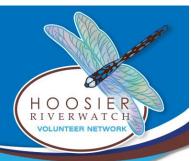
Indiana Department of Environmental Management

Riffles & Pools



Office of Water Quality

idem.IN.gov



Greetings Riverwatchers!

Is your organization interested in working toward cleaner waterways but limited by funding? I have good news! IDEM's Nonpoint Source Program is now accepting proposals for FY2026 Clean Water Act Section 319 grants. This funding supports projects that address nonpoint source pollution and improve water quality across Indiana. Eligible applicants include local governments, nonprofit organizations, universities and other groups committed to restoring and protecting Indiana's waterways. A 40% (nonfederal) in-kind or cash match of the total project cost must be provided. Projects are normally two to three years long and selected projects would receive funding to begin work at the start of 2027.

Projects may focus on watershed planning, best management practice (BMP) implementation, education and outreach or other innovative approaches to reducing nonpoint source pollution. Past projects have included cover crop cost-share initiatives to reduce nutrient loads, septic/sewer maintenance awareness and education and the development of watershed education products. IDEM project managers work closely with the project sponsors to help ensure that the project runs smoothly and the tasks of the grant agreement are fulfilled. Site visits are conducted at least quarterly to touch base on the project, provide guidance and technical assistance as needed and to work with the grantee on any issues that arise to ensure a successful project closeout.

Due Date for Notice of Intent: June 2, 2025

Application Deadline: Sept. 2, 2025

To learn more about this fantastic opportunity, visit idem.IN.gov/nps/funding/clean-water-act-section-319h-grants.

Dylan Allison Hoosier Riverwatch Coordinator Spring 2025

In this Issue:

319(h) Grants

April Flooding

Prairie Creek EPA Success Story

Earth Day Outreach

Instructor Gathering

Upcoming Workshops

May 15 – Logansport

May 16 - Spencer

May 17 – Bristol

May 30 – Greenwood

June 17 – North Webster

June 27 <u>– Greenwood</u>

Sept. 5 - Bristol

More workshops soon!

Hoosier Riverwatch is sponsored by IDEM



Page 2 of 6 Riffles & Pools

Rain, Rain, Go Away

The saying goes "April showers bring May flowers." This year, April showers also brought near-record flooding to much of Indiana. The historical average rainfall in April is approximately 4" within the state. Some regions saw twice that amount in just the first week.

From April 2–April 5, 2025, a low-pressure system dumped heavy rain across central and southern Indiana. The 96-hour downpour caused extensive flooding with some rivers reaching their highest levels since 2008. According to the National Weather Service, the Big Blue River at Shelbyville had its highest crest since 1913. Bloomington saw the highest totals with 8.84" across a 5-day period. Columbus, Muncie, and Indianapolis saw 7.32", 6.72" and 5.75" respectively. Even higher totals were reached across the border into Kentucky.



USGS river gauge measured nearly 70 feet deep at the Ohio River at Louisville on April 9.

April 2024 also saw higher-than-average rainfall; 7.77" according to the National Weather Service. This makes 2024-25 the wettest consecutive Aprils in at least the last 20 years. Below are photos of flooding around the state.















From top left, clockwise: Pottersville Road south of Spencer, Ind. (The Herald Times), Hanging Rock Hill in Madison, Ind. (Fox Weather), drone photo of Columbus, Ind. (Indiana Public Media), water rescue team in Bartholomew County (ABC News), flooded playground in Madison, IN (WDRB Louisville), Greenlawn Cemetery in Franklin, Ind. (Franklin Daily Journal) and White River at 30th Street Bridge (IndyStar)

Page 3 of 6 Riffles & Pools



Successfully Implementing Best Management Practices Improves Fish Community at Prairie Creek

Waterbody Protected

In 2006, the Indiana Department of Environmental Management (IDEM) listed the Prairie Creek (INB0735_02) stream segment on the Clean Water Act (CWA) Section 303(d) List of Impaired Waters for impaired biotic communities (IBC). This problem, as well as many others in the South Fork Wildcat Creek watershed, led to the development of the South Fork Wildcat Creek Watershed Management Plan in 2012. Since the development of the watershed management plan, several agricultural and urban best management practices (BMPs) have been implemented across the watershed. After years of BMP implementation, IDEM's 2021 Performance Monitoring results showed biological improvements on Prairie Creek. As a result, IDEM removed the Prairie Creek (INB0735_02) stream segment from the impaired waters list.

