



Mississinewa River, October 2014

photo by Jim Garringer

## Greetings Riverwatchers!

Whoa! What happened? Seems like we were just having fun traipsing around in creeks on gorgeous autumn days (like the one pictured above) and BAM, winter showed up. Well, fine. It's time to tie up the loose ends of 2014 and start planning for great things in 2015! Right? Woo hoo! I'm excited!

Since my arrival, I have immersed myself in the HRW files and databases, and oriented myself once again to the environment of IDEM. Through this I have sort of 'walked' the path that many of you have taken over the years, starting with how HRW functioned as a part of the Indiana Department of Natural Resources (IDNR); first as part of the "T by 2000" (zero soil loss) efforts of the Division of Soil Conservation and then as part of the collaborative education program of the Division of Fish and Wildlife. Still, HRW fits equally well with the overall roles and goals of IDEM's Office of Water Quality (OWQ) and - as a program - is an especially good match to other activities in the Watershed Assessment and Planning Branch.

Along the way I have also come up to speed with where the long-awaited and long-term process of the External Data Framework (the second mantle this position now wears) is taking us and how it all fits together with the database upgrades which are occurring with HRW this year. *(continued on page 7)*

November /December 2014

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### **Mark Your Calendars!** **2015 Basic Workshops:**

**Mar. 4** – Sugar Ridge  
FWA, Winslow

**Apr. 25** – Holliday  
Park, Indpls.

**Sep. 25** – Holliday  
Park, Indpls.

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## Work Continues on the OWQ's External Data Framework

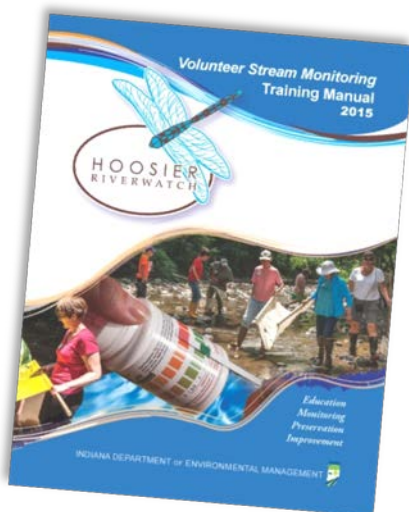
The Nov/Dec 2013 issue of this newsletter introduced you to the idea of IDEM's External Data Framework (EDF) program. The impetus behind this effort is that: 1) no single entity can possibly know all there is to know about water quality issues affecting the state, 2) there are many other eyes and ears around the state who are keeping watch over the quality of Indiana's water resources, 3) having access to water quality data collected by others can allow the decision-makers and program managers at IDEM to more accurately evaluate and report on issues affecting the state as a whole, and 4) accurate reporting allows for better targeting and wiser spending of incoming dollars in our efforts to monitor, protect, and improve the valuable water resources which we all rely on.

The Hoosier Riverwatch database, being the well-designed and handy dandy tool that it has been for volunteer monitors all these years, became the obvious tool to accommodate additional external data entry. Since the time was at hand (and funding available) for a much-needed upgrade to the HRW database, the idea of an expanded data entry portal was added to the effort. Therefore, the efforts of both the HRW and the outward facing portion of the EDF programs have become merged to some degree.

What does all this mean for the average HRW volunteer monitor or data user?

Well, first of all, much-needed database upgrades are taking place at this time. The data entry and mapping functions, which recently became problematic, will be corrected once the scripting language, in which the database runs, is upgraded to one that the internet community currently operates in and supports. The upgraded database is expected to be up and running before this time next year.

Other potential outcomes of this combined effort include increased awareness of the prevalence and value of citizen science around the state. Continued funding of and support for the HRW program is another plus, with the potential for greater coordination with current lake volunteer monitoring efforts and possible expansion into the areas of wetland and/or groundwater monitoring (more on that later). Stay tuned for updates!



## 2015 Training Manual is Now Online

HRW announces that the 13<sup>th</sup> edition of the Volunteer Stream Monitoring Training Manual is available for viewing and download online! Check it out at the usual link: [www.IN.gov/idem/riverwatch/2332.htm](http://www.IN.gov/idem/riverwatch/2332.htm).

We look forward to having printed copies available again soon. We apologize for any inconvenience our gap in HRW staffing may have caused by delaying the revision, review and approval of this important document.

We thank those facilitators who adapted their presentation styles in the absence of said manuals during their fall training sessions, and appreciated hearing about the other useful teaching techniques they picked up, as a result!

Enjoy!



## Brown County Home School Lessons

Your HRW Coordinator and her retired biologist husband taught a stream biology class to home schooled students in Brown County in October.

The students were just as excited to sample dissolved oxygen, pH, nutrients and turbidity (using HRW kits), as they were in identifying macroinvertebrates. They found it enlightening to see the connections between the physical, chemical and biological properties of their intermittent stream; which is a tributary to Bear Creek.

One student stated that she might grow up and study streams for the rest of her life. When asked about the hours she now spends studying the violin, she replied, "I think I will do both!"

