

ST. JOSEPH RIVER REVIEW

A PUBLICATION BY THE ST. JOSEPH RIVER WATERSHED INITIATIVE

St. Joseph River Watershed Initiative - 3718 New Vision Drive - Ft. Wayne, IN 46845 - (260) 484-5848, ext. 3
www.sjrwi.org

Volume 7, Issue 2

Spring, 2005

BOARD OF DIRECTORS

Robert Gillespie,
Chairman

IPFW Biology Dept.

Bill Word,
Vice-Chairman

Hillsdale Co. Drainage
Commission

Mary Jane Slaton,
Treasurer

City of Fort Wayne, IN

Joe Draper, Secretary

The Nature

Conservancy

Tom Crowe

Allen County SWCD

Dan Easterday

Hillsdale County, MI

farmer

Rodney

Renkenberger

Maumee River Basin

Commission

Marvin Dietsch

Williams Co.

Farm Bureau

Valerie Richardson

IPFW-Community

Resource Institute

Bob Koerner

Williams Co., OH farmer

Chris LaLonde

Edgerton OH Wastewater

Treatment Plant

Ricky D. Kemery

Purdue Cooperative

Extension/Allen Co.

Dan Wire

Fort Wayne, IN

Brian Custer

Custer Grain Co.

Board positions are

open to new and exist-

ing partners.

STAFF

Jane Loomis

Executive Director

Aaron Wartenberg

Water Resource

Specialist

Jeremy Palmer

Agronomy

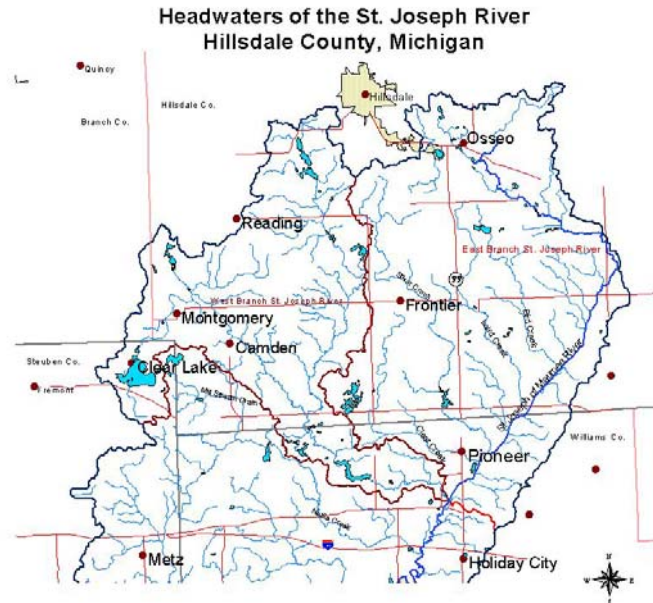
Technician

Kevin Breit

SWPI Technician

Where it begins Portrait of the Headwaters

by Tina Puitz



What does the land at the headwaters look like?

Hillsdale County gets its name from the topography—rolling hills. There are some forests but land use is primarily agricultural, consisting of corn and soybean production. Most field sizes are 40-50 acres, somewhat smaller than fields further south in the watershed. The small farm sizes are directly attributed to the many rolling hills. The community is mostly rural, with the city of Hillsdale being close by with a population of 8,500.

Why sample in the headwaters?

The SJRWI has added a new site to their water sampling route in 2005, a location on Reading Road just west of the town of Pittsford. Aaron Wartenburg, Water Resource Specialist for SJRWI, says this site is good because “there is no large scale agriculture in the area. The land is made up of nature preserves with wildlife and conservation practices in place.” What is hoped to be accomplished by adding this site in this location? Bob Gillespie, IPFW Biologist and chairman of the SJRWI board of directors, says streams have different physical and chemical dynamics that have nothing to do with land use. As a new tributary comes in, the

[See Headwaters on page 2](#)

head wa ters, n. the streams that make up the beginnings of a river.

Where are the headwaters?

Ever wonder where the St. Joseph begins? The headwaters of the St. Joseph River are located in Hillsdale County, Michigan, just south of the city of Hillsdale. The east branch of the river, which begins near Osseo, and the west branch of the river, which begins south of Reading, merge just below the town of Pioneer, Ohio (Williams County) to form the main branch of the St. Joseph. These waters will travel south to Fort Wayne, Indiana, where they will merge with the St. Marys River to form the great Mau-

mee, the largest river system of the Great Lakes. The Maumee flows north through Indiana and Ohio before emptying into Lake Erie at Toledo, Ohio.

