# APPENDIX E:

# IDEM'S PRIORITY RANKING AND 2024-2026 SCHEDULE FOR TOTAL MAXIMUM DAILY LOAD DEVELOPMENT

Table E-1: Total Maximum Daily Load (TMDL) reports planned for 2024-2026 as of April 1, 2024.

| IDEM TMDL KEY * | TMDL |
|---|---|
| 58 | Total Maximum Daily Load Report for the Big Raccoon – Wabash River Watershed |
| 59 | Total Maximum Daily Load Report for the Indian Creek – White River Watershed |
| 60 | Total Maximum Daily Load Report for Indian Creek |

*IDEM TMDL Key numbers correspond to the TMDL Key in Appendix D of the Integrated Report, which identifies all 57 TMDL reports approved to date.

Table E-2: Currently impaired parameters for stream and river segments scheduled to be included in Total Maximum Daily Load (TMDL) reports planned for 2024-2026. This list is not comprehensive as additional impairments are commonly identified during the additional sampling and reassessment that occurs as part of the TMDL development process. This list reflects IDEM's TMDL Priority Framework, which appears as Attachment E-1 at the end of this Appendix.

| BASIN | HYDROLOGIC UNIT CODE | COUNTY | ASSESSMENT UNIT ID | ASSESSMENT UNIT NAME | PARAMETER | IDEM TMDL KEY * |
|---|---|---|---|---|---|---|
| Middle Wabash – Little Vermillion | 051201081501 | Parke | INB08F1_02 | Leatherwood Creek | PCBs in Fish Tissue ** | 58 |
| Middle Wabash – Little Vermillion | 051201081502 | Parke | INB08F2_T1004 | Rocky Run | *Escherichia coli* (*E. coli*) | 58 |
| Middle Wabash – Little Vermillion | 051201081502 | Parke | INB08F2_01 | Leatherwood Creek | *Escherichia coli* (*E. coli*) | 58 |
| Middle Wabash – Little Vermillion | 051201081503 | Parke | INB08F3_T1004 | Rock Run | *Escherichia coli* (*E. coli*) | 58 |
| Middle Wabash – Little Vermillion | 051201081503 | Parke | INB08F3_T1003 | Rock Run | Biological Integrity | 58 |
| Middle Wabash – Little Vermillion | 051201081503 | Parke | INB08F3_T1003 | Rock Run | *Escherichia coli* (*E. coli*) | 58 |
| Middle Wabash – Little Vermillion | 051201081504 | Parke | INB08F4_T1008 | Tributary of Big Raccoon Creek | PCBs in Fish Tissue ** | 58 |
| Middle Wabash – Little Vermillion | 051201081504 | Parke | INB08F4_03 | Big Raccoon Creek | PCBs in Fish Tissue ** | 58 |
| Middle Wabash – Little Vermillion | 051201081504 | Parke | INB08F4_05 | Big Raccoon Creek | PCBs in Fish Tissue ** | 58 |
| Lower White | 051202020803 | Daviess | INW0283_03 | White River | *Escherichia coli* (*E. coli*) | 59 |

| BASIN | HYDROLOGIC UNIT CODE | COUNTY | ASSESSMENT UNIT ID | ASSESSMENT UNIT NAME | PARAMETER | IDEM TMDL KEY * |
|---|---|---|---|---|---|---|
| Lower White | 051202020803 | Daviess | INW0283_03 | White River | Biological Integrity | 59 |
| Lower White | 051202020803 | Daviess | INW0283_03 | White River | PCBs in Fish Tissue ** | 59 |
| Lower White | 051202020803 | Daviess | INW0283_04 | White River | *Escherichia coli* (*E. coli*) | 59 |
| Lower White | 051202020803 | Daviess | INW0283_04 | White River | Biological Integrity | 59 |
| Lower White | 051202020803 | Daviess | INW0283_04 | White River | PCBs in Fish Tissue ** | 59 |
| Lower White | 051202020803 | Knox | INW0283_05 | White River | *Escherichia coli* (*E. coli*) | 59 |
| Lower White | 051202020803 | Knox | INW0283_05 | White River | PCBs in Fish Tissue ** | 59 |
| Lower White | 051202020803 | Daviess | INW0283_06 | White River | *Escherichia coli* (*E. coli*) | 59 |
| Lower White | 051202020803 | Daviess | INW0283_06 | White River | Biological Integrity | 59 |
| Lower White | 051202020803 | Daviess | INW0283_06 | White River | PCBs in Fish Tissue ** | 59 |
| Lower White | 051202020803 | Knox | INW0283_07 | White River | *Escherichia coli* (*E. coli*) | 59 |
| Lower White | 051202020803 | Knox | INW0283_07 | White River | PCBs in Fish Tissue ** | 59 |