Come to think of it, one of the first wetland biologists I ever met in Indiana was also a concert violinist.



## Bloomington Workshop Inspires

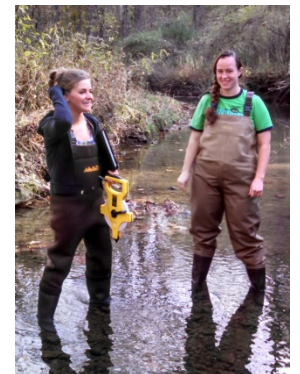
Seven students and a pair of recent graduates from the Indiana University School of Public and Environmental Affairs' (IU SPEA) master's degree program recently participated in a Basic Riverwatch Workshop. They were joined by a Carmel High School senior and the HRW Coordinator and were taught by facilitators Kriste Lindberg and Cathy Meyer.

This workshop was held at the IU Research and Teaching Preserve; nestled in the woods between University Lake, the IU Championship Golf Course and a series of 100'-deep ravines which feed into Griffy Lake. The weather was great for the long trek to Sycamore Creek; where water was found for sampling.

Of special note in the group were the two recent graduates. Maggie Messerschmidt was the 2013 recipient of the Campus Catalyst Award for Student Leadership at IU. She is a well-traveled, unassuming, yet charismatic member of [RAIN](#) (Restorative Adaptations for Infrastructure at Indiana University); a program of the IU Office of Sustainability which promotes green infrastructure efforts on campus as part of an U.S. EPA initiative/challenge. She has done amazing things on behalf of the world's environment so far, and should continue to do so in the future.

Another equally dynamic young professional is the ever-smiling, highly motivated executive director of the Owen County SWCD office, Kelsey Thetonia (pictured on the right; holding the yellow, spooled measuring tape). In fact, each one of the young women in this workshop was inspiring to watch and listen to. Our environmental future seems bright when you consider that our graduate schools are turning out such qualified people with such integrity of minds and hearts.

I will add, however, that—in the future, unless something drastically changes—I know of at least one HRW Coordinator who may opt to send the camera out with someone else so that she can 'conduct business' in the classroom, while the students traverse the deep ravines to collect water samples! (Huff! Puff!)



## NEEF Announces Algal Bloom Photo Contest Winners



In partnership with the National Environmental Education Foundation (NEEF) and the North American Lake Management Society, U.S. EPA asked Facebook and Instagram users to submit their photos of algal blooms using the hashtag #AlgalBloomPhoto14 to the Algal Bloom Photo Contest.

EPA chose the top three photos from an impressive collection of more than 100 entries from 27 states, the District of Columbia, Guam and even China. All of the photos were unique and thought-provoking, and will be used to build a photo library that will help educate people on the prevalence and impacts of algal blooms across the country. [Photos can be viewed on their Flickr site.](#) [Visit the NEEF website to learn more about the contest and to view all the entries.](#)

It's interesting to note that this contest has spawned a blog site by a student contractor with U.S. EPA's science communications team. Check it out [here](#).

## InWMC Symposium & IWRA Fall Meeting



The Indiana Water Monitoring Council (InWMC) will be hosting its fall symposium entitled *Indiana Energy and Water*, immediately followed by the fall business meeting of the Indiana Water Resources Association (IWRA). The IWRA is associated with the American Water Resources Association (AWRA).

**When:** Date: Thursday, December 11, 2014  
Time: 9:00 a.m. - 3:00 p.m.

**Where:** Indiana Government Center South,  
Conference Rooms B&C  
(302 W. Washington St. Indianapolis, IN 46204)

There are no fees to attend the symposium. **But you need to be registered by Friday, December 5th**, to attend. Visit: [www.inwmc.org/](http://www.inwmc.org/) for a detailed agenda and to register for this event.



**ROW** (Reconnecting to Our Waterways) has meetings lined up for those interested in Indianapolis urban waterways. Connect with your neighbors here:

- December 2 – [Pogue's Run Waterway](#) (6 – 8 pm at the Paramount School of Excellence, 3020 Nowland Ave., Indpls.)
- December 4 – [Little Eagle Creek Waterway](#) (recurring event at Community Hospital Westview Healthplex, 2<sup>nd</sup> Floor)
- December 9 – [Canal Waterway](#) (recurring event at Christian Theological Seminary from 5 – 6 pm)

**IndianaMAPS Update** - The mapping tool found at <http://maps.indiana.edu/> is already a superb tool allowing everyone to use it online as a viewer. Now it's even better! It is available in ArcGIS format at <http://indianamap.maps.arcgis.com> to allow download of geo-referenced dataset layers so that you can create and share your own custom maps, for personal or organizational use, or to embed maps into your website.



**Indiana Guide** – Check out the handy guide written by the USDA Natural Resources Conservation Service entitled “Finding Answers to Your Natural Resources Questions.” It can be found online at [www.nrcs.usda.gov/wps/portal/nrcs/main/in/newsroom/factsheets/](http://www.nrcs.usda.gov/wps/portal/nrcs/main/in/newsroom/factsheets/). It is a good one to post in your office or community bulletin boards!