The headwaters are unique. Why?

This headwaters area spawns not only the St. Joseph (Maumee) River, but also the Kalamazoo, Raisin, St. Joseph (Michigan), and the Tiffin rivers. These rivers all impact Lakes Michigan and Erie. Since all water in Hillsdale County flows out of the area, what happens in Hillsdale has a tremendous effect on the people, the waterways and the wildlife of many other counties within the Great Lakes basin.

Headwaters *continued from page 1*

make-up of the stream changes. The headwaters is thought to represent a more clean condition than downstream. This new site may not be pristine; however Gillespie says this site is a “potential reference site that could be used as a target for other sites down the watershed. We can use it as a target as far as contamination goes.”

Who is watching out for the headwaters?

Many organizations, from the local to federal level, care for the headwaters in different ways but all want to make a difference in conserving the river. We interviewed some of these people to find out their approach to the headwaters.

Dennis Haskins, district conservationist of the Hillsdale Natural Resources Conservation Services (NRCS) says farming practices have a direct impact on water quality. Some farmers who are not completely sold on the idea of no-till farming, and their conventional farming practices contribute to soil erosion and cause problems for the river.

Haskins believes his role for the headwaters is the same as it is for everyone in the rest of the watershed. A responsibility in keeping the land and water clean no matter where we live or work.

How does Haskins achieve that goal? He believes it’s all about educating people about their role in the watershed. The St. Joseph River Watershed Initiative is a big help to them in achieving that goal. The Initiative brings issues to people’s attention, such as soil problems, and they facilitate solutions and provide data on water quality through water sampling.

The Hillsdale Conservation District in Hillsdale County takes a strong stand on education. Robin Ryan, administrator of the conservation district says “We really target schools because the young people are our future leaders.” It is very important to reach them at a young age to teach them about water quality.

Ryan feels their office is the gateway between residents and NRCS. They listen to the residents’ concerns and answer questions citizens may have about resources.

Water quality, sedimentation, wind and water erosion are daily issues for Ryan. For example, Berry Lake was dredged because the river had accumulated 10-12 inches of sediment over a period of time. “It isn’t just the sedi-

ment that affects the water,” stated Ryan. “Agriculture and storm water runoff are areas of concern also.” Because of this, they work with people to install filter strips, riparian buffers and wetland restoration. They also have Clean Water Act Section 319 grants for all five of their watersheds.

Ryan said the Initiative is a great help to the SWCD with getting money into their hands for incentive payments and providing resources they can rely on.

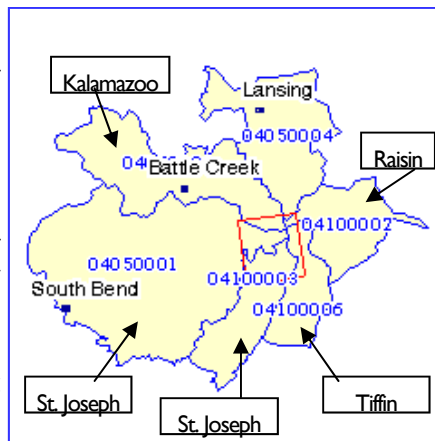
Ryan sees her role to the rest of the watershed as educating and reaching out to people with water quality concerns. “Water has no political boundaries and it flows where it wants or is allowed. Because of this, we must address the watershed as a whole.” said Ryan.

There is also a responsibility to conserve the inhabitants of the river. Joe Draper of the Nature Conservancy is involved on several fronts. He works in the headwaters, owns land and farms in the watershed, and sits on the board of directors for the St. Joseph River Watershed Initiative.

One of the issues Draper deals with daily at the Nature Conservancy is the hydrology of the streams which affects the mussel habitat. He is very concerned with what actually is happening in the streams and rivers. Soil erosion, tile drainage, sedimentation and nutrient and pesticide applications all have an impact on the water.

The St. Joseph River Watershed Initiative helps the Nature Conservancy by providing water quality analysis of the river and its tributaries as a part of its monitoring program. Draper is also encouraged by the Source Water Protection Initiative (SWPI) project. “Hopefully, the SWPI project will show that Best Management Practices (BMP) actually do help the river and they should be continued,” stated Draper. “If the headwaters are screwed up, everyone is messed up all the way down the watershed. It has a trickle down effect.”

