

# ST. JOSEPH RIVER REVIEW

Volume 10, Issue 3

Quarterly Newsletter of the St. Joseph River Watershed Initiative Partnership

Summer, 2008

Newsletter Editor: Tina Puitz

## Elementary School Curriculum Highlights St. Joseph Watershed

Nearly five years ago, surveys conducted by the SJRWI and Fort Wayne City Utilities revealed that although people in Fort Wayne considered their rivers a significant resource, the majority didn't know what a watershed is and were unsure about water quality of the rivers. The SJRWI's informal work with mid-level students in Fort Wayne and Auburn found that although many children could identify the rivers or the Cedar Creek, they had no clue about where the water went once it left their area.

### What Students Learn

Students in elementary school learn about the water cycle, animals, plants and other facets of earth science. But often they aren't able to connect that knowledge to their own local environment. They may not be very clear at all about where the stream in their neighborhood gets its water, or where it flows, whether it's safe for wading, or what kind of plants and animals live in the water.

In an attempt to reach decision-making adults through their children, as well as to teach the next generation of consumers, the SJRWI has created a five-day watershed curriculum for the mid-elementary school students.

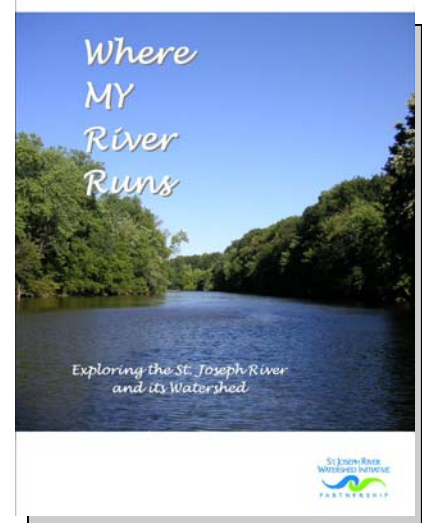
Curriculum specialists Nancy Leininger and Pamela George have worked with Initiative staff for the past three years to build an exciting and fun watershed learning experience for the fifth-grade level students that is correlated to Indiana State Educational Standards in science, history and reading.

### What's in the Curriculum?

The curriculum explores the physical watershed of the St. Joseph River, where the water originates and where it flows. It includes lessons on water quality and how human activity affects that quality, as well as how the rivers and streams have impacted local history. It also includes an opportunity for students to assume the roles of various landowners and other stakeholders in determining how they will protect and improve their local water resources.

### Distribution of the Curriculum

Thanks to funding from the Indiana Department of Environmental Management in the form of a Section 319 grant, the curriculum will be distributed free of charge to 4<sup>th</sup> and 5<sup>th</sup> grade classrooms in the Cedar Creek watershed. Teacher in-service training will be offered to each school. Teacher kits include all lessons,



student worksheets, transparencies, maps and games, and a virtual tour of the St. Joseph River. A CD copy of the entire instruction package will allow teachers to reproduce additional pages as necessary.

The curriculum is designed to be adopted by educational groups in other watersheds by substituting local watershed maps and local history to the basic curriculum. For more information about the curriculum, contact the Initiative at 484-5848 ext. 117. ■



## SAVE THE DATE

Tri-State Conservation Farming Expo  
February 25, 2009





## Volunteer Water Monitoring

### Calling All Volunteers!

#### Adopt a Stream for Your Local Team



Are you an outdoorsy person? Do you like to wade in streams, checking out the wildlife, fish and plants? Are you a canoe enthusiast?

Have we got a deal for you!



The Initiative is growing its volunteer water quality monitoring program with the introduction of the St. Joe Team Water Sampling program.

The volunteer teams can be organized around a neighborhood, workplace, or

other community group. Each team can choose its own name. Members (2 or more) are trained together in Hoosier Riverwatch volunteer water quality monitoring methods. The team then adopts a section of a tributary of the River, staging at least one clean up and two water quality

monitoring events annually. What a good way to get out and experience nature!