| BASIN | HYDROLOGIC UNIT CODE | COUNTY | ASSESSMENT UNIT ID | ASSESSMENT UNIT NAME | PARAMETER | IDEM TMDL KEY * |
|---|---|---|---|---|---|---|
| Lower White | 051202020804 | Knox | INW0284_02 | White River | *Escherichia coli* (*E. coli*) | 59 |
| Lower White | 051202020804 | Knox | INW0284_02 | White River | PCBs in Fish Tissue ** | 59 |
| Lower White | 051202020804 | Knox | INW0284_03 | White River | *Escherichia coli* (*E. coli*) | 59 |
| Lower White | 051202020804 | Knox | INW0284_03 | White River | Biological Integrity | 59 |
| Lower White | 051202020804 | Knox | INW0284_03 | White River | PCBs in Fish Tissue ** | 59 |
| Lower East Fork White | 51202080902 | Greene | INW0892_02 | Indian Creek | *Escherichia coli* (*E. coli*) | 60 |
| Lower East Fork White | 51202080902 | Greene | INW0892_T1002 | Mitchell Branch | *Escherichia coli* (*E. coli*) | 60 |
| Lower East Fork White | 51202080903 | Lawrence | INW0893_T1005 | Spring Creek | *Escherichia coli* (*E. coli*) | 60 |
| Lower East Fork White | 51202080904 | Lawrence | INW0894_02 | Indian Creek | *Escherichia coli* (*E. coli*) | 60 |
| Lower East Fork White | 51202080906 | Martin | INW0896_02 | Indian Creek | Mercury in Fish Tissue ** | 60 |
| Lower East Fork White | 51202080906 | Martin | INW0896_02 | Indian Creek | PCBs in Fish Tissue ** | 60 |
| Lower East Fork White | 51202080906 | Lawrence | INW0896_03 | Indian Creek-Mt. Olive | *Escherichia coli* (*E. coli*) | 60 |

| BASIN | HYDROLOGIC UNIT CODE | COUNTY | ASSESSMENT UNIT ID | ASSESSMENT UNIT NAME | PARAMETER | IDEM TMDL KEY * |
|---|---|---|---|---|---|---|
| Lower East Fork White | 51202080906 | Lawrence | INW0896_03 | Indian Creek-Mt. Olive | Biological Integrity | 60 |
| Lower East Fork White | 51202080906 | Lawrence | INW0896_03 | Indian Creek-Mt. Olive | Mercury in Fish Tissue ** | 60 |
| Lower East Fork White | 51202080906 | Martin | INW0896_04 | Indian Creek-Mt. Olive | Mercury in Fish Tissue ** | 60 |

* IDEM TMDL Key numbers correspond to the TMDL Key in Appendix D of the Integrated Report, which identifies all 57 TMDL reports approved to date.

** Parameter is currently impaired for this stream segment but is not anticipated to be addressed by the proposed TMDL.

Attachment E-1: Indiana's TMDL Priority Framework 2.0: A Process for Implementing the National CWA 303(d) Long-Term Vision in Indiana (2024). This document represents IDEM's commitment to the U.S. EPA Vision 2.0 requirements for states to establish TMDL development priority rankings for waters not meeting State water quality standards. The Priority Framework 2.0 was finalized during the state-mandated 45-day public comment period (February 1, 2024 – March 18, 2024) for the draft 2024 303(d) List of Impaired Waterbodies and draft 2024 Consolidated Assessment and Listing Methodology (CALM); the previous (2015) version of the Priority Framework was included as Attachment 2 of the 2024 Notice of Comment (NOC) Period document. The Priority Framework 2.0 was made available for a 2-week public comment period (March 1, 2024 – March 18, 2024) on the IDEM 303(d) List of Impaired Waters webpage and is subsequently being included in Appendix E of the 2024 Indiana Integrated Water Monitoring and Assessment Report.

