chicken house w/~28,000 birds
Elkhart River Main Branch	Noble Co.; south of 1100N and east of Elkhart/Noble line	Fall tillage w/ slight slope for several miles
Elkhart River Main Branch	Noble Co.; Perry TWP, S7; just north of 1000N	Bank erosion, trees removed 2007
Elkhart River Main Branch	Noble Co.; Perry TWP, S17/18; 1100W; bridge 59	Lack of buffer on south side
Elkhart River Main Branch	Noble Co.; Perry TWP, S20; Perry Rd/900N east of N. River Rd.; bridge 56	Residential lawns--lacks buffer to NE, NW, SE
Sparta Lake Ditch	Noble Co.; immediately south of E. Union St. in Ligonier, east of SR 5	Old Ligonier City Dump, manufacturing dumping history?
North Branch	Noble Co.; Ligonier to Wawaka	log jams inhibiting recreation, but good habitat (some jams northeast of Wawaka have been cleared)
Elkhart River Main Branch	Noble Co. Between 600W and 700W Perry TWP, S25	trees removed from south bank--erosion problem
Schwab Ditch	Noble Co.; Elkhart TWP; 1000N b/t 400W and 300W	Lacks buffer
Boyd Ditch	Noble Co.; Elkhart TWP, S15; north of Cosperville (just south of powerline)	Old Cosperville City Dump
North Branch	Noble Co.; Elkhart TWP, S2; 1200N just east of 225 W	buffer needed to south
Rome City	Noble Co.; adjacent to Sylvan Lake	Limberlost Golf Club
Waterhouse Ditch	Noble Co.; Wayne TWP, S29; Anglin Rd.	steep banks, but buffered
Henderson Lake Ditch	Noble Co.; Wayne TWP; at SR 3	steep bank
Rimmell Branch	Noble Co.; Allen TWP, S18; 700E north of SR 8	very narrow buffer
Rimmell Branch	Noble Co.; Jefferson TWP, S24; 500E, south of SR 8	steep banks, needs buffer; west side residential lawn, east side field
Skinner Lake	Noble Co.; Jefferson TWP	residential lawns up to banks
Unnamed ditch draining to Summers Ditch	Noble Co.; Jefferson TWP, S28; 125N b/t 200E and 300E	ditch goes through lawn w/o buffer
Summers Ditch	Noble Co.; Jefferson TWP, S29; 200E and 125N	lacks good buffer on east side
Noble Co. Landfill	Noble Co.; Jefferson TWP, S32; Baseline Rd. and 125E	
Unnamed ditch	Noble Co.; Jefferson TWP, S32; Baseline Rd. b/t 75E and 125E	Residential lawn--lacks buffer
Tributary to South Branch	Noble Co.; York TWP, S14; Albion Rd. west of 100W	buffer needed south of road; cattle access to stream
Noble Co.	South of Albion	Sewage treatment ponds
Tributary ditch to South Branch	Noble Co.; b/t 50W and SR 9 north of 100N; and south of 100N east of SR 9	buffers lacking (residential and fields)
South Branch	Noble Co.; York TWP, S9; 400N b/t 450W and 350W; bridge 65	Animals fenced but without a buffer (fence right up to banks)
Ditch b/t Lower Long Lake and Upper Long Lake	Noble Co.; York TWP; 100N west of Long Lake Rd.	Residential lawn, lacks buffer
Tributary to South Branch (draining Russell Lake)	Noble Co.; York TWP; 200N east of 400W	eroding/steep banks on south side

South Branch	Noble Co.; York TWP; 100N before 50W; bridge 57-76	NW corner lacks buffer
Foraker Creek	Noble Co.; Noble TWP, S12; 50W north of 200S	erosion; cattle grazing
South Branch	Noble Co.; Noble TWP; 100S west of 250W; bridge 57-80	Residential lawn, lacks buffer
Augusta Hills Golf Course	Noble Co.; Long Lake Rd. and 300N/330N	
Solomon Creek (LARE \$ available)	Noble Co.; Sparta TWP, S15; 860W south of 450N	buffer lacking on south side
Solomon Creek (LARE \$ available)	Noble Co.; Sparta TWP, S5; 1050W and 550N	fall tillage near creek
Solomon Creek (LARE \$ available)	Noble Co.; Perry TWP, S32; 1050W south of 625N; "Good Enough Farm"	Cattle access on SE and SW; fall tillage on NE
Cromwell Ditch (LARE \$ available)	Noble Co.; 450N west of 1025W	fall tillage; lack of buffer
Cromwell Ditch (LARE \$ available)	Noble Co.; 1100W north of 450N	fall tillage to the west