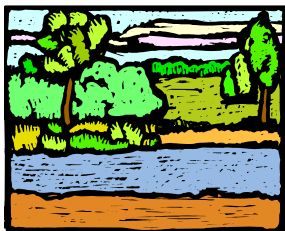
Charles McKeown, land use educator for Michigan State University Extension (MSUE), has the primary role of education in dealing with water quality ordinances and master plans. McKeown is currently working with Reading township in developing a master plan. They are basically taking a look at where they have been for the past 30 years and what they look like now,



St. Joseph Sediment Reduction Project Progresses

The Great Lakes Commission-funded grant that supports the St. Joseph Sediment Reduction Project is in full swing in the six counties that make up the St. Joseph River Watershed. The grant supplies funding for projects that stop erosion from fields, mainly agricultural, by installing buffer strips and filter zones that help to trap and hold sediment and accompanying pesticide and nutrient contaminants. This keeps those pollutants out of the waterways and improves the quality of water in nearby ditches and streams, and ultimately, in the St. Joseph and Maumee rivers.

The grant also supplies funding for installation of several best management practices (BMP) in the Matson Ditch sub-watershed. These BMPs will become part of the research of the Source Water Protection Initiative (SWPI) project since the water quality at the outfall from these installations will



be closely monitored in an attempt to measure how well these BMPs actually function in a real-world setting on a watershed scale.

The Initiative has chosen to administer these grant funds through the six county Soil and Water Conservation Districts so that each county can determine its most pressing erosion-reduction need(s) and respond to them efficiently. Hillsdale County, Michigan has hired a part-time assistant to work directly with landowners to contract and install buffers and filter strips. Meanwhile, the Allen County SWCD has created a working agreement with the owner and staff of a local retail farm supply operation to be the outreach arm for the SWCD. The retail staff will use their one-on-one contact with customers living in the St. Joseph watershed to advertise and recruit qualified landowners for the sediment reduction project.

DeKalb County is working with the City of Auburn to cost-share the funding for seeding of rural Riecke Park, a former agricultural field which has lain barren for a couple of years and is eroding through a direct storm sewer to the Cedar Creek. In addition, specially-designed, paired gravel filtration beds are being installed in the Matson sub-watershed, also located in DeKalb County. Water run-off from these beds will be closely monitored, along with rainfall, tillage methods, and chemical inputs, to determine how well these filtration beds function in a working watershed.

Williams County, Ohio, as well as Noble and Steuben Counties in Indiana, are using their funds to offer incentives to landowners who install filter strips, buffers and grassed waterways within the St. Joseph watershed, thereby increasing the numbers of critical acres in long term sediment reduction conservation programs. Noble County is planning a direct mail campaign to reach the landowners in its eastern section, which is drained by the Cedar Creek and its tributaries.

All counties must track the placement and installation of qualified erosion control projects and the Initiative will calculate the annual expected reduction in pollutants.

Also funded by the grant is the creation of a geographical information system (GIS) map layer that will make available up-to-date conservation program information for the entire watershed. With this map, we will be able to determine at a glance which land areas are lacking conservation and which areas are most critical to improving soil and water quality. ■

Headwaters continued from page 2

and he is helping them develop what they want to be in the future with regards to townships, zoning and ordinances. McKeown also works with the Hillsdale Planning Commission, is currently running a land use seminar, and works with general education to establish lines of communication. McKeown is there to help people with projects, from sampling efforts to GIS mapping.

McKeown noted, "The Initiative doesn't directly help me but the Initiative has some of the best data in the state as far as the river goes."

Mark Williams, the County Extension Director for MSU Extension-Hillsdale County describes his role as a partner with others in the watershed from an educational standpoint. He sees his organization as a supporter offering sites to hold meetings and helping get the message out to the public on conservation practices. Land use, such as erosion and run off, is one of the biggest issues Williams deals with. The Extension tries to teach people to practice the best conservation measures on land bordering streams.

"We are interested in keeping the water as clean as possible when it leaves Michigan" says Williams. Like the Nature Conservancy, his office is interested in keeping waterways clean for the mussels and clams. Some of these creatures are on the endangered species list and he doesn't want to be the state that allows them to go extinct.

