Watershed Prioritization Process for Indiana's State Nutrient Reduction Strategy (SNRS)

(October 2025 – March 2026)

Goal

Create and implement a method to prioritize Indiana's HUC8 level watersheds for targeted sediment and nutrient load reduction work to improve water quality.

Method

Identify factors that contribute to the prioritization of watersheds for sediment and nutrient load reduction. Evaluate and rank the factors, group them into categories, and tier the categories based on the score.

Six Factors Chosen

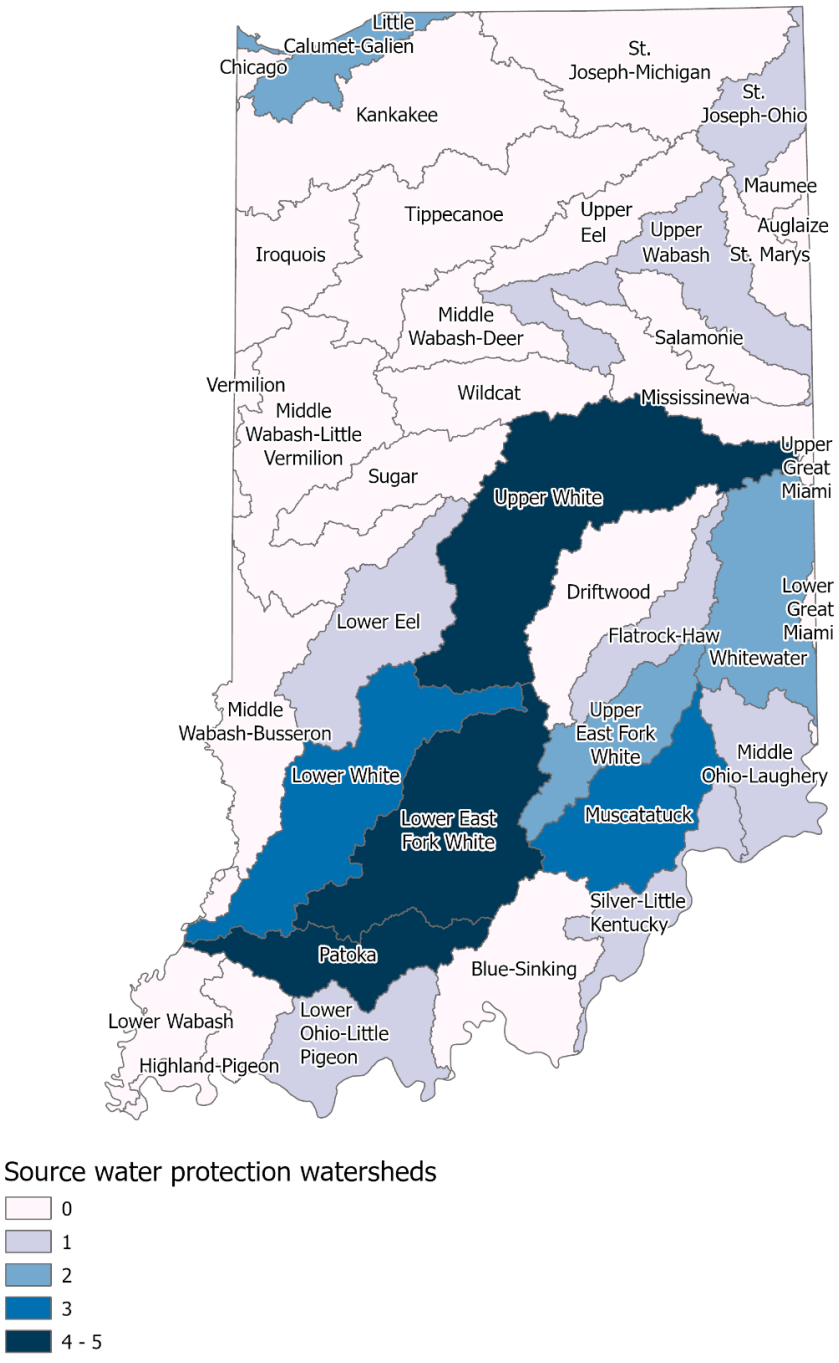
Each HUC8 watershed in the state was scored based on these six factors:

1) Source Water Protection watersheds
2) Water Quality Data/Trends results from WRTDS analysis
3) Impairments/Impaired Streams
4) Loading Data from SPARROW Model
5) Conservation Practice Implementation Data
6) Ground Water Vulnerability/Aquifer Sensitivity

1) **Source Water Protection watersheds** – This factor considered the number of source water protection watersheds within a HUC8 watershed, which are designated by the Indiana Department of Environmental Management's (IDEM) Source Water Assessment Program (SWAP). It is based on the source of public drinking waters susceptibility to contamination. It looked at watersheds with drinking water reservoirs and surface water intakes and scored them as being a higher priority than those that do not include reservoirs and intakes. (Figure 1)

Watershed Prioritization Factor – Surface Water Protection Watersheds (Figure 1)

- The higher the number (and darker the color) means more HUC12 watersheds with drinking water reservoirs per HUC8 watershed
- 0 means there are no intakes within the watersheds, 5 had the most intakes

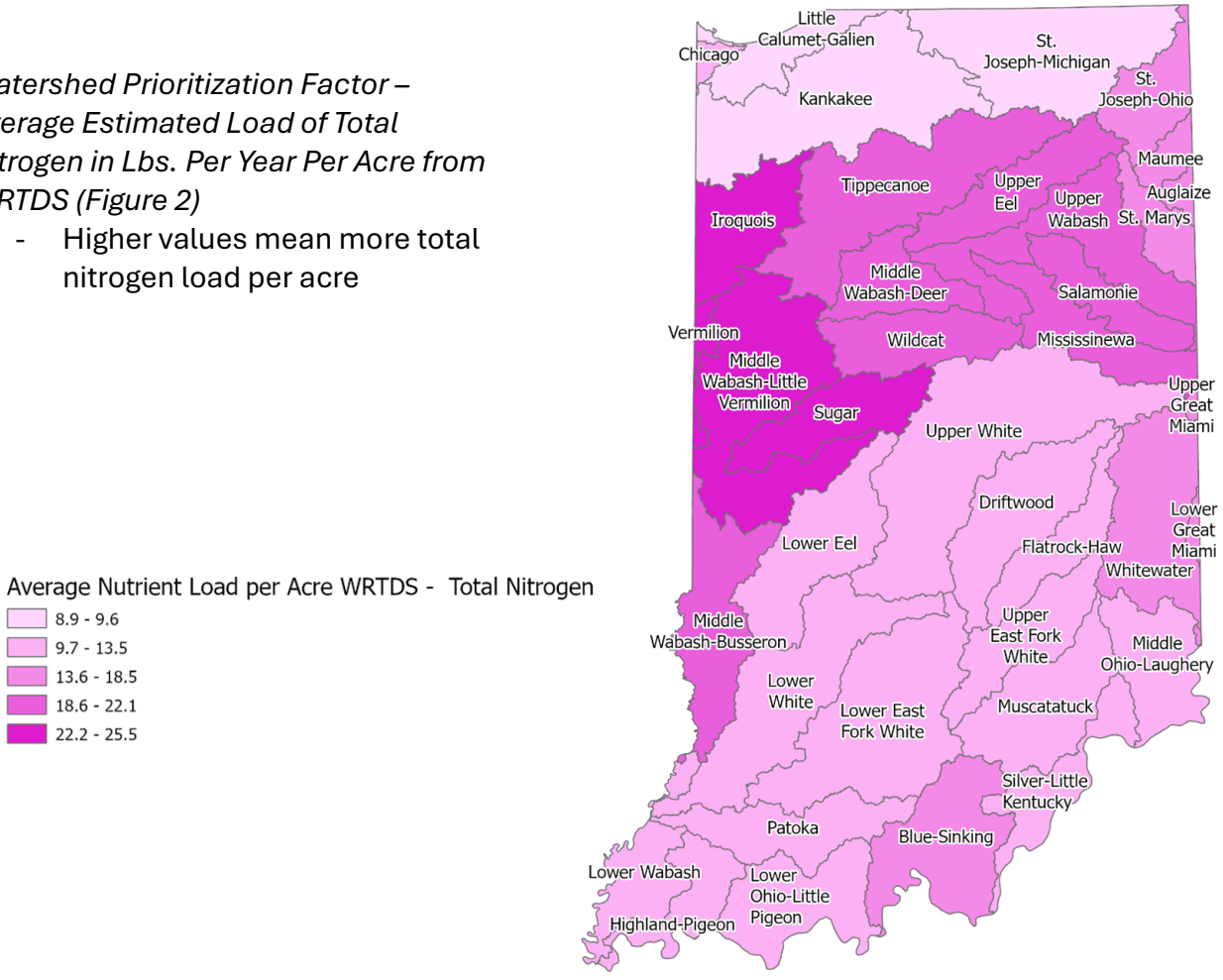


2) **Water Quality Monitoring Data/Trends results from the WRTDS analysis done as part of Component 1 of the Indiana Science Assessment** – Component 1 of the Indiana Science Assessment used the Weighted Regressions on Time, Discharge, and Season (WRTDS) model to assess nutrient load trends in various watersheds around the state of Indiana using IDEM Fixed Station water quality monitoring data and USGS streamgage data. Ascertaining nutrient loads at the state borders and within some basins in the state helps to inform the prioritization process.