## Wabash Valley Art Spaces Draws Attention to Local Waterways

What a super job this organization is doing! They have been enhancing the economic vitality and quality of life of residents and visitors of Terre Haute since 2003. They've been doing so by bringing locally themed culture and art to their waterways, green spaces and public areas.

Their comprehensive plan [Turn to the River](#) is well underway and intended to re-connect downtown Terre Haute with the Wabash River through public art and design. On October 15<sup>th</sup> they dedicated the sculpture “A Song for Indiana” in Fairbanks Park; a sculpture designed and created by Teresa Clark in celebration of [Paul Dresser](#). Mr. Dresser wrote the song “On the Banks of the Wabash, Far Away”; which became Indiana’s official state song in 1913 (see photos to left, adapted from the website [wabashvalleyartspaces.com](http://wabashvalleyartspaces.com)).

Be sure to check out this site to see the many great projects, videos, CDs and sculptures they have been producing; as well as the current Max Ehrmann-themed poetry competition they have going on (open to adults and students living in Clay, Parke, Putnam, Sullivan, Vermillion or Vigo county). Come on, Riverwatchers, let's see what you can do! But, hurry! Submissions for this contest must be in from Jan. 1 to Feb. 16, 2015. Entry form, procedures and current theme are available [here](#).



## 44th Annual HASTI Conference / The Nature of Science

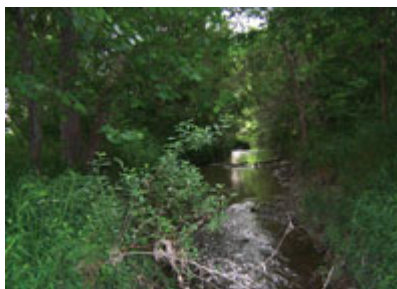
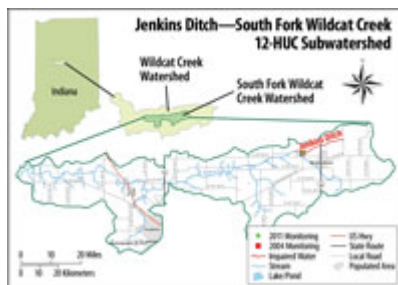
February 11-13, 2015 at the Indiana Convention Center, Indianapolis, IN

Planning for the 44th Annual Conference of the Hoosier Association of Science Teachers, Inc. (HASTI) is in full swing! Visit the Annual Conference tab online for more information, or check out one of their quick links below.

**Registration:** Note that advanced registration ends on January 16<sup>th</sup> and that advanced pricing is up to \$30 cheaper than onsite registration. [REGISTRATION IS NOW OPEN - CLICK HERE TO REGISTER](#)

**Program Proposals:** The deadline for accepting program proposals has closed. But, keep your great ideas handy for next year!

**Exhibit Hall:** Exhibitor registration is now available - [CLICK HERE FOR MORE INFORMATION AND TO REGISTER YOUR BOOTH](#). If attending, please be sure to stop and introduce yourself to the Riverwatch staff at the IDEM booth in the exhibit hall! Can't wait to meet you!



### 319 Success Story: Jenkins Ditch, Indiana

Indiana watershed project makes EPA's *Water Headlines* news!

Check it out on EPA's web page at:

[http://water.epa.gov/polwaste/nps/success319/in\\_jenkins.cfm](http://water.epa.gov/polwaste/nps/success319/in_jenkins.cfm).

Or get the excellent PDF version at:

[http://water.epa.gov/polwaste/nps/success319/upload/in\\_jenkins.pdf](http://water.epa.gov/polwaste/nps/success319/upload/in_jenkins.pdf).

*The problem?* An area of Indiana, which has 36 of its >60 miles of streams listed as being Outstanding Rivers, also had a tributary ditch/drain listed as an Impaired Waterbody for not meeting water quality standards.

*The solution?* Collaborative efforts between multiple county SWCD offices, the local watershed alliance, cooperating landowners, the Purdue extension service, various entities from the NRCS, funding from IDEM and others and—yes!—even Hoosier Riverwatchers!

*The results?* BMPs implemented, water quality improved, and another waterbody cleaned up and de-listed. Great job, Everyone!





Indiana Department of  
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



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## Greetings... (continued from the cover)

With regard to the people involved with Riverwatch, I must say I'd be hard pressed to find a more dedicated, enthusiastic, unassuming and diverse group of 'professional' volunteers anywhere. And I have barely scratched the surface of meeting people! But we hope to change that in the near future.

So, as was also said last year, THANK YOU ALL for another great year! Do not hesitate to contact me with comments, suggestions, feedback, and stories. I look forward to working with you during the coming season and wish you all the very best until we meet here again in 2015.

*- Carol Newhouse*

## IDEM OWQ 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 ground water quality; regulating and monitoring drinking water supplies and waste water 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](http://www.idem.IN.gov/riverwatch).