# TMDL Program Priority Framework 2.0:

*A Process for Implementing the National CWA 303(d) Long-Term Vision in Indiana*

Watershed Planning and Restoration Section

Watershed Assessment and Planning Branch

Office of Water Quality

Indiana Department of Environmental Management

February 26, 2024

## Background

Since the first cycle of the *Vision for the Clean Water Act Section 303(d) Program* wrapped up in 2022, the U.S. Environmental Protection Agency (U.S. EPA) has worked with State program managers to evaluate the Vision. In Section 303(d) of the CWA, States are required to develop a list of impaired waters that do not meet State water quality standards and establish priority rankings for waters on the list to develop Total Maximum Daily Loads (TMDLs). The purpose of this Vision is to assist with focusing State efforts to build the effectiveness of the program in the future. Currently there are five goals that form the basis of the national long-term Vision:

**Planning and Prioritization** - States, territories, and tribes develop an overall strategy for implementation of Vision Goals, prioritize waters or watersheds for TMDL and other plan development (restoration and/or protection), and report on the progress towards development of plans for important waters.

**Restoration** – States, territories, and tribes design TMDLs and other restoration plans to meet and maintain water quality standards, help lead meaningful progress, and fix impaired waters.

**Protection** - In addition to recognizing the protection benefits that TMDLs and other restoration plans can provide, states, territories, and tribes may develop protection plans to prevent impairments and improve water quality, as part of an overall watershed approach.

**Data and Analysis** – The CWA Section 303(d) program coordinates with other government and non-governmental groups to lead data production and sharing and analyzes data and information necessary to fulfill its multiple tasks.

**Partnerships** – The CWA Section 303(d) program meaningfully communicates and collaborates with other government programs and non-governmental groups to restore and protect water quality effectively for the long term.

In addition to the five listed goals, the Vision also includes four focus areas of national, regional, and local importance to consider when implementing the CWA 303(d) program. These are environmental justice, climate change, tribal water quality and program development, and program capacity building.

## Indiana's Current Approach

The CWA Section 303(d) Program in Indiana is led by the Indiana Department of Environmental Management's (IDEM) Watershed Assessment and Planning Branch (WAPB). As required by the CWA, the WAPB monitors the current water quality status of Indiana waters, using a nine-year rotating basin approach. Water quality data collected are assessed using water quality criteria in the State's water quality standards and waterbodies are placed into one or more categories of the state's Consolidated List, available every two years in Indiana's Integrated Report.

While only a portion of the 63,000 miles of streams and rivers in Indiana have been monitored to date (leaving approximately 19,000 miles unassessed due to lack of data), approximately 21,000 miles of streams are listed as impaired under Category 5. Since the beginning of the TMDL program in Indiana, 56 TMDL documents have been developed resulting in 1,778 individual TMDLs moving waterbodies from the 303(d) List of Impaired Waters Category 5 into Category 4a. Prior to the commencement of the Vision, IDEM's WAPB worked with U.S. EPA Region 5 every cycle to determine the number of TMDLs to be developed. With the development of a national focus on showing results of water quality improvement, including several U.S. EPA focused success measures, Indiana has been moving toward a more general approach of TMDL development. In 2005, the TMDL and Nonpoint Source Program (NPS) were combined into the same group to gain efficiencies and better include the work of the two programs; with the thought that better outreach to watershed groups would lead to success of the of the TMDL.

Since the first project using this approach in 2013, the Assessment, TMDL, and Nonpoint Source staff at IDEM have worked together to provide watershed monitoring at 249 sites; produce 522 TMDLs in 77 HUC-12 watersheds; and provide $6.25 million in funding to eleven watershed groups to complete watershed planning and put efforts on the ground to implement those TMDLs. The environmental results of some projects are still being seen as funding has not yet been put on the ground for the latest funded projects. As we move into this next Vision cycle, IDEM sees continuing to use this model of monitoring, producing the TMDL, and funding implementation to successfully lower nonpoint source pollution in Indiana.