- Average Nutrient Load per Acre WRTDS – Using the IDEM Fixed Station water quality monitoring data and USGS streamgage data, a recent 5-year period (2015-2020) of the mean load per year per acre within the watershed was calculated. Because the initial WRTDS analysis did not utilize HUC8-level watersheds, the data was resampled to the HUC8 scale. Where multiple contributing WRTDS watersheds mapped to a single HUC8, results were aggregated using an area-weighted average. This process was done for both phosphorus and nitrogen.
    - Average Nitrogen Load in lbs. / year / acre from WRTDS analysis (Figure 2)
    - Average Phosphorus Load in lbs. / year / acre from WRTDS analysis (Figure 3)

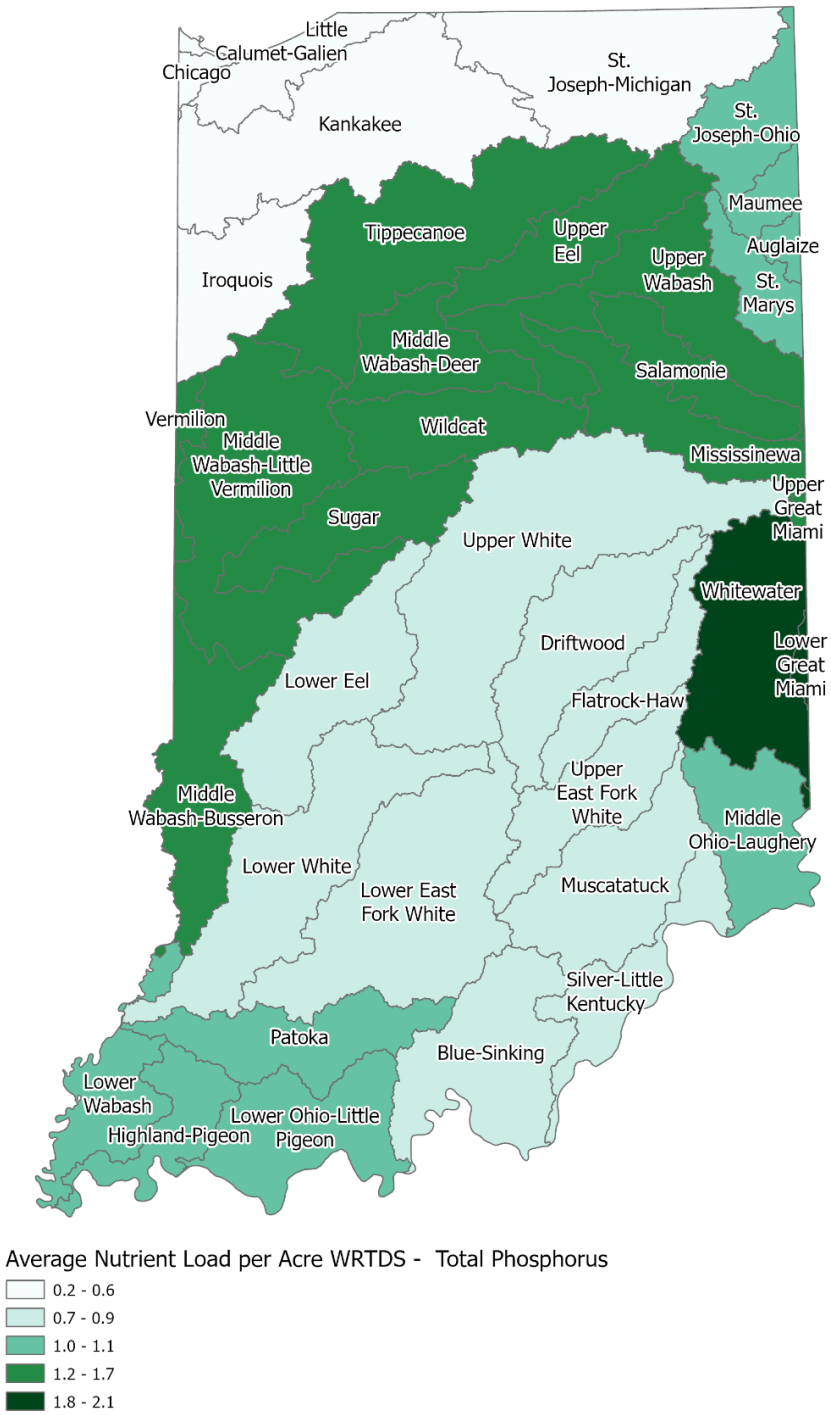
Watershed Prioritization Factor – Average Estimated Load of Total Nitrogen in Lbs. Per Year Per Acre from WRTDS (Figure 2)

- Higher values mean more total nitrogen load per acre



Watershed Prioritization Factor – Average Estimated Load of Phosphorus Load in Lbs. Per Year Per Acre from WRTDS (Figure 3)

- Higher values mean more phosphorus load per acre



3) **Impairments/Impaired Streams** – This factor considered impaired stream miles for nutrients within the HUC8 watersheds. This metric calculates the total stream miles impaired for nutrients and assessed for aquatic life use and divides it by the total stream miles assessed for aquatic life use.

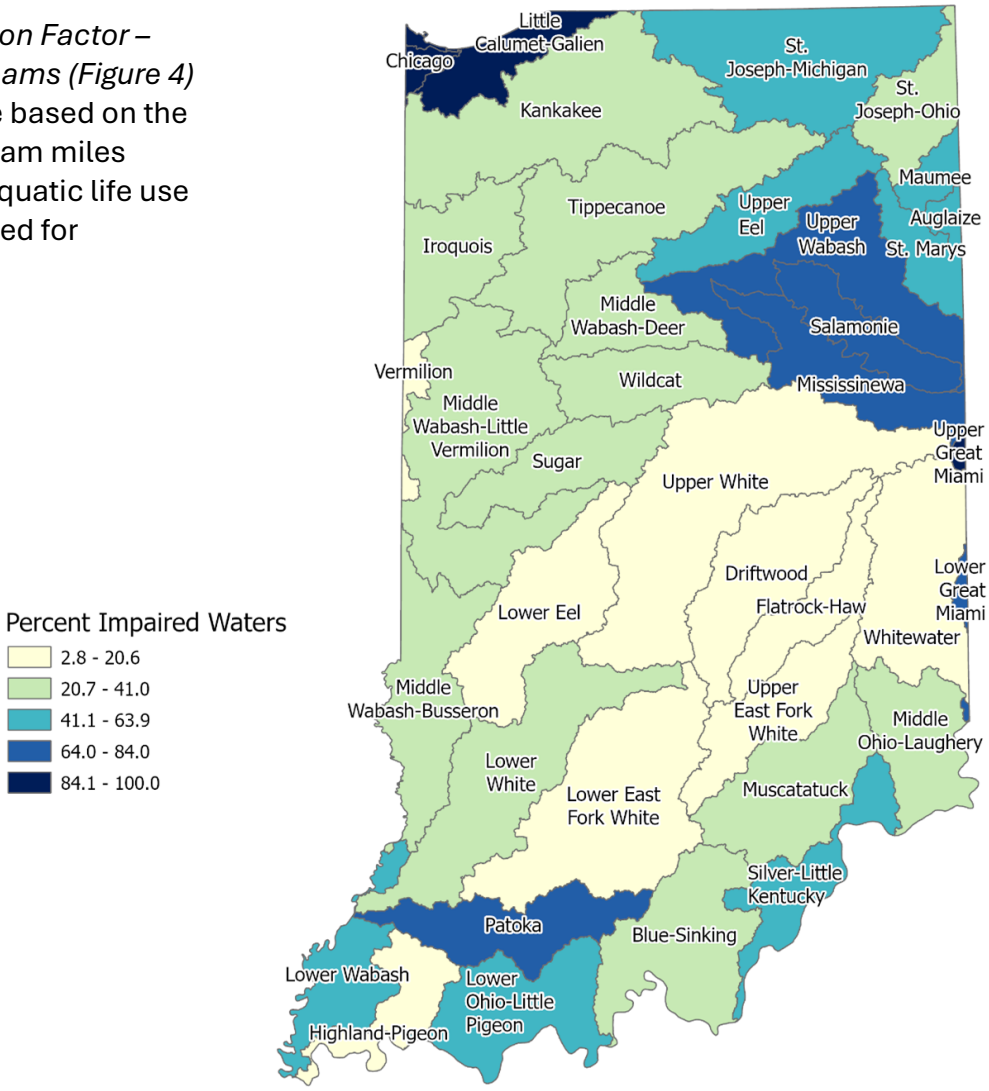
- Percent Impaired Waters- The percentage of waterways within HUC8s that are classified as impaired based on the IDEM 303(d) list of impaired waterways.

$$\frac{Number\ of\ stream\ miles\ classified\ as\ impaired}{Number\ of\ stream\ miles\ assessed} * 100$$

The denominator was limited to only assessed stream miles because including unassessed miles would artificially lower the percentage and misrepresent the extent of nutrient-related impacts within the assessed stream miles.