This is a great opportunity to bring some positive publicity to your work crew! Photos and accounts of the teams and their work will be featured on a page of the SJRWI website, [www.sjrwi.org](http://www.sjrwi.org). Group gatherings to update skills and share tips, stories and refreshments will be offered twice a year by the SJRWI for all team members.

Two teams have already been formed and will soon be out monitoring in the St. Joseph. Members are from First Vehicle and from the Davey Resource Group, both from Fort Wayne, and certified as Hoosier Riverwatch monitors on September 22. A third group from Clear Lake, will be monitoring inlets to that lake near Fremont, Indiana. Teams from across the St. Joseph watershed are welcome. We bring the training to you, and it's free!

For more information or to arrange training for your team, contact Tina Puitz at the Initiative office (484-5848 x117). ■

### S·J·R Online!



## Online water quality database now available online!

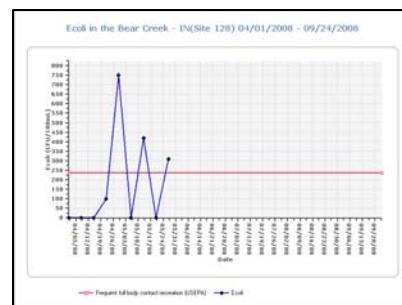
Funded by a Section 319 grant from the Indiana Department of Environmental Management, the project, nicknamed *SJR Online!*, makes the data from the Initiative's weekly water quality monitoring project available to the public. The Initiative has been sampling 24 sites across the St. Joseph River watershed during the recreational season (April through October) since 1996. Data from five additional sites, three that are routinely sampled by the City of Fort Wayne Water Utilities, and two sampled by the Fort Wayne-Allen County Health Department are available on the website.

The database is available through a link on the Initiative's website, [www.sjrwi.org](http://www.sjrwi.org) and the City's web site [www.cleanriversteam.org](http://www.cleanriversteam.org). The *SJRWI Online!* home page features a map of the watershed and its subwatersheds. Clicking on the map will provide a larger, detailed map with the sampling sites located in each subwatershed. Additional information about each site location is also available on the home page.

Choosing a subwatershed, or the entire watershed, presents the possible sites for which information can be extracted from the database. A choice of parameters, or all parameters, and specific dates or all dates, will result in a spreadsheet containing the data that is requested.

The data is also available in simple chart form when one site and one parameter is selected. Charts can be created by site, date range and parameter, or by median parameter.

A brochure featuring simple directions and the web address is available from the Initiative's office and from the Initiative's website. Representatives of the Initiative will be demonstrating the website and its use at various county SWCD meetings throughout October. ■



## Cedar Creek Subwatershed

### Wildlife habitat workshop October 18 at ACRES Dustin Preserve



Wildlife species and the natural areas they need to survive are important to people, too. Imagine life without songbirds, clear streams and lakes, and cool green woodlands.

Do you no longer see the animals and fish that you used to see around northwest Indiana? Are you wondering how to attract more birds and other wildlife to your property? Learn more about creating a wildlife-friendly neighborhood at a free public wildlife habitat workshop on October 18.

Indiana Wildlife Federation education and habitat coordinator Jerry Wheeler, and local certified backyard conservationist Ellen Ley will be sharing their vast experiences in conservation at the ACRES Land Trust office and activity center on the beautiful 28-acre Dustin Preserve, 1802 Chapman Road, Fort Wayne. Located in the unique canyon area of the Cedar Creek, the Dustin Preserve is worth the drive, particularly in mid-October as the trees are dressed in their finest autumn colors.