Sites below are those marked for preservation

Turkey Creek	Kosciusko Co.; West of SR15 (+/- 2 miles)	grass buffer present
LaGrange Co.		Several areas in CRP tree plantings and wetlands
LaGrange Co.	All lakes in watershed	On central sewers
Camp Potawatomi (YMCA)	LaGrange Co.; Milford TWP, S29; 700S and 725E	130 acres of woods, wetlands
Dallas Lake Park	LaGrange Co.; Clearspring TWP; 700S at 75W	75 acres of wetlands, woods
Marsh Wren Nature Preserve	LaGrange Co.	large wetland area near Oliver Lake; protected by ACRES
Olin Lake Nature Preserve	LaGrange Co.	largest natural lake in Indiana that will never be developed; protected by ACRES
David Rogers Park, North Branch	LaGrange Co.; Clearspring TWP; 200W south of 550S	100 acres; LaGrange Co. park
immediate Elkhart River corridor esp. N and S branches	Noble Co.	areas worth preserving
Merry Lea Environmental Center	Noble Co.; Wolf Lake	Natural Area
Chain of Lakes State Park	Noble Co.; Green TWP	Natural Area
Smalley Ditch	Noble Co.; Elkhart TWP, S17; north side of 900N, west of 450W	Waterway and filter strip present--several filter strips were present in Noble. Co.
Noble Co.	Esp. North Branch	Would like a baseline inventory of mussels
Noble Co.		Would like a baseline fish tissue sampling

Elkhart River Watershed Windshield Survey

Investigator(s):

Date:

Time:

Weather (now):

Weather (past 24 hrs.):

	Site ID	Site ID	Site ID	Site ID
	GPS: Roads: Description:	GPS: Roads: Description:	GPS: Roads: Description:	GPS: Roads: Description:
Please check those that apply and give any pertinent information				
Log Jams				
<input type="checkbox"/> inhibits all passage <input type="checkbox"/> moderately inhibits passage <input type="checkbox"/> slightly inhibits passage <input type="checkbox"/> jam located in highly used/visible spot <input type="checkbox"/> est. area of jam (sf)				
Area Worth Preserving				
<input type="checkbox"/> wetlands <input type="checkbox"/> wildlife habitat <input type="checkbox"/> green space <input type="checkbox"/> cultural/historical site				
Areas Under Urban Pressure/ Growth				
<input type="checkbox"/> Likely to be developed <input type="checkbox"/> Under development				

	Site ID	Site ID	Site ID	Site ID
Septic Clusters				
<input type="checkbox"/> est. size of cluster (acres) <input type="checkbox"/> indicators of failure/leakage (explain)				

Stormwater Management				
<input type="checkbox"/> Combined Sewer Outfall <input type="checkbox"/> impervious surface (sf, pavement, buildings, etc.) <input type="checkbox"/> erosion (rills, gullies, soil transport) <input type="checkbox"/> pooling of water (est. ac) <input type="checkbox"/> sediment trap <input type="checkbox"/> curb/gutter <input type="checkbox"/> detention/retention basin <input type="checkbox"/> rain garden/rain barrel				