Watershed Prioritization Factor – Percent Impaired Streams (Figure 4)

- Map colors are based on the percent of stream miles assessed for aquatic life use that are impaired for nutrients.

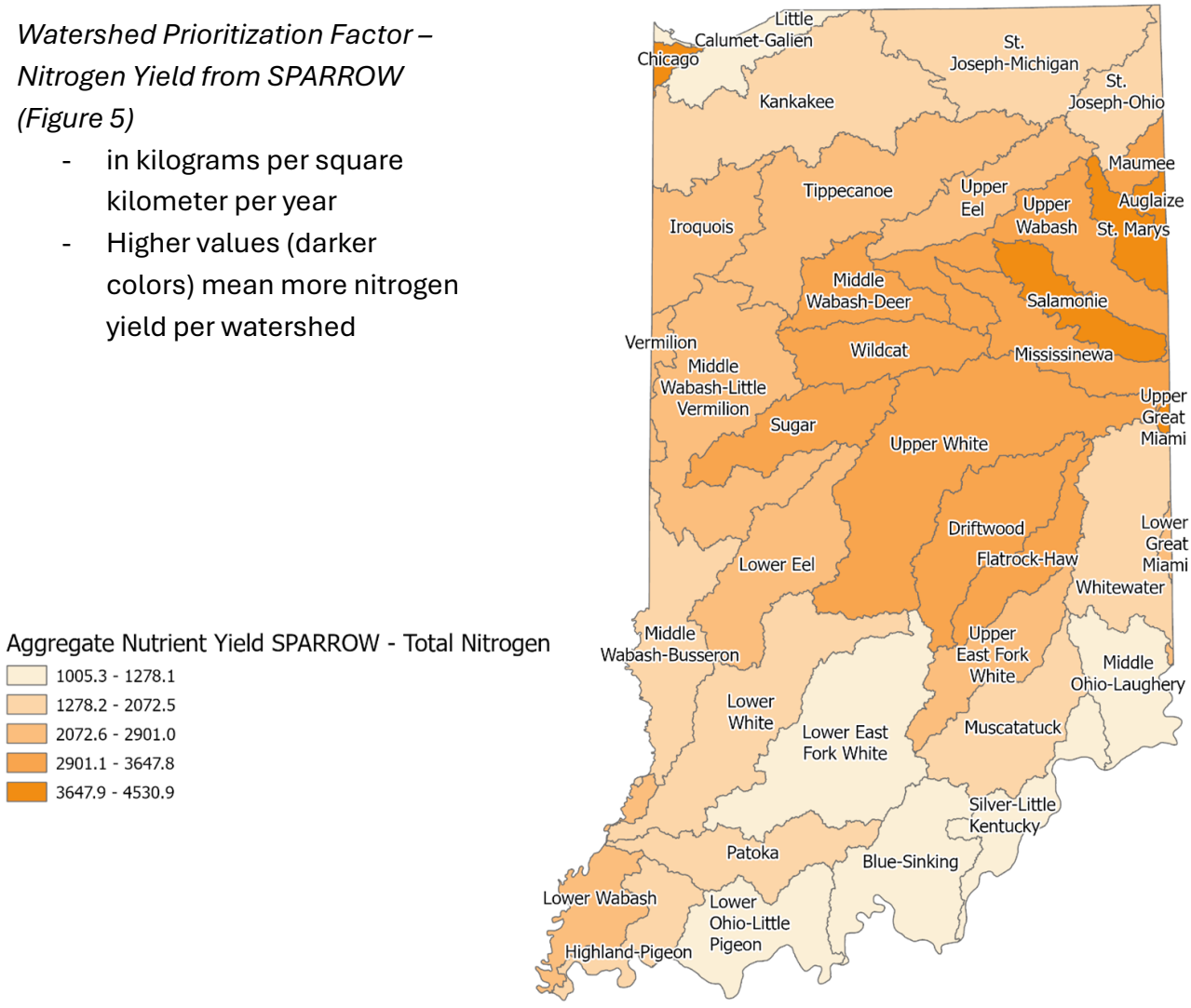


4) **Loading Data from SPARROW** - The USGS SPARROW (Spatially Referenced Regression on Watershed Attributes) model calculates nutrient yield in watersheds by estimating mass balance in small catchments.

- Aggregate Nutrient Yield SPARROW - The SPARROW model was used as a second method for estimating the nutrient yield in watersheds (it works in a different manner than WRTDS) by estimating mass balance in small catchments for factors like fertilizer, manure and point sources, and summing them to estimate values at the HUC8 scale. This process was done for both phosphorus and nitrogen.
    - Nitrogen Yield in kilograms / square kilometer / year from SPARROW (Figure 5)
    - Phosphorus Yield in kilograms / square kilometer / year from SPARROW (Figure 6)

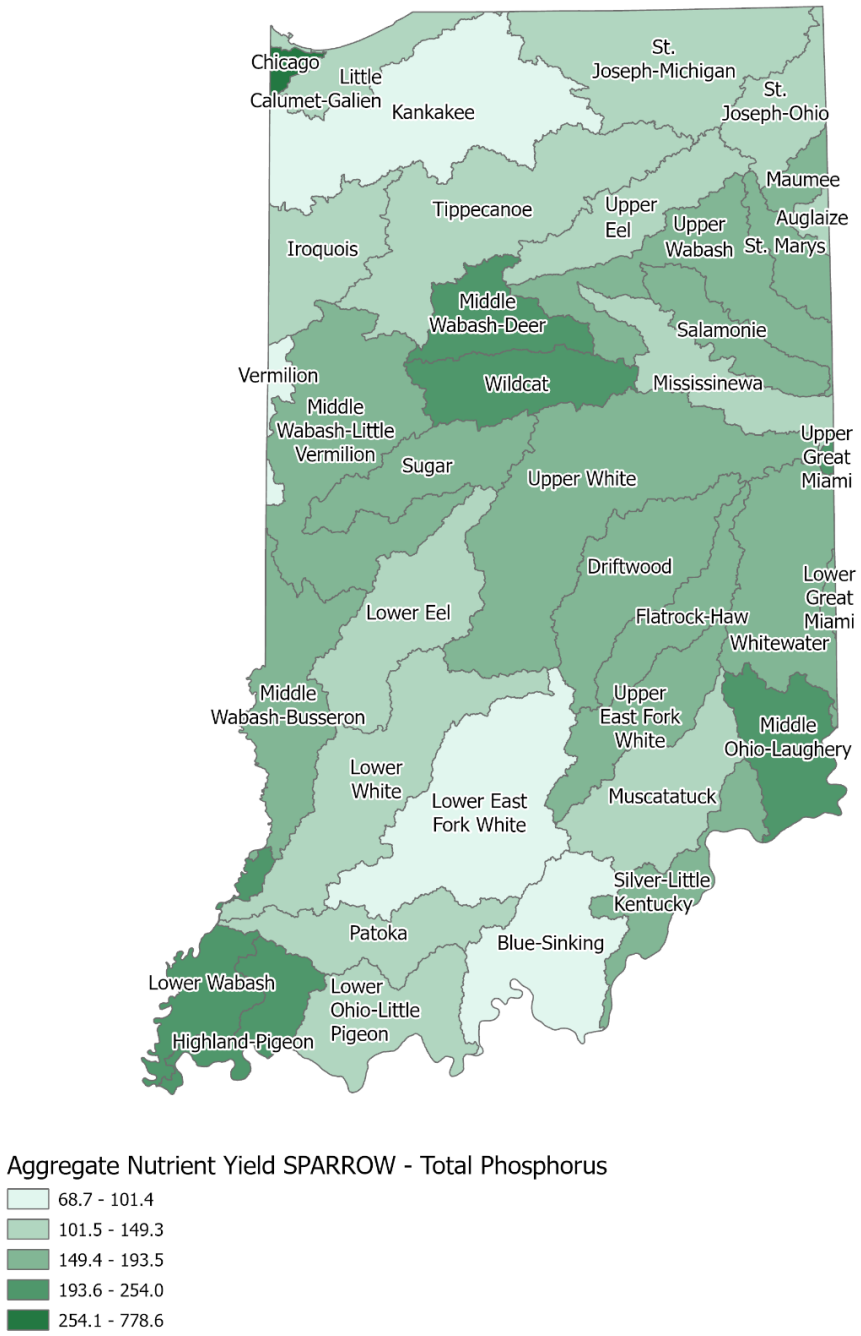
Watershed Prioritization Factor – Nitrogen Yield from SPARROW (Figure 5)