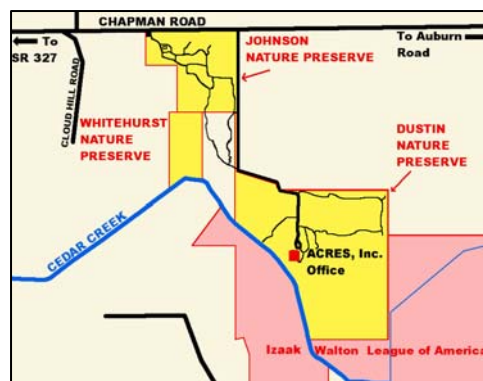
The workshop, sponsored by the SJRWI as part of the Cedar Creek watershed management plan implementation, will focus on the needs of wildlife to co-exist with growing human population, and will highlight backyard conservation – those things everyone can do in their own back yards to attract and sustain wildlife. “The sustainable environment is about the whole system,” advises Jane Loomis, coordinator of the workshop. “The impact of our conservation efforts in our neighborhoods helps to sustain wildlife, conserve and protect water resources, and clean the air. It takes everyone in the community doing a little bit to make a positive impact on our watershed and our environment.”

The workshop will start at 9:00 a.m. and end around noon with a cookout lunch. There is no charge for this event, but donations to the SJRWI and/or ACRES Land Trust are welcomed.

**RSVP appreciated (260) 484-5848 ext. 117**

#### How To Get There

From Fort Wayne travel north on I-69 to exit 116. Turn left (west) onto Dupont Road, then right onto Coldwater Road, then right onto Chapman Road. After 3/4-miles, look on the right for the "ACRES Land Trust Office" sign for the lane leading into the preserve and to ACRES' office. 7 miles from the I-69 interchange. Thirteen miles from downtown Fort Wayne by way of Coldwater Road. Park along either side of the lane to the office; the loop in front of the office is for turnaround, pick-up and drop-off only. Handicap parking spot on the loop. Additional parking on the Johnson nature preserve. ■



### SJRWI receives grant to continue water sampling

The Community Foundation of Greater Fort Wayne has awarded the Initiative \$36,350 for water quality monitoring and monitoring equipment. This will enable the Initiative to continue to provide water quality data to the Fort Wayne area by collecting samples from 24 sites in a 75 mile range.

Water quality monitoring enables the Initiative to target conservation practices across the watershed that will result in reduced water pollution; cleaner incoming water reduces the cost of water treatment and accurate water quality data supports outreach education and water management planning for local communities.

Partners of the Initiative in obtaining water quality data are Fort Wayne City Utilities and IPFW. The Initiative provides equipment and administrative support, IPFW Department of Biology collects the samples and the City provides the lab analysis for bacteria, pesticides and phosphorus. ■

# A Day at the Bay

## A Boat and Bus tour through the Maumee River Basin

On September 10, a trip to Lake Erie was sponsored by the St. Joseph River Watershed Initiative, local Soil and Water Conservation Districts and the St. Marys River Watershed Project. This was an opportunity for agriculture retailers and farmers to learn about some of the valuable programs and projects that are happening in the Maumee River Basin.

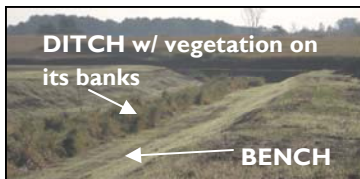


BUS TRIP TO TOLEDO

### First Stop

#### 2-Stage Ditch in Steuben County

Joe Draper, The Nature Conservancy and Initiative board member, and Larry Gilbert, Steuben County Surveyor, explained how benches are created about 10 feet on each side of a ditch allowing water to spread out over a larger area increasing capacity while decreasing velocity of water during high flows. 2-stage ditches improve drainage, reduce nutrients in surface water and improve wildlife habitat.



2-STAGE DITCH

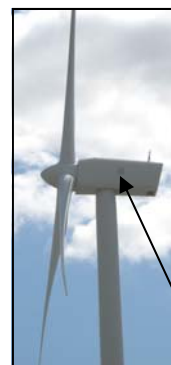
### Third Stop

#### Bowling Green Wind Farm Project, Bowling Green, OH

Driving up to the site was like approaching four metal giants. Amanda Gamby from the Wood County Solid Waste District explained it cost \$8.8 million to build the four wind turbines. Each turbine can provide power to between 50 to 400 homes a day depending on the wind speed and the time of year. Spring and Fall are the best times of the year to produce electricity and it takes 9 mph winds for the turbines to begin producing electricity. The turbines must be placed a minimum of 800 feet apart because of wind turbulences.