## Moving forward with Vision 2.0

As the first cycle of the Vision was ending, Indiana discussed the prioritization process, what worked well, and what could be improved. Work on priorities for Vision 2.0 began in late 2020 with state data being analyzed for selecting watersheds for TMDLs.

## Indiana's TMDL Program Prioritization

### Priority Watershed Selection Criteria

The focus of this process document is defining the method used to choose which waters will be the focus of TMDL planning and watershed restoration. The process for determining the TMDL priority

watersheds will meet the following criteria (Figure 1). The first four parts are required pieces, while the remaining are additional areas when choosing between watersheds identified by working through the first four.

(1) First, the prioritization will begin by identifying those watersheds with impairments based upon Indiana's water quality standards and 303(d) list, since the CWA mandates that TMDLs be developed for impaired waterways. As the monitoring and assessment process continues to find new impairments, the priority list will be updated from the 303(d) impaired waters list.

(2) The second part ranks watersheds based on their current ability to meet Indiana's aquatic life use. Waters that have poor biological communities but show an ability for improvement by means of a "good" habitat score (QHEI) will be considered first for TMDL development. Indiana has a highly changed landscape, and where current law and codes prohibit physical stream restoration, NPS improvements will most likely show biological community changes where good habitat already exists.

(3) The third part will select those watersheds where neither a TMDL, nor a watershed planning project has been completed. This piece lowers times where work is already progressing to improve water quality.

(4) The fourth part for TMDL selection is the reasonable expectation that a group to lead planning efforts exists in the watershed. Part of the TMDL process requires the State to provide "reasonable assurance" that the load reduction recommendations will be met. The presence of a local group (e.g. watershed group) wanting to implement a TMDL will allow the reasonable assurance of NPS reductions.

**Additional Parts Considered:**

- Identify those surface waters that provide a source of water for public drinking water use. People rely on clean water for drinking and business uses for everyday life.

- Identify waters that are upstream of public-access lakes used for activity. Harmful algal blooms have been on the rise recently in Indiana lakes and reservoirs, threatening the use of these waterbodies for primary contact activities.

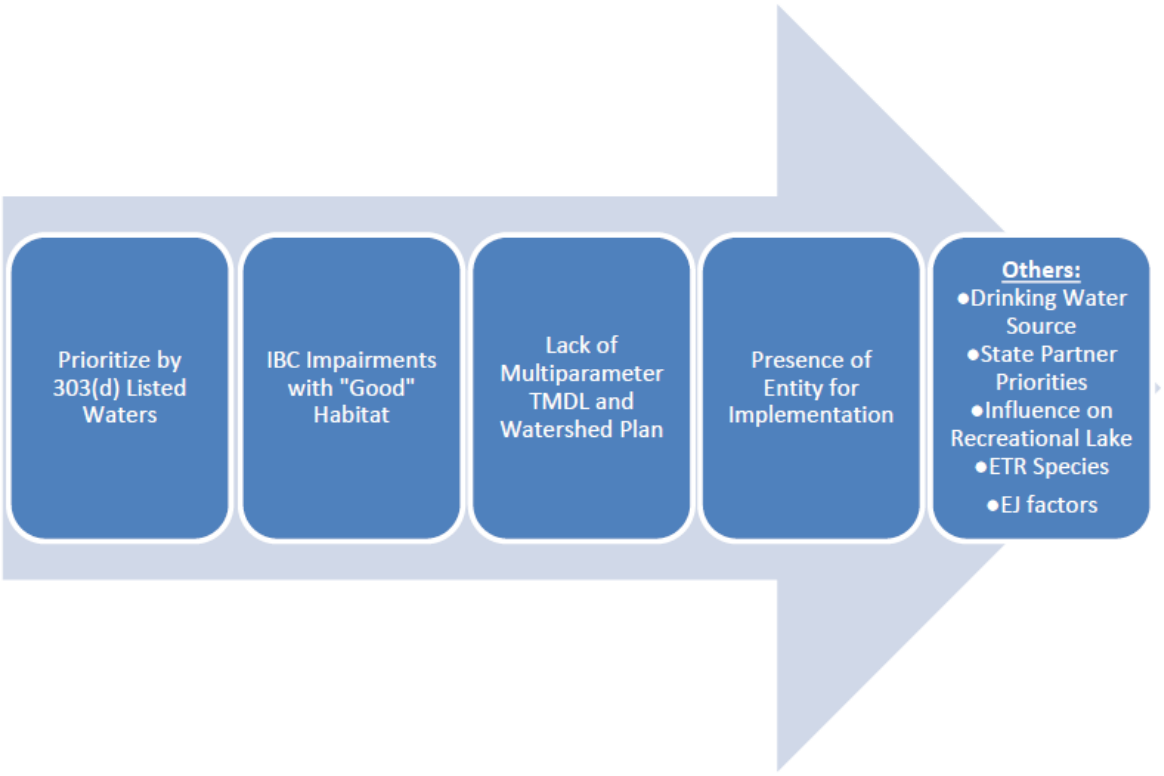
- Identify waters that are home to endangered, threatened or rare species. Water quality pollution and loss of habitat have lowered the number of some species to poor numbers; restoration and protection of the remaining groups should be important.