Water Quality Challenge

The 6.69-mile-long Prairie Creek (INB0735_02) stream segment flows northwest from the southeast portion of the Prairie Creek subwatershed toward the city of Frankfort (Figure 1). The Prairie Creek subwatershed lies along the southern boundary of the South Fork Wildcat Creek watershed. In all, Prairie Creek drains a watershed area of roughly 17,178 acres containing approximately 21 miles of waterways. The primary waterways include Mann Ditch and Prairie Creek. All open waterways within the Prairie Creek subwatershed are classified as open drains. The Prairie Creek subwatershed contains most of the developed area associated with Frankfort. Even with the city-related development, most of the subwatershed consists of cultivated cropland.

The IBC impairment on Prairie Creek (INB0735_02) was identified based on fish sampling that took place as part of IDEM's 2004 IBC South Fork Wildcat Creek Study. Results from the 2004 study indicated a total Index of Biotic Integrity (IBI) score of 32 and a Qualitative Habitat Evaluation Index score of 49 at site WAW040-0126. In Indiana, an IBI score of less than 36 indicates that a stream is not supporting aquatic communities.

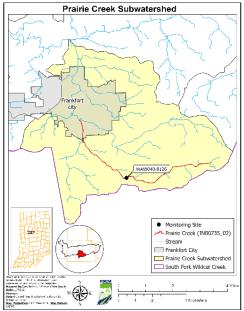


Figure 1. Overview of Prairie Creek and monitoring site location.

Page 4 of 6 Riffles & Pools

Project Highlights

In 2009, IDEM awarded the Clinton County Soil and Water Conservation District (SWCD) with \$166,000 in CWA Section 205(j) funding for developing the South Fork Wildcat Creek Watershed Management Plan. Once the watershed management plan was completed in 2012, Clinton County SWCD began working on the South Fork Wildcat Stewardship Initiative (SFW-SI). The goal of SFW-SI was to begin implementing the actions established by the watershed management plan. IDEM awarded \$320,950 in CWA Section 319 grant funding to Clinton County SWCD to begin implementing the SFW-SI. This grant covered approximately 4% of the South Fork Watershed in BMPs. In total, 50 water quality improvement projects were implemented across the watershed that required planning, coordination and communication with 28 local producers, Ivy Tech Community College, Mulberry Library, county commissioners, Frankfort city officials, the county surveyor, Clinton County SWCD, the Lebanon Natural Resources Conservation Service technical team and subcontractors. Of those 50 projects, five were urban BMP implemented within the city, including a rain garden, bioswale, conservation cover, and pervious pavement and underground storage. In addition to BMPs, the Section 319 grant funding helped support public education and participation, such as a demonstration to showcase how blind inlets are constructed (Figure 2). Clinton County SWCD received Section 319 grant funding again in federal fiscal years 2017 and 2021 to implement SFW-SI Phase 2 and SFW-SI Phase 3, respectively. Clinton County SWCD received \$158,250 for Phase 2 of the SFW-SI. This funding funded the implementation of 30 agricultural BMPs, most of which were cover crops (4433.4 acres), and continued support for public education and participation. Most recently, \$177,989 in Section 319 grant funding was awarded to Clinton County SWCD for Phase 3 of the SFW-SI. This phase of the project is still in progress. Funding for phase 3 will also go toward implementing BMPs and public education and participation.



Figure 2. Pictures taken during the active construction demonstration of a blind inlet and interpretative sign posted by the inlet showcased during the demonstration.