#### Interesting Facts:

- Total height (tower and blades) above ground: 391 ft.
- Total height below ground: 32 ft.
- Each blade: 22,000 lbs.
- Blade speed: 16.8 rotations/minute
- Speed at tip of blade: 178 mph



WIND TURBINES  
The nacelle, which sits on top of the tower, is as big as a bus.

### Second Stop

#### Toledo Bay for a trip down the Maumee River

Warren McCrimmon of the Toledo-Lucas County Port Authority and Arnold Page, Army Corps of Engineers, shared how business is conducted in the Toledo Bay, interesting stories about land along the shore and why dredging is important. The St. Joseph River is a contributor of sediment build-up in the Maumee River and Lake Erie.



THE ANDERSONS



A SHIP BRINGING GOODS INTO THE TOLEDO BAY



DREDGING IN THE TOLEDO BAY

#### Interesting Facts

about the Maumee River:

- 150 miles long
- fed by 7 rivers: St. Marys, St. Joseph, Auglaize, Little Auglaize, Tiffin, Blanchard and Ottawa
- 6,500 square mile watershed
- 4,000,000 acre watershed
- 1.7 million people live in the watershed
- 94 kinds of fish
- Dredging began in the Port of Toledo in 1867
- If the ports on the Great Lakes were to shut down, 17 million more trucks would be on the road.

For information about programs offered through the St. Joseph River Watershed Initiative, St. Marys River Watershed Project and your local Soil and Water Conservation District, please call 484-5848 ext. 3. ■

## Conservation News

### Fall Equipment Available

Equipment available this fall through the St. Joseph River Watershed Initiative is the JD 9520 with RTK auto steer and an 8 row Brillion strip/zone till. The unit is set up on 30 inch rows and runs 14 inches deep leaving an 8 inch strip to plant into in the spring. Also, available is a Case-IH MX-285 equipped with Trimble RTK auto steer. Renting the equipment provides an opportunity to try the equipment without a large expense to you. For more information or to sign up for strip-till, contact Jason Buuck at 260-484-5848 ext. 108. ■

### Livestock Survey

A livestock survey of the St. Joseph watershed was conducted this summer by Initiative and Allen County SWCD staff. There was no up-to-date comprehensive record of how many and what type of livestock were in the watershed.

The survey was best accomplished by driving up and down the roads past all farms and facilities in the watershed and recording the number and type of livestock, age of the facility, and if the livestock were in lots or pastures. ■

Livestock Type	# Operations	# Animals
Alpaca	3	39
Beef	699	12,216
Buffalo	3	36
Chickens	11	430
Dairy	71	4,588
Deer	7	101
Donkey	1	3
Ducks	1	20
Elk	2	20
Emu	1	6
Goats	54	1,305
Horses	1,298	7,475
Llama	18	118
Pheasants	2	200
Pigs	76	22,948
Pigeons	1	200
Reindeer	1	3
Sheep	83	1,922
Turkeys	2	16
Zebra	1	1

### St. Joseph Conservation Planning Grant Creates Rapid Assessment Process

In 2007, the Initiative partnered with The Nature Conservancy on a Cooperative Conservation Partnership Initiative (CCPI) grant from the Ohio Department of Natural Resources. The project developed a rapid assessment method to prioritize sub-watersheds for the placement of conservation practices which enhance the water quality and habitat of the St. Joseph River watershed.