- TMDL development is based on goals specific to the State of Indiana. This step is based on conversations about overlapping priorities with agency partners such as the Indiana

Conservation Partnership (ICP)[1], as well as consideration of time sensitive or current relevant high-profile issues (e.g. Western Lake Erie Basin eutrophication).

- Identify areas with Environmental Justice (EJ) concerns. Areas with underserved communities were considered using EPA's Environmental Justice Screening and Mapping tool.

**Figure 1** Priority watershed selection process




[1] The ICP is comprised of eight Indiana agencies and organizations who share a common goal of promoting conservation. Members include the Indiana Association of Soil and Water Conservation Districts, Indiana Department of Environmental Management, Indiana Department of Natural Resources, Indiana State Department of Agriculture, Purdue Cooperative Extension Service, Indiana State Soil Conservation Board, USDA Farm Service Agency and the USDA Natural Resources Conservation Service.

## Priority List 2024-2032

The key to IDEM's current TMDL strategy is the presence of a local group ready, willing, and able to lead the TMDL. Due to the nature of such groups, the availability of a strong group of people to lead a watershed planning efforts after completion of a TMDL is often unknown on a long-term basis. Therefore, though IDEM's process for choosing TMDL watersheds remains consistent, its list of priority watersheds is always changing. IDEM also finds itself with resources that limit its TMDL development commitment to providing TMDLs for one 10-digit watershed per fiscal year. These TMDLs will be limited to streams and rivers with poor biotic communities (IBC) and *E.coli* impairments caused by one or more of the following conditions:

- Dissolved oxygen
- Algae
- Total Suspended Solids
- Phosphorus

TMDLs for nutrients and dissolved oxygen impairments may be considered for development based on agency resources and suitable pollutant connections identified. However, these impairments should not be considered commitments before development at this time.

IDEM has agreed with U.S. EPA to develop three TMDLs that are already in progress using the Vision prioritization method, each focused on 10-digit watershed scales. These three TMDLs are high priority for completion in the short term, as watershed groups are set to develop plans and lead efforts in the area. These three TMDLs and their completion years are as follows:

- Big Raccoon-Wabash River (2024)
- Indian Creek-White River (2025)
- Indian Creek (Monroe County) (2026)

In 2020, IDEM received support to develop technical guidance for applying lake modeling efforts in Indiana lakes and reservoirs. The intent of the project was to begin exploring the program ability to add lake TMDL development into the program. From this effort, Lake Manitou was identified as an example project for TMDL development. Due to this being a program development project, IDEM is not proposing to set specific time commitments on this project. However, this project could be completed as early as 2025. In the event of final submission of this project, other projects on the list above will be moved to the next year's submission accordingly (i.e., Indian Creek-White River (2026), Indian Creek (Monroe County) (2027) given Lake Manitou submitted in 2025).