- in kilograms per square kilometer per year
- Higher values (darker colors) mean more nitrogen yield per watershed



Watershed Prioritization Factor – Phosphorus Yield from SPARROW (Figure 6)

- Higher values (darker colors) mean more phosphorus yield per watershed
- in kilograms per square kilometer per year



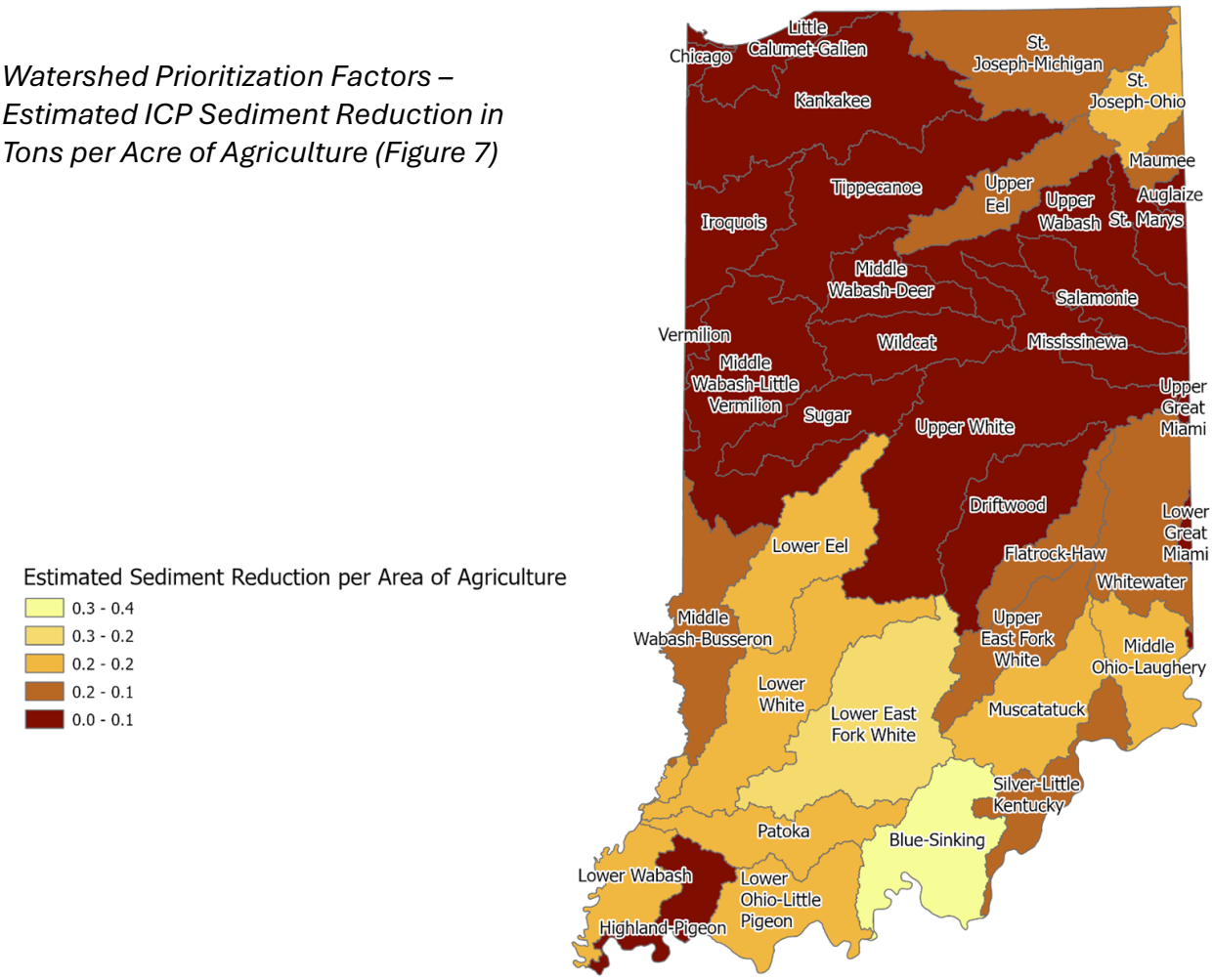
Aggregate Nutrient Yield SPARROW - Total Phosphorus

- 68.7 - 101.4
- 101.5 - 149.3
- 149.4 - 193.5
- 193.6 - 254.0
- 254.1 - 778.6

5) **Conservation Practice Implementation Data** – This factor was selected to evaluate the adoption of conservation practice supported by the Indiana public agencies, to help identify gaps in workload or areas of high priority that are not currently covered by Indiana Conservation Partnership (ICP) assistance. We looked at the 5-year average of implemented conservation practices in the watersheds based on sediment saved using the Region 5 Model. This allowed us to prioritize watersheds with low implementation rates or minimal sediment savings.

- Estimated Sediment Reduction in Tons per Acre of Agriculture – ICP uses the Region 5 sediment and nutrient reduction model to estimate the amount of sediment saved by implementing cost-shared best management practices. This figure was aggregated by HUC8 watershed and then the mean of the 5-year time period was taken and divided by the 5-year mean of agriculture acres in the watershed based on NASS Crop Scape, which is a remote sensing data product geared towards estimating agriculture land cover. A higher number means more practices and more sediment saved, meaning a lower priority. (Figure 7)

Watershed Prioritization Factors – Estimated ICP Sediment Reduction in Tons per Acre of Agriculture (Figure 7)

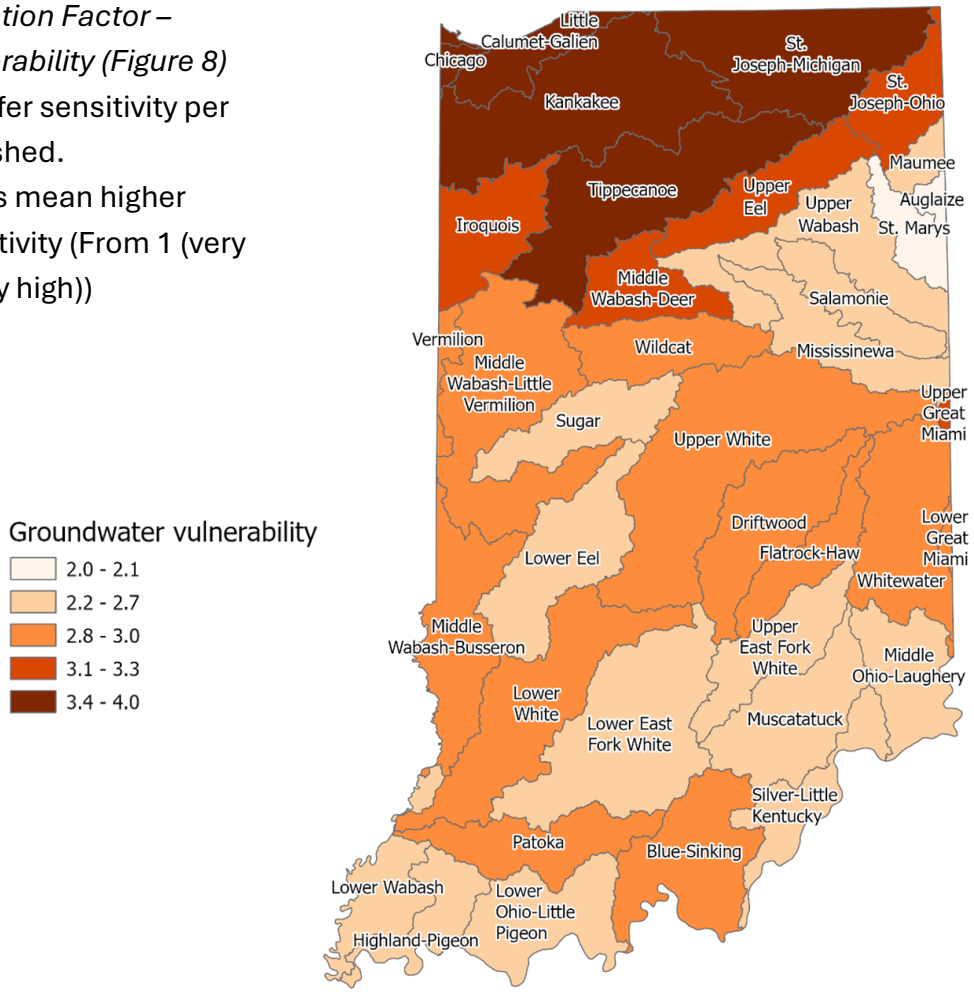


6) **Ground Water Vulnerability** – The Indiana Geological Survey (IGS) has compiled data on aquifer sensitivity for the state of Indiana based on estimated ground water recharge rates in shallow aquifers. This data was used to score which HUC8 watersheds have the lowest and highest aquifer sensitivity. (Figure 8)