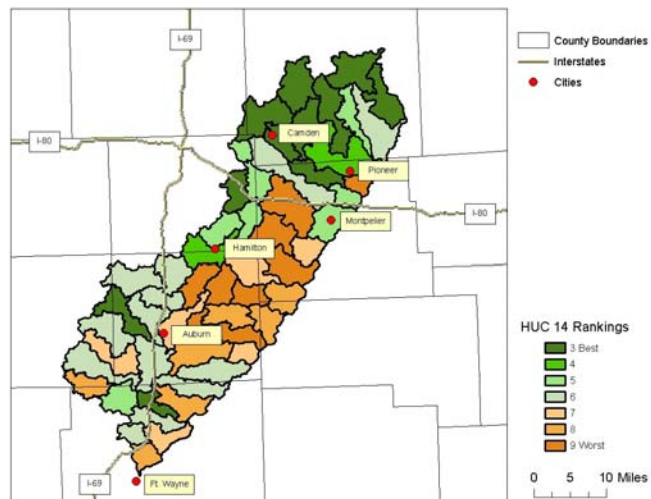
A broad range of partners participated in the development of this rapid assessment method, including a technical committee which included representatives of the county Soil and Water Conservation Districts, Natural Resource Conservation Service district conservationists, and Fish & Wildlife Service biologists. Retired Tri-State University biology professor Dr. Pete Hippensteel directed the project. GIS assistance came from Scott Gibson, research assistant at the IPFW Biology Department’s Center for Reptiles and Amphibians.

An extensive review of existing resource information was made for the assessment process. These included the National Land Cover Database, water quality data (bacteria, turbidity, and Atrazine) from the St. Joseph River Watershed Initiative’s monitoring program, and species occurrence data from the National Heritage Database. The digital land cover database was utilized to obtain three data sets: The amount of cropland (row crops) in each subwatershed, the amount of natural vegetation within each subwatershed, and the amount of woodland within a 30 meter buffer on each side of the stream. Each dataset was used as a ranking layer.

Both the HUC-II subwatersheds and the smaller HUC-14 subwatersheds were ranked, using available data in a process that ranked them against each other.

The selection of which sub-watershed to invest in the placement of conservation practices can be based on a variety of natural resource management approaches. One such approach is to “protect the best and restore the rest.” Selection should be based on practices that provide the most water quality and habitat benefits.

Additional information about this project and the rapid assessment procedure can be found on the SJRWI website, [www.sjrwi.org](http://www.sjrwi.org). Click on *Western Lake Erie Conservation Assessment Project* under the *Current Projects* listing. ■





## Upcoming Board of Directors Meetings

**October 6 at the DeKalb County Annex Building in Auburn, IN beginning at 6:30 p.m. The public is invited to attend.** Board of Directors meetings for the St. Joseph River Watershed Initiative are on the first Monday of Feb., Apr., June, Oct. and Dec. ■

## Board of Directors

**Bill Word, Chair**  
Hillsdale Co.  
Drainage Commission

**Marvin Dietsch**  
Williams Co. Farm Bureau

**Angie O'Neill**  
ACRES Land Trust

**Rodney Renkenberger, Vice-Chair**  
Maumee River Basin  
Commission

**Joe Draper**  
The Nature Conservancy

**Tara Storey**  
Fort Wayne-Allen Co.  
Resident

**Martha Ferguson, Secretary**  
Master Gardener, Landowner

**Dan Easterday**  
Hillsdale County, MI farmer

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**Mary Jane Slaton, Treasurer**  
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**Bob Gillespie**  
IPFW Biology Department

**Tina Puitz**  
Program Support Assistant

**Tom Crowe**  
Allen County SWCD

**Jerry Hohla**  
Retired A&L Great Lakes  
Laboratory

**Jason Buuck**  
Agronomy Technician

**Bob Koerner**  
Williams Co., OH farmer

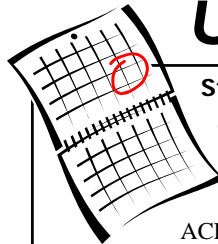


*If all the world's water were fit into a gallon jug, the fresh water available for us to use would equal only about one tablespoon.*



**THANK YOU**

to all our volunteers, stakeholders and partners who help promote the work of the St. Joseph River Watershed Initiative through donations of time and treasure.



## Upcoming Events

### St. Joseph River Watershed Initiative

- **October 6 Board of Directors Meeting**, DeKalb County Annex Building, Auburn, IN, 6:30 p.m.
- **October 18 Wildlife Habitat Workshop**, ACRES Land Trust office, Fort Wayne, IN, 9:00-noon (see page 3)
- **February 25, 2009 Tri-State Conservation Farming EXPO**, ACD Museum, Auburn, IN

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