

Greetings Riverwatchers!

Just like the fluidity of our streams result in ever-changing landscapes, the Hoosier Riverwatch (HRW) office at IDEM has gone through changes in the past few years. As of May, one such change is a new HRW coordinator. Some of you may have crossed paths with Ross this past winter, and I am sure many of you have heard of Carol during her tenure as HRW coordinator. Now, I am excited to enter this role, dive into workshops, and connect with the incredible volunteer base that I am learning about.

At the time of writing this, I am only in my third month on the job. Fortunately for me, I have some background in the field of natural resources and volunteer coordination. I spent the last five years with the Indiana Department of Natural Resources as an Interpretive Naturalist at Fort Harrison State Park. I spent a lot of time showing park visitors the natural resources the park has to offer. Fall Creek, a tributary to the White River, flows for several miles through the park. Fall Creek Trail is perhaps the most popular for hiking, especially in the spring when the water runs high and the wildflowers pepper the forest floor. There are smaller creeks within the park, such as Lawrence Creek, in which I've conducted "creek stomps" for school groups. Without the technical step-by-step and equipment provided by the Riverwatch program, these creek stomps often focused on the biological surveys- collecting macroinvertebrates! The children often squeal with excitement when they find something wriggling around in their net. However, they are often plenty satisfied with simply getting their feet wet.

Those moments remind me how special our waterways are, not just for the use of drinking water, agriculture, and habitat, but also for the wonder that they bring to our children. The HRW program is a unique opportunity to monitor, and ultimately protect, this resource for future generations. This is no small task. However, I have learned that when faced with large tasks, volunteers serve as the backbone of such efforts. I have worked with so many great volunteers at the park, and now I am looking forward to working with the great network of volunteers of the HRW program. I have already had the pleasure of participating in a Riverwatch workshop first-hand, hosted by long-time instructors Seth and Leah Harden. It was a wonderful learning experience with a classful of engaged individuals! My hope is to be able to offer the same incredible opportunity to countless Hoosiers across the state. Make sure to check out our updated list of Riverwatch instructors, loaner equipment sites, and upcoming workshops later in this newsletter!

Happy Sampling!

-Dylan Allison, Hoosier Riverwatch Coordinator

Summer 2022

In this Issue:

New Riverwatch Coordinator

Little Deer Creek Success Story

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2022 Instructor & Loaner Sites

MARK YOUR CALENDARS!

Upcoming Basic Training

August 18th - Indianapolis September 2nd – Bristol September 16th - Muncie

Check out

<u>www.hoosierriverwatch.com</u>

for more info!

Hoosier Riverwatch is sponsored by



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Little Deer Creek is an 11.94-mile-long tributary of Deer Creek in Carroll and Howard counties. The Indiana Department of Environmental Management (IDEM) listed the stream on its Clean Water Act (CWA) Section 303(d) List of Impaired Waters in 2016 for high levels of *E. coli* and in 2018 for impaired biotic communities. These and other pollutants have been a persistent problem in the greater Deer Creek-Sugar Creek watershed and led to the creation of the Deer Creek-Sugar Creek Watershed Management Plan (WMP) in 2014. Various agricultural best management practices (BMPs) were implemented in the following years and follow up sampling on Little Deer Creek in 2019 indicated that the segment now fully supports aquatic life. IDEM will propose to remove the biotic community impairment from its impaired waters list in 2022.

Little Deer Creek joins with Deer Creek in Carroll County, just southeast of Camden, in north central Indiana. Its water flows through the larger Deer Creek-Sugar Creek watershed and eventually drains into the Wabash River. The Little Deer Creek subwatershed covers approximately 20 square miles, with agricultural accounting for most of the land use. According to the 2014 Deer Creek-Sugar Creek WMP, a 2013 survey identified livestock access and streambank erosion as the major stream-related concerns for Little Deer Creek.

In 2015, IDEM's Probablistic Monitoring Program sampled Little Deer Creek and discovered a failing Index of Biotic Integrity (IBI) score of 32 for its macroinvertebrate community. An IBI score of less than 36 in Indiana indicates that a stream is not supporting a well-balanced aquatic community. This led IDEM to list the segment on its 2018 CWA Section 303(d) List of Impaired Waters for impaired biotic communities.

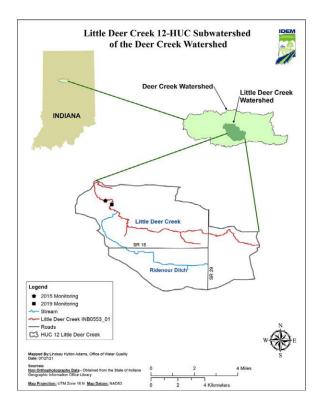


Figure 1. Little Deer Creek (HUC 051201050503) is inthe Deer Creek watershed in north central Indiana.

In fall 2010, the Carroll County Soil and Water Conservation District (SWCD) submitted a CWA Section 319 Nonpoint Source Program grant application to IDEM and identified watershed partners that would become part of the project's steering committee. The purpose of the grant was to produce a WMP for the Deer Creek-Sugar Creek watershed, provide education and outreach to the community, assess stakeholder opinions, monitor water quality, and develop a cost-share program. The project's overarching goal was to improve water quality in the Wabash River. The grant was awarded, and the Deer Creek-Sugar Creek WMP was approved in 2014.



