



Riffles & Pools



Horace Mann students doing watershed tarp activity.

Riverwatch News & Updates

Many of us have taken time out of our hectic schedules to monitor our Riverwatch sites. When asked the question "Why do we monitor?" we all have our own reasons. Some of us monitor to satisfy our curiosity, others want to find out what's in the water that our children play in, still others want to help the state of Indiana better understand our water resources. There are absolutely no wrong answers to this important question, and for all reasons we'd like to say a heartfelt thank you and keep up the good work! Hoosier Riverwatch is a program for all

of us and we are encouraged to shape the program to suit our needs-whatever those needs may be.

A gentle reminder, I will be on maternity leave before the next issue of *Riffles & Pools* is scheduled to be released. I will try to provide you with contact information before my leave, but in the meantime please keep Diane Day's contact information handy. You can reach Diane at 317-562-1338 or dday@dnr.in.gov.

Hoosier Riverwatch and Adopt-A-River are programs in the Indiana Department of Natural Resources, Division of Fish and Wildlife. We are housed at the Natural Resources Education Center located at Fort Benjamin Harrison State Park.

Fort Harrison State Park - NREC
5785 Glenn Road
Indianapolis, IN 46216
317.541.0617 (phone)
317.562.0790 (fax)

Visit Hoosier Riverwatch and Adopt-A-River online at

www.IN.gov/dnr/nrec

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Healthy Water Healthy People

Hoosier Riverwatch and Project WET are teaming up to deliver this workshop focused on raising awareness and understanding about water quality and its relationship to personal, public and environmental health. It will help educators address science standards through interactive activities that interpret water quality concepts and promote diverse learning styles with foundations in the scientific method. Cost is FREE but pre-registration is required. Participants will receive both the Educators Guide and Field Monitoring Manual, a \$40.00 value.

Friday, February 19

Indianapolis, IN - Earth Discovery Center at Eagle Creek Park

9:00 am - 4:00 pm

To register contact the NREC at nrec@dnr.in.gov or 317-562-1338.

Wednesday, July 7

North Webster, IN - North Webster Community Center (joint Project WET)

9:00 am - 4:00 pm

To register contact Darci Zolman at 574-267-7445 x 3 or darci.zolman@in.nacdnet.net.

Friday, September 24

Elkhart, IN - Elkhart Conservation Club

9:00 am - 3:00 pm

To register contact Nancy Brown with the Elkhart County SWCD at nancy.brown@in.nacdnet.net or 574-533-4383 ext. 3



[Register User](#) [Register Site](#) [Submit Your Story!](#) [Enter Data](#) [Search Database](#)

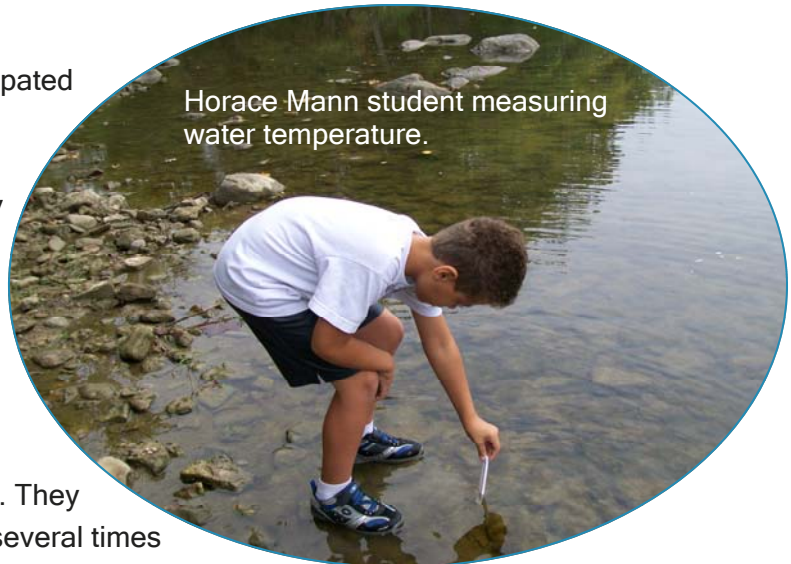
Submit Your Story!