- The Indiana Geologic and Water Survey (IGWS) published a classified raster dataset for the state of Indiana based on estimated rates of diffuse ground water recharge to shallow aquifers. This data was used to generate average values for each HUC8 based on zonal statistics utilizing GIS. The data was pre-classified into values of 1-5 with 5 being the highest level of aquifer sensitivity. https://www.indianamap.org/maps/INMap::aquifer-sensitivity-near-surface/about

Watershed Prioritization Factor – Ground Water Vulnerability (Figure 8)

- Average aquifer sensitivity per HUC8 watershed.
- Higher values mean higher aquifer sensitivity (From 1 (very low) to 5 (very high))



Categories and Method

The six factors were categorized into three different categories:

1) **Water Resource Protection** – These are factors that identify watersheds that have water resources, surface water and groundwater, that are valuable, and/or suspectable due to high levels of nutrients.
    a. Source Water Protection watersheds
    b. Ground Water Vulnerability
2) **Water Quality** – These factors identify the current state of water quality within HUC8 watersheds, focused on water quality as it relates to nutrients.
    a. Impaired Streams
    b. Water Quality Data results from WRTDS
    c. Loading Data from SPARROW
3) **Indiana Conservation Partnership (ICP) Conservation Adoption** – This factor was chosen to identify the amount of conservation practice adoption within the HUC8 watersheds based on sediment saved and its effect on water quality.
    a. Conservation Practice Implementation Data

Data Preparation

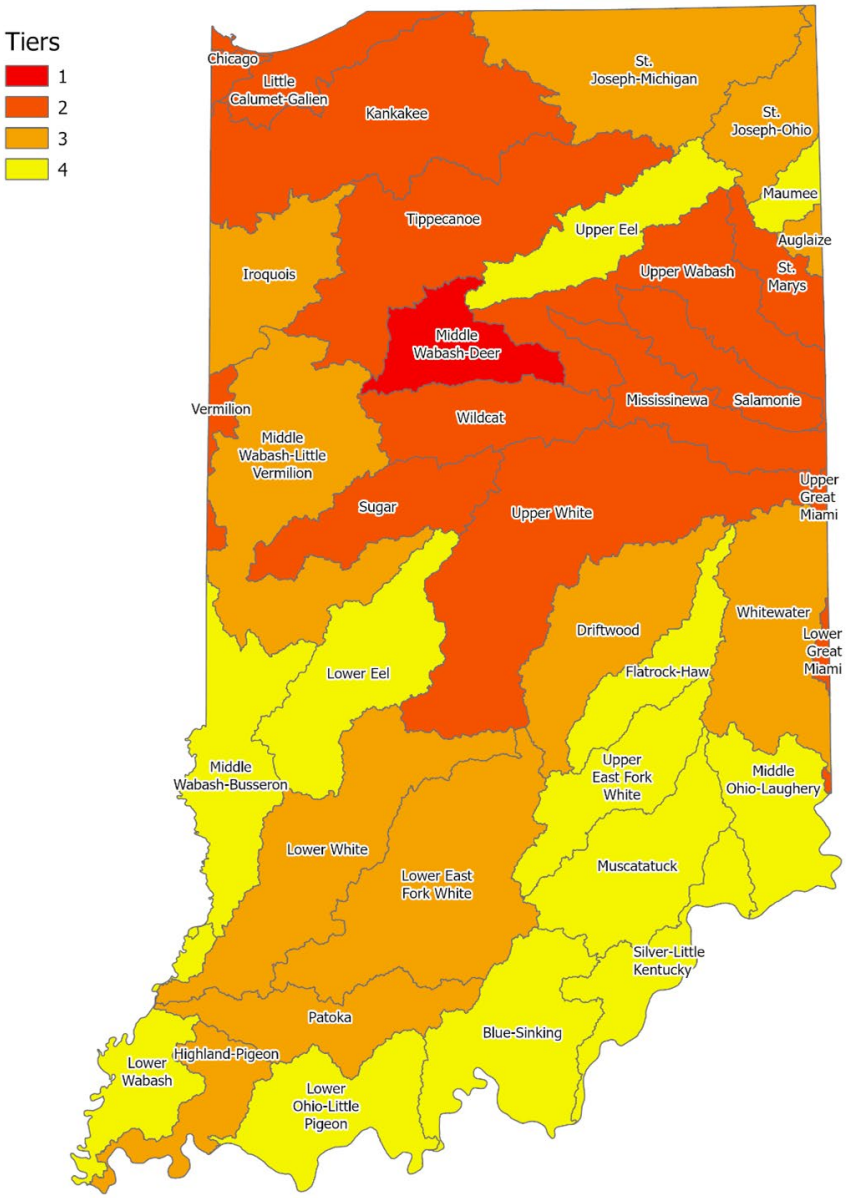
1. Values were produced for each HUC8 watershed for each factor using the sources and methods described above. These values were placed in a data table. (Table 1)
2. To unify the scales of the various factors, the values from the factors were converted into a scoring of 1-5 using the Jenks natural breaks classification method, which is a data clustering method designed to determine the arrangement of values into classes. A higher score value indicates that a watershed is a higher priority for a given factor. (Table 2 and Table 3)
3. The score values for each category of factors were averaged (mean) to make the different categories comparable. (Table 4)
4. The Water Quality category was split into two additional subcategories, one using only the nitrogen factors, and one using only the phosphorus factors. (Table 5)
5. Each category average score is split into thirds, creating low, medium, and high buckets for each category. (Table 5)
    a. The ICP investment score could not be cleanly split into thirds, so it was broken down as follows:
        i. 5 -3,
        ii. 4 -2
        iii. 3 or 2 or 1 - 1
6. Based on the respective buckets for each category, each HUC8 watershed is assigned a tier rank as described below. (Table 5)
    a. Tier 1 – High in all three categories

b. Tier 2 – High in two of three categories
c. Tier 3 – High in one of three categories
d. Tier 4 – High in zero of three categories.