Figure 2. Closing wheel equipment modification for no-till corn and soybean planting.

Photos courtesy IDEM

The Carroll County SWCD received a grant in 2011 and again in 2017 totaling \$859,626, which supported implementing over 3,995 acres of cover crops, 203 acres of nutrient management with manure, 124 acres of no-till field management, 130 acres of mulch-till field management, 0.2 acres of grassed waterways, one waste facility closure, one stream crossing, two heavy use protection areas, one mulch-till equipment modification, one nutrient management equipment modification, one no-till equipment modification, three cover crop equipment modifications, and one conservation plan in the Little Deer Creek sub-watershed. Additionally, the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) helped implement 2,178 square feet of seasonal high tunnel for crops and 1,018 acres of cover crops in the sub-watershed in 2015–2017 through the Environmental Quality Incentives Program (EQIP).

In 2019, IDEM returned to Little Deer Creek to conduct follow up performance monitoring on the stream. The monitoring now showed an improved macroinvertebrate IBI score of 40. The fish IBI (which was not previously failing) had also remained the same, with a score of 46. Although the Qualitative Habitat Evaluation Index score decreased from the 2015 score, it was still passing and showed improvement in the individual scores for bank erosion and riparian zone quality. As a result, IDEM is proposing to remove the biotic community impairment for Little Deer Creek from the list of impaired waters in 2022.

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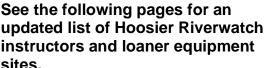




Instructors Unite!

Before departing the position, Ross Carlson was able to conduct a Hoosier Riverwatch Instructor Workshop. In March, 17 participants gathered at the IDEM office in Indianapolis to review techniques, share ideas, and discuss how to best lead basic HRW workshops around the state. Of course, they also got their feet wet sampling local Fall Creek. This was the first instructor training since 2018. Many of the participants were taking over for their predecessors at their local SWCD or county parks department. Congrats to everyone who completed the workshop!

If you are interested in attending an instructor workshop, reach out to riverwatch@idem.in.gov for more info!











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Updated 2022

HOOSIER RIVERWATCH

Instructor Locations

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Leah Harden - Frankfort (765) 438-6539 Lrharden77@yahoo.com

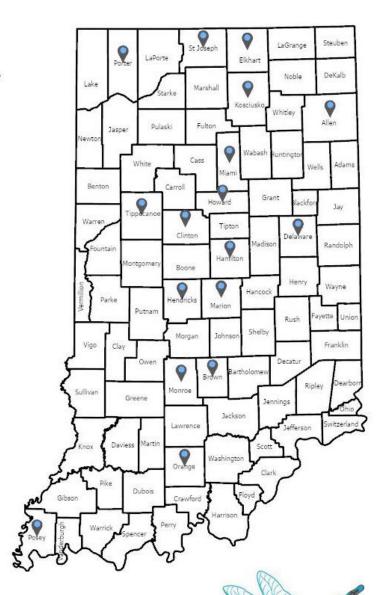
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HOOSIER

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HOOSIER

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HOOSIER RIVERWATCH

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Mark Your Calendars



Hoosier Riverwatch Volunteer Stream Monitoring

2022 Basic Training Workshops

A Hoosier Riverwatch Basic Training workshop introduces you to hands-on water quality monitoring methods. You will learn about aquatic habitat, chemical and biological assessment techniques. Sessions are held in- and out-of-doors. All interested persons, age 18 and over, are welcome to attend. Once trained, certified educators are qualified to teach these methods and topics to their students.

Workshops are free of charge. But it is important to register in advance using the contact given the workshop you are interested in. Training does come at a cost to the program, however, as well as to the host and/or instructor. So, please, contact your instructor or host if you will *not* be able to attend the workshop that you have signed up for.

August 18 Indianapolis, IN – Fort Harrison State Park (9 AM – 4 PM) Instructor will be

Dylan Allison. Contact Dylan at DJAlliso@IDEM.IN.gov or (317) 308-3392 to

egister.

September 2 Bristol, IN – Bonneyville Mill County Park (9 AM – 4 PM) Instructor will be Krista

Daniels. Contact Krista at kdaniels@elkhartcounty.com or (574) 875-7422 to

register.

September 16 Muncie, IN – Madjax Makerforce (9 AM – 4 PM) Instructors will be Dylan Allison

and Toria Callow. Contact Dylan at DJAlliso@IDEM.IN.gov or (317) 308-3392 to

register.

Thank you for your interest. We look forward to having you with us!



HRW Program Coordinator at IDEM: Dylan Allison HRW Volunteer Coordinator at IDEM: Cindy Jewell HRW Email: Riverwatch@idem.IN.gov Online database URL: www.hoosierriverwatch.com Program URL: www.in.gov/idem/riverwatch Page 9 of 9 Riffles & Pools



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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 www.idem.IN.gov/riverwatch