We want to hear how you are using Riverwatch in your community. Visit, www.hoosieriverwatch.com and click the “*Submit your Story*” link. Remember, it doesn’t need to be a lengthy story, just a few sentences. Just let us know what is going on! Each quarter we will randomly select a story from among the submissions for that period as our winner. Prizes may include macro-invertebrate ID guides, bug viewers, Wet Your Waders CD-ROM software, etc.

Featured Story

The following story was submitted by Deborah Schwartz, a teacher at Horace Mann Elementary School in Huntington, IN. Deb, along with Cindy Paul and Shelley Paschal took the entire 4th grade class out for water monitoring.

Horace Mann Elementary fourth graders participated in World Water Monitoring Day following a unit study on the topic of roles of citizens. Students understood that their participation was one way that they could be active citizens by helping to monitor the quality of the water in our area. In addition, we were beginning a unit that involved investigating the earth using the scientific process. They learned how to ask a question about the quality of water, form a hypothesis, collect data, and form a conclusion. They also learned that scientists perform their tests several times to compare and insure accuracy. We had a few outliers in our data so good discussion followed as to why we may have had discrepancies. For example, turbidity was related to how carefully they collected the sample. If they collected water that had become murky due to stirring up the silt from walking in the water, then their data was not accurate. We also used the nets to collect macroinvertebrates and used the Riverwatch data collection sheet to calculate the PTI. Students were happy to know that the quality of our river was good!



Horace Mann student measuring water temperature.

Equipment: Net Spoon

The Fall 2009 edition of the Volunteer Monitor celebrated 20 years of volunteers and innovation. If you have not had the opportunity to view the Volunteer Monitor (<http://www.epa.gov/owow/monitoring/volunteer/newsletter/volmon20no2.pdf>), I encourage you check it out, especially the pages related to homemade sampling equipment. My favorite is the net spoon submitted by David Wilson with the Huron River Watershed Council in Ann Arbor, MI .

Net Spoon

by David Wilson

Sorting benthic macroinvertebrates from the tray with forceps is a pain, and often results in rather badly mauled speci-mens. With a net spoon, it's much easier to catch the critters and they are virtually never damaged.



To make a net spoon, use an electric grinder to grind off the bottom of a plastic picnic spoon, leaving only the rim. Be sure to wear safety glasses while grinding. Use waterproof cement to glue a small piece of fine mesh netting to the back of the rim. After the cement has dried, trim excess netting with small sharp scissors.

Loaner Trunks

For your monitoring pleasure.

So you've attended a workshop and want to try your hand at monitoring, but you don't have the equipment? Have no fear, Riverwatch has Loaner Trunks located throughout the state. Loaner Trunks have all the equipment you need monitor and may be borrowed for varying lengths of time.

Arrangements are made on an individual basis for each location.

To locate a Loaner Trunk in your area, email Lisa at riverwatch@dnr.in.gov for a map and contact information.



Monitoring Equipment

Expired? The Riverwatch program was built on the principles of sound science. Since data obtained from out of date equipment may not be accurate, it is not acceptable. No data is better than bad data. Please take the time to check expiration dates every time you monitor. Expiration dates for chemical kits can be found in the following places:

Dissolved Oxygen

- ◆ Color comparator on the lid
- ◆ Ampoules do not expires as long as they are kept out of direct sunlight

Orthophosphate

- ◆ Color comparator on the lid
- ◆ Round color comparator tube
- ◆ Activator Solution
- ◆ Ampoules do not expires as long as they are kept out of direct sunlight

Nitrite-N/Nitrate-N, pH

- ◆ All expiration dates printed on the bottles

Bacterial Monitoring

- ◆ Coliscan Easygel Bacteria Media
- ◆ Coliscan Petri dishes do not expired - reseal open packages after use
- ◆ 3M Petrifilm package

Applications are available for 2010 Equipment packages. Equipment recipients must meet the following criteria:

- ◆ Be affiliated with a non-profit organization, school, or government agency
- ◆ Agree to the Cooperative Agreement (pg. 4), including:
 - ◆ Attend a Basic Training Workshop
 - ◆ Monitor and submit data online at least 4 times per year for 2 years (*Total of 8 data sets by December 31, 2012*)
 - ◆ Submit 4 online Activity Reports within 2 years

NOTE: Applications are processed on a rolling basis. Equipment Packages available beginning in April. The award process is competitive, so please complete your application in detail so that we may fully assess your organization's suitability as a recipient. Return the completed 2010 Equipment Application no later than September 1, 2010.