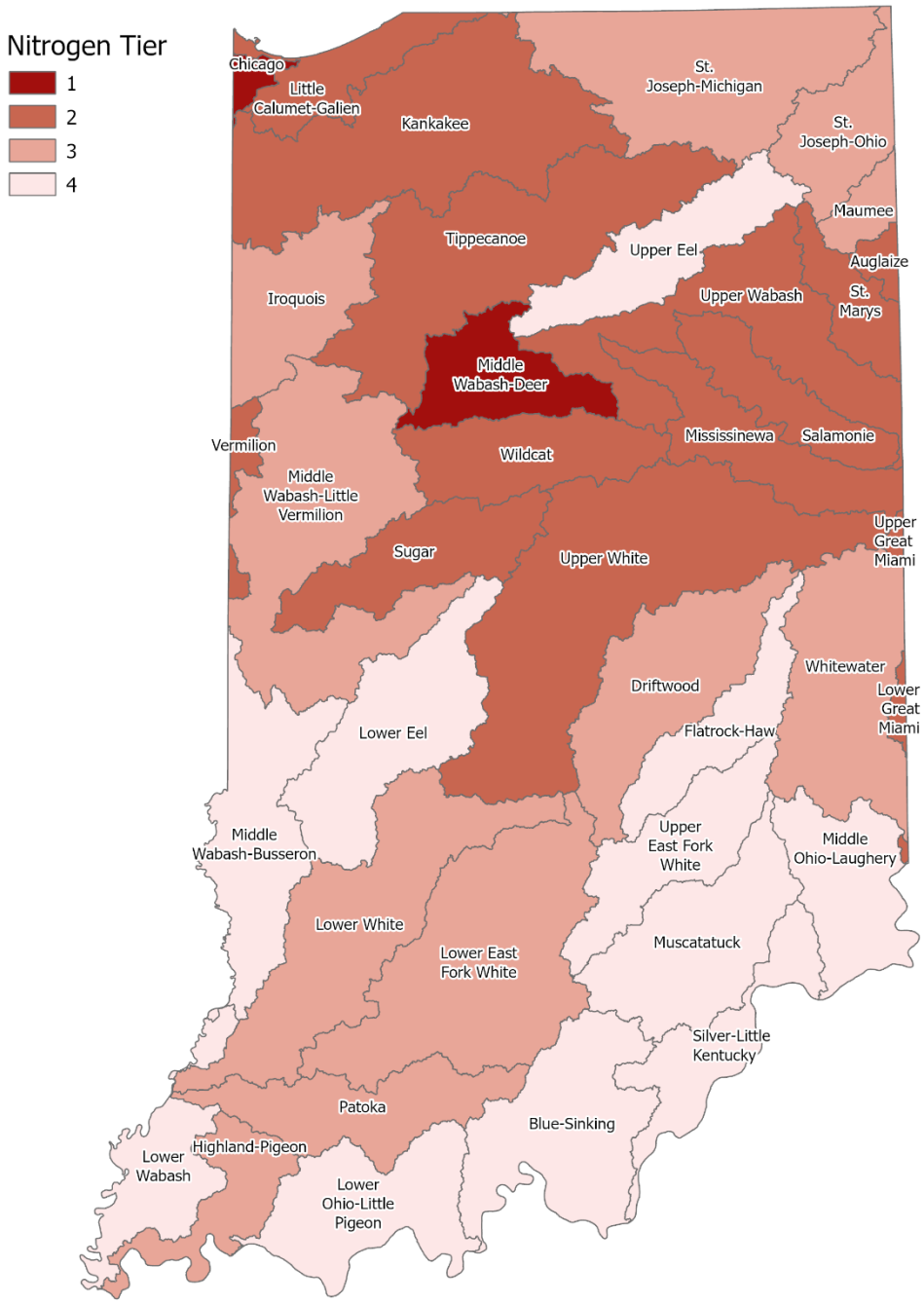
Results

The following three map figures show the results of this prioritization process. Figure 9 shows the overall results of the watershed prioritization ranking when taking all factors and categories into consideration. Figure 10 shows the watershed prioritization ranking based on nitrogen loads. Figure 11 shows the watershed prioritization ranking based on phosphorus loads. Tier 1 watersheds are the highest priority watersheds and Tier 4 are the lowest priority watersheds.

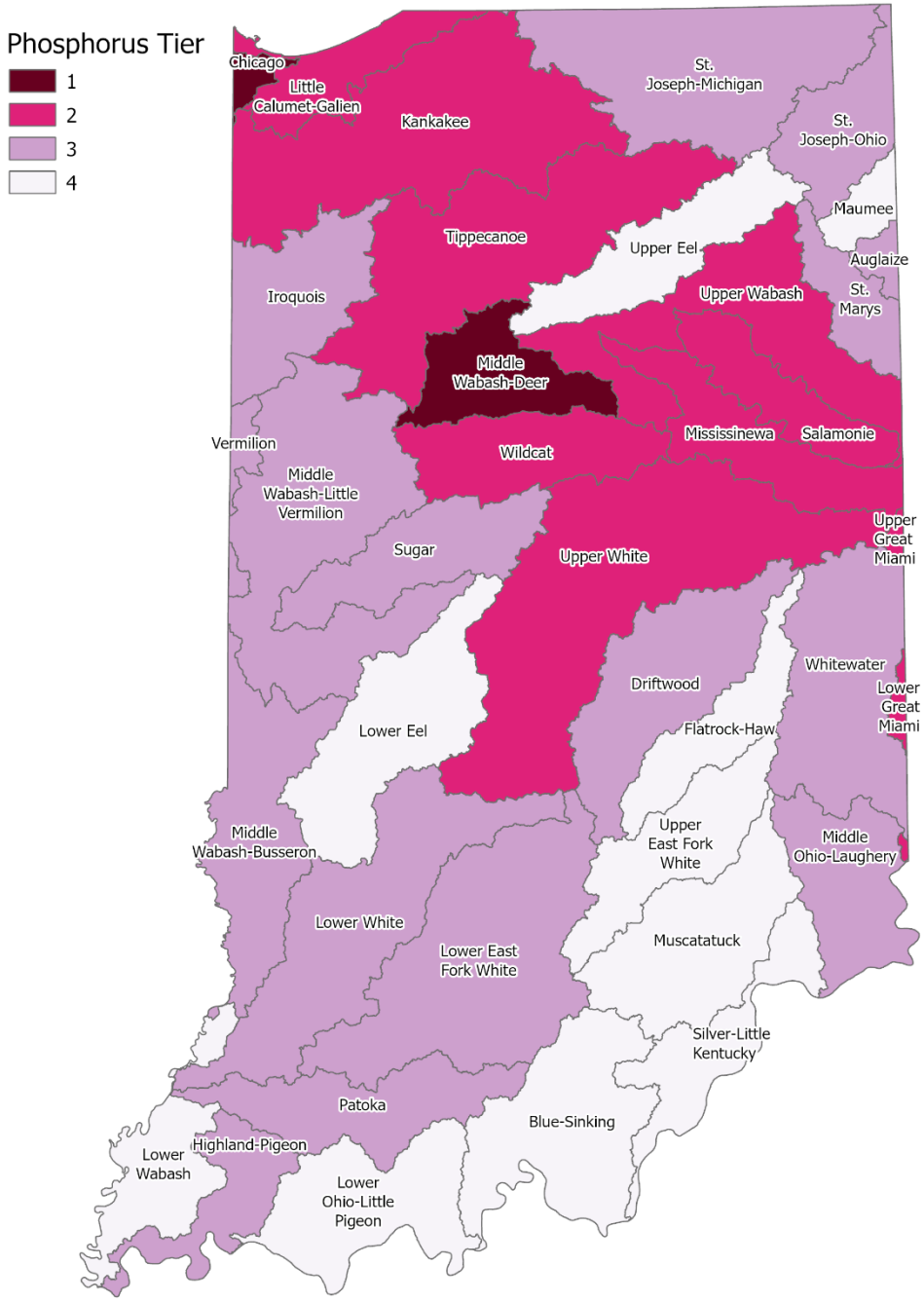
Watershed Prioritization Tiers – Watershed Priorities (Figure 9)



Watershed Prioritization Tiers – Watershed Priorities based on Total Nitrogen (Figure 10)



Watershed Prioritization Tiers – Watershed Priorities based on Total Phosphorus (Figure 11)



Watershed Prioritization Factors – Input Data Values (Table 1) **units are described below under the table*

HUC8	HUC Name	SWP Watersheds	GW Vulnerability	% Impaired Waters	WRTDS TN	WRTDS TP	SPARROW TP	SPARROW TN	Est. Sediment Red. (per ac)
*04040001	Little Calumet-Galien	2	3.64	89.9%	9.61	0.48	127.65	1244.89	0.044
*04050001	St. Joseph (Michigan)	0	4.00	50.9%	8.92	0.18	116.22	1803.30	0.079
*04100003	St. Joseph (Ohio)	1	3.22	36.3%	16.08	0.96	119.34	1866.57	0.180
*04100004	St. Marys	0	2.12	49.6%	16.76	1.00	187.57	3948.34	0.049
*04100005	Upper Maumee	0	2.40	60.3%	16.77	1.01	184.34	3594.18	0.079
*04100007	Auglaize	0	2.01	59.8%	16.76	1.00	148.15	3977.87	0.030
*05080001	Upper Great Miami	0	3.06	100.0%	18.50	1.55	214.37	4147.71	0.012
*05080002	Lower Great Miami	0	2.85	81.9%	13.53	2.15	172.52	2497.57	0.018
*05080003	Whitewater	2	2.97	20.0%	13.53	2.15	171.24	1772.16	0.057
*05090203	Middle Ohio-Laughery	1	2.54	33.9%	11.92	1.13	254.02	1203.72	0.148
*05120101	Upper Wabash	1	2.56	84.0%	22.10	1.51	167.05	3543.68	0.042
*05120102	Salamonie	0	2.45	71.6%	21.82	1.48	162.70	3904.58	0.026
*05120103	Mississinewa	0	2.59	63.9%	21.96	1.51	143.96	3568.08	0.024
*05120104	Eel	0	3.05	49.6%	21.82	1.48	141.77	2747.58	0.077
*05120105	Middle Wabash-Deer	0	3.26	33.6%	21.82	1.48	245.26	3360.34	0.040
*05120106	Tippecanoe	0	3.64	35.5%	21.82	1.48	138.09	2334.96	0.025
*05120107	Wildcat	0	2.92	29.8%	20.85	1.38	209.34	3600.14	0.034
*05120108	Middle Wabash-Little Vermillion	0	2.97	28.8%	23.47	1.67	166.65	2407.31	0.034
*05120109	Vermillion	0	2.81	2.9%	23.87	1.72	101.37	2334.95	0.011
*05120110	Sugar	0	2.68	29.8%	23.87	1.72	157.56	3253.98	0.025
*05120111	Middle Wabash-Busseron	0	2.86	36.2%	19.95	1.50	155.56	1752.54	0.058
*05120113	Lower Wabash	0	2.64	46.4%	13.06	1.10	202.85	2451.61	0.137
*05120201	Upper White	5	2.94	16.0%	11.32	0.92	189.85	2901.02	0.028
*05120202	Lower White	3	2.81	28.4%	11.39	0.93	136.32	1843.39	0.132

