

# Riffles & Pools

Office of Water Quality

[idem.IN.gov](http://idem.IN.gov)



## Greetings Riverwatchers!

According to the National Weather Service, central Indiana gets an average of 8.8 inches of snow in the month of January. We hit that mark just days into this January, however. I had planned to stay at the beautiful Clifty Inn after an outreach event at Clifty Falls State Park in early January. With the impending storm forecast, I made the decision to leave a day early. I am glad that I did, as 24 hours later my car was buried under a blanket of snow.

Although we often link snow with dangerous driving conditions or scenic landscapes, there is a lesser considered aspect of our January winter wonderland. Upon warming temperatures, some of our snowmelt will inevitably percolate the soil to recharge our groundwater. More than half of the state's residents rely on wells that tap into our groundwater resource. In fact, over 300,000 water wells have been drilled in Indiana ([IGWS, 2022](#)). Unfortunately, our groundwater is not immune to contamination. Landfills, septic tanks and fertilizers are among potential pollution sources of groundwater. Through best management practices, we can limit the pollution entering groundwater and ensure a step toward positive public health. I'm proud that Hoosier Riverwatch is a piece of the puzzle when it comes to monitoring and protecting this crucial resource. Thanks to all of our participatory scientists who monitored in 2024. For those interested in becoming involved in 2025, please visit [HoosierRiverwatch.com](http://HoosierRiverwatch.com) for more information.

Dylan Allison

Hoosier Riverwatch Coordinator

Photo Courtesy of IDEM

### Winter 2025

#### In this Issue:

Safe Drinking Water Act  
50<sup>th</sup> Anniversary

External Data Framework

City Nature Challenge

Winter Weekend Getaway

Calling All Instructors!

#### Upcoming Workshops

April 29 – Zionsville

May 2 – Greenwood

May 16 – Spencer

May 30 – Greenwood

June 27 – Greenwood

More workshops soon!

Hoosier Riverwatch is  
sponsored by IDEM



## 50<sup>th</sup> Anniversary of Safe Drinking Water Act

When asked what policies and laws protect our water resources, one might answer with the Clean Water Act of 1972. Certainly, this monumental legislation altered the framework by which we regulate and protect our water. There was another policy enacted two years later, however, that continued to strive toward safe, clean water. On Dec. 16, 1974, President Gerald Ford signed the Safe Drinking Water Act (SDWA) into law.



*Photo Courtesy of City of Cincinnati*

Like the Clean Water Act, the U.S. Environmental Protection Agency (U.S. EPA) administers the SWDA. The law helped to “establish standards and treatment requirements for public water supplies, fund drinking water infrastructure projects, promote water system compliance and control the underground injection of fluids to protect groundwater sources” (American Water Works Association, [awwa.org](http://awwa.org)). Additional amendments were made over the decades. In 2002, security measures were added to protect drinking water infrastructure from potential terrorist threats. In 2018, an amendment required communities to assess and develop emergency response plans for their water systems.

Currently, the Safe Drinking Water Act regulates approximately 100 contaminants. The prevention and elimination of these contaminants in our water leads to invaluable public health benefits. Various stakeholders communicate with the U.S. EPA to offer a variety of viewpoints. As unregulated contaminants become a concern, the U.S. EPA will coordinate sampling to make informed suggestions for amendments within the act. In fact, the U.S. EPA is already examining the possibility of regulations for per- and polyfluoroalkyl substances (PFAS) and microplastics. For the latest updates, visit [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water).



*Photo Courtesy of American Water Works Association*

## External Data Framework

Calling all water monitors! IDEM's Office of Water Quality (OWQ) has developed an External Data Framework (EDF) to provide a systematic, transparent, and voluntary means for external organizations to share their water quality data for consideration and possible use in various OWQ programs.

Because Indiana has a vast expanse of streams, less than 60% have been assessed for recreational and aquatic life use. The OWQ recognizes that many universities, municipalities, watershed groups and grassroots organizations throughout the state participate in water monitoring activities at various scales. The EDF provides a pathway for greater collaboration between the OWQ and the many individuals and organizations conducting water quality monitoring to help meet the shared goal of improving and protecting Indiana's water resources.



The four main sources of data for the External Data Framework are Hoosier Riverwatch, the Clean Lakes program, local watershed management projects funded by the Clean Water Act grants and any other external group collecting water quality data.

Water quality data collected on rivers, streams, lakes and reservoirs anywhere in Indiana are potentially reliable for the OWQ uses described in EDF regardless of the scope of the study or the geographic scale over which the data are collected. The EDF does not currently accept groundwater monitoring data or data collected from wetlands. Data collected may pertain to:

- General chemistry and physical properties
- Nutrients
- Metals (surface water and fish tissue)
- Bacteria
- Algal toxins
- Pesticides
- Polychlorinated biphenyls (PCBs; surface water and fish tissue)
- Polycyclic aromatic hydrocarbons (PAHs)
- Volatile and semi-volatile organic compounds (VOCs and SVOCs)
- Radionuclides
- Aquatic biological communities (fish and macroinvertebrates)
- Habitat evaluations associated with aquatic biological communities

If you'd like to increase awareness of your local water quality and collaborate for the improvement of Indiana watersheds, visit [idem.IN.gov/cleanwater/resources/external-data-framework](http://idem.IN.gov/cleanwater/resources/external-data-framework) for more information.