If you have received an equipment package and are submitting data to the database, you are eligible to update your equipment. Please submit a refill request form online at <http://www.in.gov/dnr/nrec/2991.htm>. Allow 2 weeks for processing and delivery. Please note we are in the process of updating supplies for 2010 and have limited equipment available now.

Watershed Protection Grant

River Network is partnering with MillerCoors to award \$50,000 in watershed protection grants!

Projects that are eligible for funding will be focused on agricultural and water issues. This may include working with agriculture organizations, individual farmers, Soil & Water Conservation Districts or others involved with the farming community. Projects will be expected to provide long-term benefits to water quality, quantity and/or public education. Funds are available for projects currently underway. There are no geographic restrictions.

This is a contest program with direct public involvement deciding final awardees.

From the pool of submitted proposals, eight finalists will be chosen by committee. The eight chosen proposals will be posted on River Network's website, and the public encouraged to vote for their favorite project.

The top vote-getting proposal will receive \$25,000.

The 2nd place vote-recipient will receive \$15,000.

The 3rd place vote recipient will receive \$5,000.

The 4th - 8th vote-recipients will each receive \$1,000.

Timeline

- | | |
|----------------------------|---|
| February 8, 2010 | - Proposals Due by 5:00 PM Pacific Time |
| February 18, 2010 | - Finalists notified |
| February 22, 2010 | - Online voting begins |
| March 19, 2010 | - Online voting ends 5:00 PM Pacific Time |
| March 24, 2010 | - Awardees Announced |
| April 2010 - December 2010 | - Projects implemented |

For more information and to access the Request for Proposals, visit <http://www.rivernetwork.org/news/rivernetwork-millercoors-50000grantsRFP-2010>

Conservation Scholarships

Applications are now open for the League's 2010 National Conservation Scholarship, which provides two \$2,500 scholarships for qualified college juniors or seniors studying a conservation- or environment-related major. **Application deadline: April 1, 2010.** Specific requirements are available on the [League Web site](http://www.iwla.org) at <http://www.iwla.org/index.php?id=184>. For more information about criteria and applications, email [Earl Hower](mailto:ehower@iwla.org), ehower@iwla.org, IWLA Director of Chapter Relations, or call him at (800) IKE-LINE x216. These scholarships are made possible through the generous support of the [IWLA Endowment](#).

National Environmental Education Week

April 11-17, 2010

National Environmental Education Week connects educators with environmental resources to promote K-12 students' understanding of the environment. Held each year the week before Earth Day, EE Week is the nation's largest environmental education event.

Our nation's water and energy resources are increasingly relevant topics of discussion in today's media, classrooms, and homes. Recognizing the importance of conserving both water and energy to protect the planet and reduce costs, and acknowledging the interdependence between water and energy, EE Week's 2010 theme is Be Water and Energy Wise! Learn more by visiting [www.eeweek.org/water and energy wise](http://www.eeweek.org/water_and_energy_wise).

When you register for EE Week, you will join a national network of educators dedicated to increasing the environmental literacy of K-12 students. You will also receive certificates of participation, free online resources, information on professional development and funding opportunities, and access to discounts and special offers on educational materials just for EE Week participants. Register today at <http://www.eeweek.org/regist>.

Database Door Prize

Online Database

To date, over 750 individual volunteers have registered at www.HoosierRiverwatch.com and entered over 1200 stream sites!! These volunteers have also entered:

- ◆ 4,925 chemical data sets
- ◆ 2,185 biological data sets
- ◆ 1,875 flow data sets, and
- ◆ 2,015 habitat data sets.

Entering your data ensures its storage and easy access for use by your group, Hoosier Riverwatch, state agencies, and other researchers. So get on that computer and go to [www.HoosierRiverwatch.com!](http://www.HoosierRiverwatch.com)

Door Prize

To encourage continued database entry, we are renewing the Database Door Prize. Each quarter we will randomly select a winner from among the volunteers who submitted data since the last drawing. To be eligible, the selected data set must be free of errors. So be sure to always double-check your entries. If you do find an error, let us fix it. Contact Lisa at riverwatch@dnr.in.gov and she'll get you squared away.