*05120203	Eel	1	2.59	9.4%	11.32	0.92	133.51	2229.35	0.155
*05120204	Driftwood	0	2.99	14.9%	11.37	0.78	160.97	3181.55	0.050
*05120205	Flatrock-Haw	1	2.86	2.8%	11.37	0.78	180.85	3647.80	0.079
*05120206	Upper East Fork White	2	2.64	14.3%	11.37	0.78	193.54	2736.82	0.105
*05120207	Muscatatuck	3	2.46	36.4%	11.37	0.78	145.91	1736.56	0.124
*05120208	Lower East Fork White	4	2.56	20.4%	11.45	0.84	82.20	1025.29	0.242
*05120209	Patoka	4	2.86	75.8%	11.97	1.11	138.07	1601.47	0.180
*05140101	Silver-Little Kentucky	1	2.60	48.6%	11.79	0.79	176.97	1262.02	0.101
*05140104	Blue-Sinking	0	2.82	38.0%	15.59	0.91	68.70	1005.26	0.416
*05140201	Lower Ohio-Little Pigeon	1	2.56	47.3%	11.89	1.11	119.28	1278.07	0.155
*05140202	Highland-Pigeon	0	2.51	20.6%	13.06	1.10	240.54	2072.50	0.053
*07120001	Kankakee	0	3.89	35.9%	8.97	0.30	89.84	1984.90	0.029
*07120002	Iroquois	0	3.19	41.0%	25.53	0.51	149.29	2643.25	0.013
*07120003	Chicago	0	3.68	100.0%	11.33	0.57	778.65	4530.93	0.037

* ***SWP Watersheds*** *– Number of source water protection HUC12 watersheds per HUC8 watershed*
* ***Ground Water (GW) Vulnerability*** *– Average Aquifer sensitivity per HUC8 watershed. From 1(very low) to 5 (very high)*
* ***% Impaired Waters*** *– Percent of streams within a HUC8 that are considered impaired*
* ***WRTDS Total Nitrogen*** *– Average estimated load of total nitrogen in lbs. per year per acre*
* ***WRTDS Total Phosphorus*** *– Average estimated load of total phosphorus in lbs. per year per acre*
* ***SPARROW Total Phosphorus*** *– Nutrient yield in kilograms per square kilometer per year*
* ***SPARROW Total Nitrogen*** *- Nutrient yield in kilograms per square kilometer per year*
* ***Estimated Sediment Reduction per Acre*** *– Estimated tons of sediment reduction per acre of agriculture*

Watershed Prioritization Scoring Buckets – Jenks Natural Breaks (Table 2) *(created intervals for scoring)*

Buckets	SWP Watersheds	Ground water vulnerability	% Impaired Waters	Average Nutrient Load per Acre WRTDS – Total Nitrogen	Average Nutrient Load per Acre WRTDS – Total Phosphorus	Aggregate Nutrient Yield SPARROW – Total Nitrogen	Aggregate Nutrient Yield SPARROW – Total Phosphorus	Estimated Sediment Reduction (per ac)
0	0	2.0	2.8%	8.90	0.2	1005	69	0.420
1	0	2.1	20.6%	9.60	0.6	1278	101	0.240
2	1	2.7	41.1%	13.50	0.9	2073	149	0.180
3	2	3.0	63.9%	18.50	1.1	2901	194	0.100
4	3	3.3	84.0%	22.10	1.7	3648	254	0.060

Watershed Prioritization Factors – Scoring Results (Table 3)

HUC8	SWP Watersheds	Groundwater vulnerability	% Impaired Waters	Average Nutrient Load per Acre WRTDS – Total Nitrogen	Average Nutrient Load per Acre WRTDS – Total Phosphorus	Aggregate Nutrient Yield SPARROW - Total Nitrogen	Aggregate Nutrient Yield SPARROW – Total Phosphorus	Estimated Sediment Reduction (per ac)
*04040001	2	5	5	2	1	1	2	5
*04050001	1	5	3	1	1	2	2	4
*04100003	2	4	2	3	3	2	2	3
*04100004	1	2	3	3	3	5	3	5
*04100005	1	2	3	3	3	4	3	4
*04100007	1	1	3	3	3	5	2	5
*05080001	1	4	3	4	4	5	4	5
*05080002	1	3	4	3	4	3	3	5
*05080003	2	3	1	2	5	2	3	5
*05090203	2	2	2	2	4	1	5	3
*05120101	2	2	5	5	4	4	3	5
*05120102	1	2	4	4	4	5	3	5
*05120103	1	2	4	4	4	4	2	5
*05120104	1	4	2	4	4	3	2	4
*05120105	1	5	2	4	4	4	4	5
*05120106	1	5	2	4	4	3	2	5
*05120107	1	3	2	4	4	4	4	5

*05120108	1	3	1	5	4	3	3	5
*05120109	1	3	2	5	5	3	2	5
*05120110	1	3	2	5	4	4	3	5
*05120111	1	3	3	4	4	2	3	4
*05120113	1	2	1	2	3	3	4	3
*05120201	5	3	2	2	2	4	3	5
*05120202	3	3	1	2	3	2	2	3
*05120203	2	2	1	2	2	3	2	3
*05120204	1	4	1	2	2	4	3	5
*05120205	2	3	1	2	2	5	3	4
*05120206	2	2	2	2	2	3	4	3
*05120207	3	2	1	2	2	2	2	3
*05120208	4	2	4	2	2	1	1	1
*05120209	4	3	3	2	3	2	2	2
*05140101	2	2	2	2	2	1	3	4
*05140104	1	3	3	3	2	1	1	4
*05140201	2	2	2	2	3	2	2	3
*05140202	1	2	2	2	3	3	4	5
*07120001	1	5	3	1	1	2	1	5
*07120002	1	4	3	1	1	3	3	5
*07120003	1	5	5	2	2	3	3	5

Watershed Prioritization Categories – Mean Category Scores (Table 4)

HUC8	Water Resource Protection - Mean	Water Quality - Mean	Water quality Nitrogen - Mean	Water quality Phosphorus - Mean	ICP Investment Category
*04040001	3.5	2.2	2.7	2.7	5.0
*04050001	3.0	1.8	2.0	2.0	4.0
*04100003	3.0	2.4	2.3	2.3	3.0
*04100004	1.5	3.4	3.7	3.0	5.0
*04100005	1.5	3.2	3.3	3.0	4.0
*04100007	1.0	3.2	3.7	2.7	5.0
*05080001	2.5	4.0	4.0	3.7	5.0
*05080002	2.0	3.4	3.3	3.7	5.0
*05080003	2.5	2.6	1.7	3.0	5.0
*05090203	2.0	2.8	1.7	3.7	3.0
*05120101	2.0	4.2	4.7	4.0	5.0
*05120102	1.5	4.0	4.3	3.7	5.0
*05120103	1.5	3.6	4.0	3.3	5.0
*05120104	2.5	3.0	3.0	2.7	4.0
*05120105	3.0	3.6	3.3	3.3	5.0
*05120106	3.0	3.0	3.0	2.7	5.0
*05120107	2.0	3.6	3.3	3.3	5.0
*05120108	2.0	3.2	3.0	2.7	5.0
*05120109	2.0	3.4	3.3	3.0	5.0
*05120110	2.0	3.6	3.7	3.0	5.0
*05120111	2.0	3.2	3.0	3.3	4.0
*05120113	1.5	2.6	2.0	2.7	3.0
*05120201	4.0	2.6	2.7	2.3	5.0
*05120202	3.0	2.0	1.7	2.0	3.0
*05120203	2.0	2.0	2.0	1.7	3.0
*05120204	2.5	2.4	2.3	2.0	5.0
*05120205	2.5	2.6	2.7	2.0	4.0
*05120206	2.0	2.6	2.3	2.7	3.0
*05120207	2.5	1.8	1.7	1.7	3.0
*05120208	3.0	2.0	2.3	2.3	1.0
*05120209	3.5	2.4	2.3	2.7	2.0
*05140101	2.0	2.0	1.7	2.3	4.0
*05140104	2.0	2.0	2.3	2.0	4.0
*05140201	2.0	2.2	2.0	2.3	3.0
*05140202	1.5	2.8	2.3	3.0	5.0
*07120001	3.0	1.6	2.0	1.7	5.0
*07120002	2.5	2.2	2.3	2.3	5.0
*07120003	3.0	3.0	3.3	3.3	5.0