[See Headwaters on page 4](#)

Board of Director Vacancies

The St. Joseph River Watershed Initiative has vacancies on our Board of Directors and invite you to submit your name in nomination if you wish to be considered for board membership. Members can represent a partner organization involved in the watershed, or can serve as an individual in an at-large position. The Board is required to be balanced in representation of both partners and geographic areas of the watershed. Partners include conservation districts, local businesses, organizations, institutions, corporations and governmental units.

The Initiative's Board oversees overall policy and direction for the Initiative, while staff manages day-to-day operations and administrative matters. Board members are selected at the Initiative's annual meeting in July by a majority vote of the entire board, and membership term is for one year.

A good board member is devoted to the Initiative's mission, thinks strategically for the long term, and is a team player who can listen to and consider other points of view.

Board membership requires time, talent and treasure! You would be expected to attend and participate in four of the six scheduled board meetings scheduled. You would also be expected to contribute your skills, experience and knowledge to board deliberations. And you would be expected to "give or get from others" donations to the St. Joseph River Watershed Initiative.

To submit your name for nomination, please email a brief essay (not to exceed 500 words) describing the following:

- why you want to join the board;
- how you demonstrate your commitment to the Initiative's mission;
- any prior experience serving on a non-profit board of directors (not a requirement); and
- what knowledge, experience and skills you will bring to board deliberations.

If you would like to submit your name for nomination, please email your essay to Board chairman Dr. Bob Gillespie, gillespi@ipfw.edu by June 1, 2005. If you would prefer to use traditional mail, send your essay to the SJRWI office, 3718 New Vision Drive, Fort Wayne, IN 46845. ■

Want to get your feet wet and test the waters?

On Saturday, July 16, the St. Joseph River Watershed Initiative will sponsor a Hoosier Riverwatch training session near Hamilton Lake. The day-long training session trains lay citizens in the use of chemical and biological monitoring equipment for the testing and assessment of wadable streams.

Hoosier Riverwatch maintains a database of stream quality information which is gathered by volunteer monitors. The database is made available through the Indiana Department of Natural Resources (IDNR).

The goal of the St. Joseph River Watershed Initiative is to create a corps of volunteer monitors who will sample the tributaries of the St. Joseph two to four times per year and submit their data to the Hoosier Riverwatch database. Water quality monitoring equipment is available from both the Allen and DeKalb county Soil & Water conservation district offices for use by trained Hoosier Riverwatch volunteers.

For more information about becoming a volunteer water quality monitor, call the Initiative office at 484-5848, or look for more information on our website, www.sjrwi.org ■



Headwaters

continued from page 3

Volunteer Efforts

Volunteer Janet Kauffman, of the Environmentally Concerned Citizens of South Central

Michigan (ECCSCM), says their main focus is dealing with the influx of large confined animal operations, primarily dairy. The dairy farms apply liquid manure onto fields, which then can drain into the waterways. If the farmland is tiled, the liquid manure may drain through the subsurface tiles. The group has concerns with sediment and pathogens. They want to reduce the pollution coming from the liquid manure.

"The St. Joseph River Watershed Initiative has mainly helped the ECCSCM through example," says Kauffman. We look to the Initiative as a model of what should take place in a watershed and that, in fact, it can be done. ■

Cedar Creek plan update *There's Still Time to Comment on the Cedar Creek Watershed Management Plan!*

Details of editing and proof reading continue on the Cedar Creek Watershed Management Plan (WMP). Draft D was submitted to the Indiana Department of Environmental Management (IDEM) in January, and comments and corrections from that agency and stakeholders are being received and incorporated into the document. The working copy is now known as "Draft E." Stakeholders are invited to continue sending in comments through the end of May, 2005. Draft D is available on the Initiative's website, www.sjrwi.org.



In addition to receiving comments on the draft as currently written, the Initiative's water resource specialist Aaron Wartenberg and IDEM's Nathan Rice continue to work on a SWAT (Soil & Water Assessment Tool) model with which we hope to characterize the loading of E. coli in the Cedar Creek, and the potential for reduction of that pollutant when various sources are removed from the landscape. SWAT modeling takes extensive amounts of time and data, including calculation of stream flow in all tributaries and ditches, amounts of the pollutants currently in the stream, and compilation of an exhaustive list of possible sources of the pollutant across the watershed with the probable contribution of each of those sources. Proper calibration of the model is critical to successful predictions of loading and possible reductions of the pollutant in question.