Prizes may include macro-invertebrate ID guides, bug viewers, Wet Your Waders CD-ROM software, etc.



Hoosier Riverwatch Training Schedule

Volunteer Water Quality Monitoring "Basic" Training introduces citizens and educators to water quality monitoring utilizing hands-on habitat, chemical, and biological assessment methods. The sessions are held both inside and outdoors. Any interested adult is welcome to attend, and once certified, may teach students how to monitor.

Although Volunteer Stream Monitoring training workshops are free, you must contact the local host in advance to register. Most workshops are held from **8:30 am - 4:30 pm** unless noted. Schedule is subject to change.

Saturday, April 10

New Castle , IN - Memorial Park (WG Smith Building)

To register contact the Elisa or Kellie at the Henry County SWCD at elisa.grafford@in.nacdnet.net or 765-529-2303 ext 3.

Saturday, April 17

Indianapolis , IN - Holliday Park Nature Center (9:00 am - 4:30pm)

To register contact the NREC at nrec@dnr.in.gov or 317-562-1338.

Saturday, May 1

Columbus , IN - Clifty Creek Park (9:00 am - 4:30pm)

To register contact Heather Siesel at 812-343-1535/812-378-1280 or heather.siesel@in.nacdnet.net.

Saturday, May 15

Peru, IN - Peru Wastewater Treatment Plant

To register contact Jamin Beisiegel at 765-473-7651 or perustormwater@gmail.com.

Saturday, May 15

Bristol, IN - Bonneyville Mill County Park (9:00am - 4:00pm)

To register contact Krista Daniels at 574-535-6458 or krista@elkhartcountyparks.org

Tuesday, June 22

Battleground , IN - Brier Environmental Education Center, at the Tippecanoe Battlefield

To register contact Mary Cutler at 765-567-2993 or at mcut@msn.com

Thursday, July 1

Winona Lake , IN - Winona Lake

To register contact Darci Zolman at 574-267-7445 x 3 or darci.zolman@in.nacdnet.net.

Thursday, July 8

North Webster , IN - North Webster Community Center

To register contact Darci Zolman at 574-267-7445 x 3 or darci.zolman@in.nacdnet.net.

Tuesday and Thursday, July 27 and 29

Kokomo , IN - Kirkendall Nature Center (5:00 pm - 9:00pm each night)

To register contact Sarah Brichford at 765-456-2217 or sarah.brichford@co.howard.in.us. Must attend both nights.

Saturday, September 11

Indianapolis, IN - Holliday Park Nature Center (9:00 am - 4:30pm)

To register contact the NREC at nrec@dnr.in.gov or 317-562-1338.

Saturday, September 11

Frankfort, IN - Camp Collum (8:00 am - 4:30 pm)

To register contact Leah Harden with the Clinton County SWCD at leah.harden@in.nacdnet.net or 765-659-1223 x3.

Saturday, September 11

South Bend, IN - St. Patrick's County Park (Brown Barn)

To register contact Brooke Artley with St. Joseph County Parks at bartley@sjcparks.org or 574-277-4828.

Saturday, September 25

Elkhart, IN - Elkhart Conservation Club

To register contact Nancy Brown with the Elkhart County SWCD at nancy.brown@in.nacdnet.net or 574-533-4383 ext. 3.

Hoosier Riverwatch for Home School Educators**Thursday, August 12**

Noblesville, IN - Conner Prairie

In the morning, Home Educators will complete the Hoosier Riverwatch volunteer stream monitoring and water quality education program. Children (**ages 7 years and older**) will attend a program that explores daily life in the 1800's with a special focus on water use and the relationships between rivers and settlements. presented by Conner Prairie staff.

Everyone will meet in the afternoon to practice water monitoring and collect macro-invertebrates. There is \$3.00 fee per child payable at the workshop.

This workshop is open to everyone, but priority will be given to home school educators. To register contact the NREC at nrec@dnr.in.gov or 317-562-1338.

Hoosier Riverwatch Contact Information

Fort Harrison State Park - NREC
5785 Glenn Road
Indianapolis, IN 46216

317.541.0617 (phone)
317.562.0790 (fax)

If you need to borrow or pick up equipment, our office hours are Monday - Friday from 8:00 am - 4:00 pm. Please contact us prior to any visit so we can let the gate attendant know you will be coming.