## 2025 City Nature Challenge

Do you love getting outdoors and exploring nature? Are you looking for the next fun activity for your friends or family? Then the City Nature Challenge might be what you're looking for!



The City Nature Challenge is an effort for cities to find and document as much urban nature as possible by challenging residents to become citizen scientists. The challenge is a fun way to compete against over 600 cities around the world. IndianaSciences.org is coordinating participation for these Indiana cities: Bloomington, Evansville, Ft. Wayne, Indianapolis, Lafayette and Terre Haute.

Residents are asked to explore their area (backyard, playgrounds, parks, etc.) for plants and bugs/animals, document their findings (take a photo), and report them (via the [iNaturalist](https://www.inaturalist.org) website or [app](https://www.inaturalist.org)). The underlying objective of this event is to develop a new baseline of a city's biodiversity and to monitor how change is accelerating (Indiana Sciences, [indianasocieties.org](https://www.indianasocieties.org)).

This year's challenge will be held April 25 - 28. After this timeframe for reporting observations, [iNaturalist](https://www.inaturalist.org) users have from April 29 - May 4 to identify the collective photos. Those who take the photos are not required to identify; local experts will collaborate on the app to come up with a positive ID. After three agreements on an identification, that data will be considered "research grade."

To participate in your local City Nature Challenge and for more details, visit [indianasocieties.org/cnc-2025](https://www.indianasocieties.org/cnc-2025). For iNaturalist instructions, visit [help.inaturalist.org/en/support/solutions/folders/151000552105](https://help.inaturalist.org/en/support/solutions/folders/151000552105).

### Who you are

You'll need to make an **iNaturalist account** and please only post your own personal observations



### What you saw

Choose a group of organisms like **butterflies** or better yet a specific organism like the **Monarch butterfly**. If you provide evidence you can leave this blank and the **community can help**



### Where you saw it

Record both the coordinates of the encounter as well as their accuracy. You can obscure the location from the public



### When you saw it

Record the date of your encounter, not the date you post it to iNaturalist



### Evidence of what you saw

By including evidence like a **photo or sound**, the community can help add, improve, or confirm the identification of the organism you encountered. Help the community by taking clear well framed photos, by including multiple photos from different angles



## Winter Weekend at Clifty Falls

Hoosier Riverwatch was invited to take part in a “Winter Weekend Getaway” at Clifty Falls State Park in January. Park Naturalist Kayla Wilson invited participants to the Clifty Inn for this fun-filled weekend involving a variety of speakers. Topics included local botany, birds of prey, stargazing and, of course, water quality via Hoosier Riverwatch. Program Coordinator, Dylan Allison, engaged with participants in a discussion about the physical, chemical and biological components of our streams. A bucket of stream water was brought indoors so attendees could try hands-on chemical testing themselves. Participants also learned to identify macroinvertebrates via a dichotomous key. The program was a success, and Hoosier Riverwatch was already invited to participate in next year’s event. For more information on the inn and Clifty Falls State Park programming, visit [dnr.IN.gov/state-parks/parks-lakes/clifty-falls-state-park](https://dnr.IN.gov/state-parks/parks-lakes/clifty-falls-state-park).



*Hoosier Riverwatch Coordinator, Dylan Allison, engages with participants of Clifty Fall’s Winter Weekend Getaway. Photo Courtesy of IDEM.*



*The event’s setting was fitting for Hoosier Riverwatch, sitting on a hill overlooking the Ohio River. Photo Courtesy of IDEM.*

## Mark Your Calendars

### 2025 Workshops

**Tuesday, April 29**

**Zionsville** – Zionsville Nature Center (10 a.m. – 4 p.m.)

Instructor: Rachel Felling. Register [here](#).

**Friday, May 2**

**Greenwood** – Greenwood Nature Center (10 a.m. – 4 p.m.)

Instructor: Dylan Allison. Register [here](#) by April 25.

**Friday, May 16**

**Spencer** – Owen County SWCD (10 a.m. – 4 p.m.)

Instructor: Dylan Allison. Register [here](#) by May 9.

**Friday, May 30**

**Greenwood** – Greenwood Nature Center (10 a.m.– 4 p.m.)

Instructor: Dylan Allison. Register [here](#) by May 23.

**Friday, June 27**

**Greenwood** – Greenwood Nature Center (10 a.m. – 4 p.m.)

Instructor: Dylan Allison. Register [here](#) by June 20.



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### ***Call Out for Instructors!***

Do you have an interest in outreach and engaging with the public? Do you enjoy getting your feet wet and sampling in our streams and rivers? If so, you may be interested in becoming a Hoosier Riverwatch Instructor! Benefits include receiving monitoring equipment from IDEM and an invitation to annual Instructor Gatherings. For more information, reach out to [riverwatch@idem.IN.gov](mailto:riverwatch@idem.IN.gov).

### ***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](http://idem.IN.gov/riverwatch).