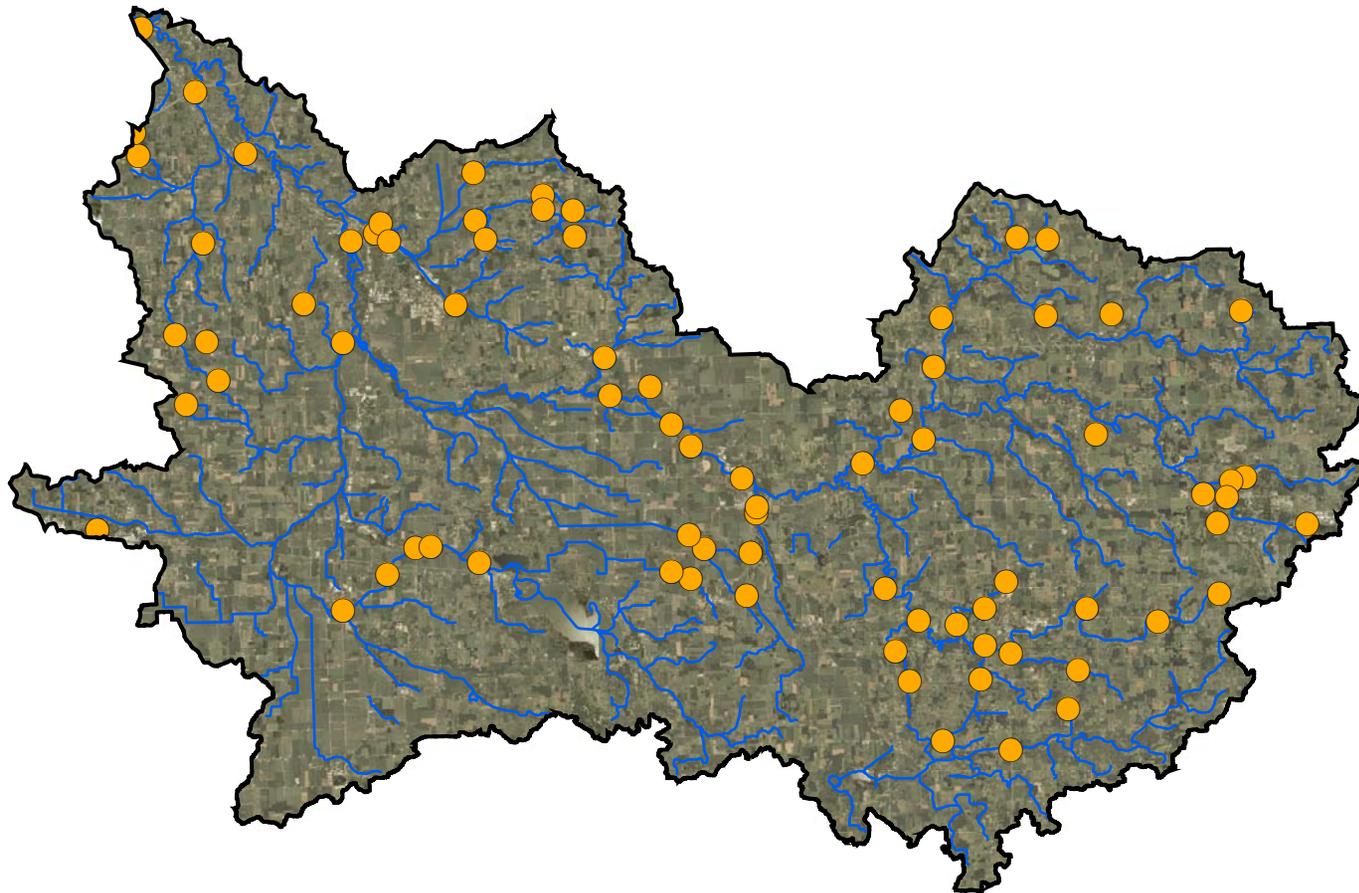
Illegal Dumping				
<input type="checkbox"/> Trash (types, est. area covered) <input type="checkbox"/> Illegal drainage pipes/ outlets <input type="checkbox"/> Dumping into storm drains				

	Site ID	Site ID	Site ID	Site ID
Cropping Practices				
<input type="checkbox"/> No-till ($\geq 30\%$ residue) <input type="checkbox"/> Reduced-till (15-30% residue) <input type="checkbox"/> Conventional tillage <input type="checkbox"/> Stream/ditch buffer absent (proximity to stream and est. length of un-buffered land (ft)) <input type="checkbox"/> Buffer present (est. width in ft; type (trees, shrubs, grasses; natural, installed); adjacent land use) <input type="checkbox"/> Erosion (rills, gullies, etc.) <input type="checkbox"/> Field flooding (est. % of field) <input type="checkbox"/> Grassed waterway present/absent (est. ac)				

	Site ID	Site ID	Site ID	Site ID
Manure/Feces Sources				
<input type="checkbox"/> Animal Feeding Operation (# animals, type) <input type="checkbox"/> Confined Feeding Op. (# animals, type) <input type="checkbox"/> hobby farm (# animals, type) <input type="checkbox"/> Animals in stream (est. #, type) <input type="checkbox"/> Manure spreading on bare ground (est. ac) <input type="checkbox"/> Manure storage (uncovered pile, failed tanks, etc.)				

		Site ID	Site ID	Site ID	Site ID
Surface Water Characteristics					
<input type="checkbox"/> Un-vegetated banks (est. area (sf))					
<input type="checkbox"/> Undercutting					
<input type="checkbox"/> Eutrophication (% surface cover)					
<input type="checkbox"/> Water color (clear, green, brown, murky, oily sheen)					
<input type="checkbox"/> Water odor (sewage, petro, chemical, other)					
Other					

Windshield Survey Locations



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TITLE:	Windshield Survey Locations		PROJECT: Elkhart River Management Plan and Implementation		
BASE LAYER:	USGS Topographic Map		PROJECT NO.:	EXHIBIT:	SHEET: 1 OF: 1
CLIENT:	Elkhart River Restoration Association 305 Carter Road Goshen, Indiana 46526		QUADRANGLE:	DATE:	SCALE:
			N/A	2/7/08	NTS