Best Management Practice	Number Installed	Units	Comments
Raingarden/bioretention basin	1500	SQUARE FEET	
Conservation Cover	.5	ACRES	
Grassed Waterway	1160	FT	
Nutrient Management	654	ACRES	
Pasture & Hayland Planting	12.4	ACRES	
Heavy Use Area Protection	3	INDIVIDUAL UNITS	
Cover Crop	7920	ACRES	3487 acres in Phase I. 4433 acres in Phase II.
Riparian Forest Buffer	20.5	ACRES	
Grade Stabilization Structure	1	INDIVIDUAL UNITS	
Watering Facility	3	INDIVIDUAL UNITS	

Results

Overall, most of the BMPs on or near Prairie Creek (INB0735_02) consisted of cover crop implementation. These efforts have successfully benefited the fish community. Performance monitoring conducted by IDEM in 2021 resulted in an improved IBI score of 50, making the Prairie Creek (INB0735_02)

Page 5 of 6 Riffles & Pools

stream segment eligible for removal from the CWA Section 303(d) List of Impaired Waters (Figure 3). Additionally, the Qualitative Habitat Evaluation Index score for site WAW040-0126 increased from 49 in 2004 to 52 in 2021. According to results from SFW-SI phases 1 and 2, cover crop implementation reduced the total suspended solids loads by 5,695 tons/year during Phase 1 and 7,027 tons/year during Phase 2. The reduction of total suspended solids loads likely contributed to an improved IBI score. Suspended sediment can clog the gills of fish, inhibit their growth, decrease their resistance to disease and prevent proper egg and larval development (IDEM, 2024).



Figure 3. Upstream view from site WAW040-0126 during 2021 monitoring.

Partners and Funding

Partner Type	Agency	Funding	No tes
Federal	Clean Water Act Section 319	\$657,189	
Federal	Conservation Stewardship Program, Environmental Quality Incentives Program, and Wildlife Habitat Incentive Program	\$36,008	
Federal	Conservation Reserve Program and Conservation Reserve Enhancement Program	\$11,088	
Federal	Clean Water Act Section 205j	\$166,000	



U.S. Environmental Protection Agency Office of Water Washington, DC

For additional information contact:

Caleb Rennaker

Indiana Department of Environmental Management 317-308-3119 • crennake@idem.in.gov

Indiana Department of Environmental Management 317-308-3237 • zbenton@idem.in.gov

Publication Date: 04/10/2025

Page 6 of 6 Riffles & Pools

Outreach Season Begins

In observance of Earth Day each year, (IDEM) offers free, hands-on classroom presentations to elementary schools across the state during the month of April. Chosen topics include air quality, land quality, water quality, and recycling. In 2025, over 350 elementary school classrooms received a presentation in central Indiana. Hoosier Riverwatch Coordinator Dylan Allison led a couple of presentations at St. Richard's Episcopal School in Indianapolis. The students discussed the importance of water and participated in an activity illustrating water's movement through the hydrologic cycle.



Photo Courtesy of St. Richards Episcopal School



Photo Courtesy of St. Richards Episcopal School

Dylan also connected with local students at Conner Prairie's Homeschool Day. Demonstrations were conducted on chemical and biological sampling utilizing a site on the banks of the White River. Students and their families were able to try hands-on techniques, including identifying macroinvertebrates and determining the levels of oxygen dissolved in the water. Conner Prairie Nature Engagement Specialist, Michelle Morton and Conner Prairie volunteer Jim Bancroft are both Hoosier Riverwatch trained and assisted with the demonstrations.





Volunteers Jim Bancroft (left) and Michelle Morton (right) demonstrate water monitoring for homeschool families.

Photo Courtesy of IDEM

Page 7 of 6 Riffles & Pools

2025 Instructor Training

On April 11, Hoosier Riverwatch instructors from around the state traveled to Eagle Creek Park in Indianapolis for the program's annual gathering. With a scenic view of the reservoir outside the shelter, instructors met for a day of recognition, networking, and fun. Some of the instructors who attended have been involved with Hoosier Riverwatch for over 20 years while others became trained to lead workshops earlier this year.

The morning consisted of two presentations from members of the water quality field. Sarah Powers and Megan Gokey of the Clean Lakes Program (CLP) discussed the volunteer lake monitoring program, comparing methods and details of CLP to Hoosier Riverwatch. Then, Mike Miller of Citizens Energy presented an up-close look at the DigIndy project. This \$2 billion project involved constructing a network of deep tunnels to collect combined sewer overflow (CSO) and reduce the amount of *E. coli* and other pollutants being washed into local waterways. These large tunnels, 18 feet in diameter, stretch across 28 miles at depths of 250 feet below Indianapolis. During large rain events, water that would overwhelm the CSO system is held in this tunnel system until it can be gradually released to the Southport water treatment facility. When completed this year, the DigIndy tunnel system will be able to store 250 million gallons of combined sewage, reducing overflows into our waterways by 97%. The incredible engineering feat will have enormous benefits on public health, economic development, and recreation.