Watershed Prioritization Categories - Buckets and Tier Results (Table 5)

HUC8	WRP Bucket	WQ Bucket	WQ N Bucket	WQ P Bucket	ICP Bucket	All Tier (Figure 9)*	N Tier (Figure 10)*	P Tier (Figure 11)*
*04040001	3	1	2	2	3	2	2	2
*04050001	3	1	1	1	2	3	3	3
*04100003	3	1	1	1	1	3	3	3
*04100004	1	3	3	2	3	2	2	3
*04100005	1	2	3	2	2	4	3	4
*04100007	1	2	3	2	3	3	2	3
*05080001	2	3	3	3	3	2	2	2
*05080002	1	3	3	3	3	2	2	2
*05080003	2	2	1	2	3	3	3	3
*05090203	1	2	1	3	1	4	4	3
*05120101	1	3	3	3	3	2	2	2
*05120102	1	3	3	3	3	2	2	2
*05120103	1	3	3	3	3	2	2	2
*05120104	2	2	2	2	2	4	4	4
*05120105	3	3	3	3	3	1	1	1
*05120106	3	2	2	2	3	2	2	2
*05120107	1	3	3	3	3	2	2	2
*05120108	1	2	2	2	3	3	3	3
*05120109	1	3	3	2	3	2	2	3
*05120110	1	3	3	2	3	2	2	3
*05120111	1	2	2	3	2	4	4	3

*05120113	1	2	1	2	1	4	4	4
*05120201	3	2	2	1	3	2	2	2
*05120202	3	1	1	1	1	3	3	3
*05120203	1	1	1	1	1	4	4	4
*05120204	2	1	1	1	3	3	3	3
*05120205	2	2	2	1	2	4	4	4
*05120206	1	2	1	2	1	4	4	4
*05120207	2	1	1	1	1	4	4	4
*05120208	3	1	1	1	1	3	3	3
*05120209	3	1	1	2	1	3	3	3
*05140101	1	1	1	1	2	4	4	4
*05140104	1	1	1	1	2	4	4	4
*05140201	1	1	1	1	1	4	4	4
*05140202	1	2	1	2	3	3	3	3
*07120001	3	1	1	1	3	2	2	2
*07120002	2	1	1	1	3	3	3	3
*07120003	3	2	3	3	3	2	1	1

* Results in column **All Tier** are shown visually in Figure 9

* Results in column **N Tier** are shown visually in Figure 10

* Results in column **P Tier** are shown visually in Figure 11

Table 6 – Overall Priority watersheds listed out by Tier according to Figure 9 & Table 5

Tier 1 watersheds	
Middle Wabash- Deer	*05120105
Tier 2 watersheds	
Little Calumet-Galien	*04040001
St. Marys	*04100004
Upper Great Miami	*05080001
Lower Great Miami	*05080002
Upper Wabash	*05120101
Salamonie	*05120102
Mississinewa	*05120103
Tippecanoe	*05120106
Wildcat	*05120107
Vermillion	*05120109
Sugar	*05120110
Upper White	*05120201
Kankakee	*07120001
Chicago	*07120003
Tier 3 watersheds	
St. Joseph (Michigan)	*04050001
St. Joseph (Ohio)	*04100003
Auglaize	*04100007
Whitewater	*05080003
Middle Wabash-Little Vermillion	*05120108
Lower White	*05120202
Driftwood	*05120204
Lower East Fork White	*05120208
Patoka	*05120209
Highland-Pigeon	*05140202
Iroquois	*07120002
Tier 4 watersheds	
Maumee	*04100005
Middle Ohio-Laughery	*05090203
Upper Eel	*05120104
Middle Wabash-Busseron	*05120111
Lower Wabash	*05120113
Lower Eel	*05120203
Flatrock-Haw	*05120205
Upper East Fork White	*05120206
Muscatatuck	*05120207
Silver-Little Kentucky	*05140101
Blue-Sinking	*05140104
Lower Ohio-Little Pigeon	*05140201

Table 7 – Priority watersheds based on TN listed out by Tier according to Figure 10 & Table 5

Tier 1 watersheds	
Middle Wabash- Deer	*05120105
Chicago	*07120003
Tier 2 watersheds	
Little Calumet-Galien	*04040001
St. Marys	*04100004
Auglaize	*04100007
Upper Great Miami	*05080001
Lower Great Miami	*05080002
Upper Wabash	*05120101
Salamonie	*05120102
Mississinewa	*05120103
Tippecanoe	*05120106
Wildcat	*05120107
Vermillion	*05120109
Sugar	*05120110
Upper White	*05120201
Kankakee	*07120001
Tier 3 watersheds	
St. Joseph (Michigan)	*04050001
St. Joseph (Ohio)	*04100003
Maumee	*04100005
Whitewater	*05080003
Middle Wabash-Little Vermillion	*05120108
Lower White	*05120202
Driftwood	*05120204
Lower East Fork White	*05120208
Patoka	*05120209
Highland-Pigeon	*05140202
Iroquois	*07120002
Tier 4 watersheds	
Middle Ohio-Laughery	*05090203
Upper Eel	*05120104
Middle Wabash-Busseron	*05120111
Lower Wabash	*05120113
Lower Eel	*05120203
Flatrock-Haw	*05120205
Upper East Fork White	*05120206
Muscatatuck	*05120207
Silver-Little Kentucky	*05140101
Blue-Sinking	*05140104
Lower Ohio-Little Pigeon	*05140201

Table 8 – Priority watersheds based on P listed out by Tier according to Figure 11 & Table 5

Tier 1 watersheds	
Middle Wabash- Deer	*05120105
Chicago	*07120003
Tier 2 watersheds	
Little Calumet-Galien	*04040001
Upper Great Miami	*05080001
Lower Great Miami	*05080002
Upper Wabash	*05120101
Salamonie	*05120102
Mississinewa	*05120103
Tippecanoe	*05120106
Wildcat	*05120107
Upper White	*05120201
Kankakee	*07120001
Tier 3 watersheds	
St. Joseph (Michigan)	*04050001
St. Joseph (Ohio)	*04100003
St. Marys	*04100004
Auglaize	*04100007
Whitewater	*05080003
Middle Ohio-Laughery	*05090203
Middle Wabash-Little Vermillion	*05120108
Vermillion	*05120109
Sugar	*05120110
Middle Wabash-Busseron	*05120111
Lower White	*05120202
Driftwood	*05120204
Lower East Fork White	*05120208
Patoka	*05120209
Highland-Pigeon	*05140202
Iroquois	*07120002
Tier 4 watersheds	
Maumee	*04100005
Upper Eel	*05120104
Lower Wabash	*05120113
Lower Eel	*05120203
Flatrock-Haw	*05120205
Upper East Fork White	*05120206
Muscatatuck	*05120207
Silver-Little Kentucky	*05140101
Blue-Sinking	*05140104
Lower Ohio-Little Pigeon	*05140201

SNRS Prioritization Sub-committee members involved in this process include:

- Julie Harrold, Program Manager for CREP and Water Quality Initiatives, IN State Department of Agriculture-Division of Soil Conservation
- Sam Stroebel, Geospatial Program Manager, IN State Department of Agriculture-Division of Soil Conservation
- Kristen Arnold, Chief of Watershed Assessment and Planning Branch, Office of Water Quality, IN Department of Environmental Management
- Caleb Rennaker, Watershed Planning and Restoration Section Chief – Watershed Assessment and Planning Branch, Office of Water Quality, IN Department of Environmental Management
- Christian Walker, Ground Water Section Chief – Drinking Water Branch, IN Department of Environmental Management
- Jerod Chew, Assistant State Conservationist for Partnerships, USDA-IN Natural Resources Conservation Service
- Kim Lambert, Special Initiatives Coordinator, USDA-IN Natural Resources Conservation Service
- Ben Wicker, Executive Director, Indiana Agriculture Nutrient Alliance
- Joe Rorick, On-Farm Sustainability Programs and Research Coordinator, Purdue Extension and Indiana Soybean Alliance
- Ben Forsythe, Sustainability and Value Creation Director, Indiana Corn Marketing Council and Soybean Alliance