- Lake Manitou (TBD)

The 10-digit watersheds listed in Appendix A may meet IDEM's criteria for TMDL development during this Vision cycle. Each watershed has been picked using the four priority watershed selection parts. They have been further chosen using the additional watershed selection conditions, categorizing them as

either high (green), medium (coral), or low (blue). IDEM will select one 10-digit watershed per year for TMDL development after 2026, as agreed upon with U.S. EPA.

## **APPENDIX A -** Potential IDEM Priority Watershed Selections

| HUC 10 | Watershed Name | County | TMDL | WMP | Lake Influence | Drinking Water | ETR | TMDL Priority | Patnership Notes |
|---|---|---|---|---|---|---|---|---|---|
| 512020810 | Leatherwood Creek-East Fork White River | Lawrence | No | No | No | Yes | Y (fish) | High | Lawrence County SWCD has strong interest. Also interested in Guthrie Creek, but more interested in Leatherwood. |
| 512011107 | Honey Creek | Vigo | No | No | Yes | No | No | High | |
| 512020702 | Graham Creek | Jennings/Ripley | No | No | Yes | No | Y (mussels) | High | Ripley Co. SWCD/HHH has strong interest; there is possible interest from Jennings Co. SWCD. |
| 514010408 | Whiskey Run-Blue River | Washington | No | No | No | No | Y (fish) | High | Interest from Jackson County SWCD but would have to discuss with Board before committing. |
| 512010606 | Bruce Lake Outlet-Tippecanoe River | Pulaski | No | No | Yes | Yes | Y (fish, mussels) | High | Bruce Lake and Mill Creek said that they may have future interest. |
| 512010607 | Mill Creek | Fulton/Pulaski | No | No | No | No | Y (fish, mussels) | High | Fulton County expressed strong interest in doing work in the Mill Creek watershed through this process. They said that it would be a 1-person operation and would need to work with a contractor to do a WMP. |
| 512020606 | Hough Creek-East Fork White River | Jackson | No | No | Yes | No | No | High | Strong interest from Washington County SWCD. |
| 512010807 | East Fork Coal Creek | Fountain | No | No | Yes | No | Y (mussels) | Medium | |
| 512010401 | Blue River | Whitley | No | No | Yes | No | Y (mussels) | Medium | Some interest from Lawrence County SWCD; there is interest from Jackson County SWCD but would have to discuss with Board before committing. |
| 512011006 | Sugar Creek | Montgomery | No | No | Yes | No | Y (fish) | Medium | Montgomery County, who just completed a WMP project for Upper Sugar Creek, expressed that lower Sugar isn't really their focus for the next few years since they are hoping to start implementation in Upper Sugar now. They said they could likely do work there in 5-10 years and that they've had multiple requests from partners to do work in the lower Sugar. They are a very active/capable group. |
| 512010403 | Sugar Creek-Eel River | Whitley | No | No | Yes | No | No | Medium | |
| 512020802 | Guthrie Creek | Lawrence | No | No | Yes | No | No | Medium | |
| 514010409 | Blue River | Harrison | No | No | No | No | Y (mussels) | Medium | |
| 512010809 | Coal Creek | Fountain | No | No | Yes | No | Y (mussels) | Medium | |
| 512020703 | Otter Creek | Jenning/Ripley | No | No | Yes | No | Y (mussels) | Medium | Ripley Co. SWCD/HHH possibly interested (would be in partnership with Jennings Co. SWCD); Jennings Co. possibly interested. |
| 514010411 | Little Blue River | Harrison | No | No | No | No | Y (mussels) | Medium | |
| 512010407 | Eel River | Cass | No | No | Yes | No | Y (fish) | Medium | |
| 514010412 | Oil Creek | Perry | No | No | Yes | No | No | Medium | |
| 514010402 | Buck Creek | Harrion | No | No | No | No | Y (mussels) | Low | |
| 514010414 | Yellowbank Creek-Ohio River | Perry | No | No | Yes | No | No | Low | |
| 514020101 | Deer Creek | Perry | No | No | No | No | No | Low | |