The annual gathering was an opportunity to highlight and recognize some Hoosier Riverwatch instructors for their contributions to the program. Kriste Linberg from Bloomington Utilities was recognized for volunteering with the program for 20 years. Toria Callow from Flatland Resources and Seth Harden from The Nature Conservancy were awarded the Fantastic Facilitator award for co-leading a first-of-its-kind training workshop while paddling the Upper Mississinewa River. Congrats to Kriste, Toria and Seth!

Finally, instructors were able to navigate the treetop ropes course at GoApe within Eagle Creek Park. Although we usually ask our instructors to get their feet wet, they were able to feel the wind in their hair as they ziplined through the canopy. Thanks to Eagle Creek, GoApe, and our presenters for hosting the event. And thanks to all our instructors for their commitment to educating Hoosiers on the importance of water quality!









Photos Courtesy of IDEM

Page 8 of 6 Riffles & Pools

Mark Your Calendars

2025 Workshops

Thursday, May 15 Logansport – Riverside Park (9 a.m. – 3 p.m.)

Instructor: Jessica Hatt. Email JHatt@ISDA.IN.gov to register.

Saturday, May 17 Bristol – Bonneyville Mill County Park (9 a.m. – 4 p.m.)

Instructor: Krista Daniels. Register here.

Friday, May 30 Greenwood – Greenwood Nature Center (10 a.m. – 4 p.m.)

Instructor: Dylan Allison. Register by May 23.

Tuesday, June 17 North Webster – North Webster Community Center (9 a.m. – 4 p.m.)

Instructor: Amanda Heltzel & Lyn Crighton. Register here.

Friday, June 27 Greenwood – Greenwood Nature Center (10 a.m. – 4 p.m.)

Instructor: Dylan Allison. Register by June 20.

Friday, Sept. 5 Bristol – Bonneyville Mill County Park (9 a.m. – 4 p.m.)

Instructor: Krista Daniels. Register here.



Photo Courtesy of IDEM

Page 9 of 6 Riffles & Pools



Environmental Management

Office of Water Quality Watershed Assessment and Planning Branch

100 North Senate Avenue, MC 65-40 - 2 Shadeland Indianapolis, Indiana 46204-2251

PHONE: 317-308-3392

E-MAIL:

riverwatch@idem.IN.gov

CLICK HERE to subscribe

or go to:

idem.IN.gov





Welcome New Instructors

This spring, Hoosier Riverwatch welcomed nine new volunteer instructors to our team. We thank these individuals for their commitment to educating Hoosiers on water quality monitoring.

- Amy Gillan, St. Mary's College
- Deanne Jensen, Maumee Watershed Alliance
- Doug Morris
- Jacob Trusty, Monroe County Parks
- Kevin Barrera, Sarett Nature Center
- Neal Schroeder, Warrick County SWCD
- Pat Fisher
- Pete Sabo, Hydro-Action
- Sam Gradle, Muncie Bureau of Water Quality

IDEM Office of Water Quality Mission

The Office of Water Quality's mission is to monitor, protect and improve Indiana's water quality to ensure its continued use as a drinking water source, habitat for wildlife, recreational resource and economic asset.

The office achieves this by developing rules, guidance, policies and procedures; assessing surface and groundwater quality; regulating and monitoring drinking water supplies and wastewater facilities; protecting watersheds and wetlands; and providing outreach and assistance to the regulated community and the public while supporting environmentally responsible economic development.

Hoosier Riverwatch Mission

The mission of Hoosier Riverwatch is to involve the citizens of Indiana in becoming active stewards of Indiana's water resources through watershed education, water monitoring, and clean-up activities. Hoosier Riverwatch is a water quality monitoring initiative sponsored by the **Indiana Department of Environmental Management's** *Office of Water Quality*.

For more information, go to idem.IN.gov/riverwatch.