Once the plan is evaluated and approved by IDEM for meeting the 2003 updated watershed management plan requirements, the Cedar Creek Plan task group will be eligible to apply for Clean Water Act Section 319 grant funding for implementation of the plan. That grant application has already been written and submitted, and approval of that funding will of course be subject to final approval of the watershed management plan. Stay tuned for further information on these projects as the spring and summer of 2005 unfold. ■

Initiative Records Successful Spring Conservation Tillage Activities

Warm and dry weather in early April resulted in a busy month for Initiative staff and the conservation tillage equipment rental program. Jeremy Palmer, agronomist for the Allen County SWCD and coordinator of both the Initiative's *St. Joseph River Sediment, Pesticide and Nutrient Reduction* project and its twin, the *St. Marys River-Maumee River Pesticide, Nutrient and Sediment Reduction* project, reported that the area had an earlier-than-normal window of opportunity for no-till planting and conservation tillage work that lasted for about three weeks in April.

As the month progressed and weather remained dry, producers took even more advantage of utilizing conservation tillage to help preserve soil moisture. The Initiative's tillage equipment remained very busy up until the time the rains started around April 20. Although much of the corn has already been planted, Palmer said he expects that we could see another spurt of activity now that there is some moisture in the ground from recent rains.

The Initiative has available for rent a Phoenix rotary harrow, a Kale Blu-jet ripper, a DMI Nutri-Plac'r strip till unit, and a Salford 27' Model 570 RTS unit. Similar equipment is leased by the Allen County SWCD for the St. Marys River/Maumee River Watershed grant program. The Initiative also has a Brillion Model SS-10 Sure Stand Grass Seeder available for rent.



A cost-sharing program that is connected with each of these grants will help to defray the cost for producers to purchase conservation tillage equipment such as no till planter attachments, light bars, guidance systems and yield monitors. To be eligible, the farmer must agree to no-till or modified no-till on at least 100 acres that had previously been under a conventional tillage system. The program includes services of a certified crop consultant and can reward a producer with up to \$3,000 in cost-share dollars. Further information on tillage equipment and the cost-share program should be directed to Jeremy Palmer, 484-5848 x3, or jpalmer@iaswcd.org. ■

The Mission of the St. Joseph River Watershed Initiative Partnership is to promote economically and environmentally compatible land uses that improve water quality in the St. Joseph River watershed.

St. Joseph River Watershed Initiative

SJRWI is a non-profit organization formed in 1995 by local agencies, organizations, and citizens. Our mission is to promote economically and environmentally compatible land uses that improve water quality throughout the St. Joseph River Watershed. Please help support our work by making a tax-deductible donation.

Name _____ Phone and/or e-mail _____
Address, City, State, Zip _____

___ **YES!** I want to help SJRWI’s work to improve water quality throughout the St. Joseph River Watershed.

Enclosed is my gift of:

___ \$500 ___ \$200 ___ \$100 ___ \$50 ___ \$20 ___ Other \$ _____

Your contribution is completely tax-deductible and will be gratefully acknowledged.
Please make checks payable to SJRWI and send to: 3718 New Vision Drive, Fort Wayne, IN 46845

___ Please add me to your newsletter mailing list.

___ I am interested in becoming a volunteer for the Initiative. Please contact me!



Thank you to the following organizations for their donations to The St. Joseph River Watershed Initiative.

- Archbold Equipment Co.*
- Patricia Oppor, CPA, Targeted Services, P.C.*
- Michigan State University Extension*

NACD North Central Region Meeting

The National Association of Conservation Districts (NACD) North Central Region Meeting will be held in Fort Wayne July 10-13. Tuesday, July 12 will feature a bus tour of the SJRWI, including the Source Water Protection Initiative (SWPI) project, the Conservation Security Program and the Lake & River Enhancement Program. For more information about this event, please contact the Allen County SWCD office at 484-5848 x3.

SJRWI Lending Library

Videos available from our lending library.

Fate of a River: Revisited explores the many water quality improvements in the Maumee River over the last 37 years and demonstrates the need for continued actions by some of the 1.7 million citizens living in the three-state watershed. The film also addresses the new challenges faced by the Maumee, the largest tributary in the Great Lakes.



After the Storm - A Citizen’s Guide to Understanding Storm water All across America people live, work and play in watersheds, often without realizing it. Protecting the nation’s water resources will take the awareness and effort of individual citizens. Three case studies focus on the interconnections between water supply, water quality and the economic vitality and quality of life in our communities.

St. Joseph River Watershed Initiative

3718 New Vision Dr.
Fort Wayne, IN 46845

Tel: 260-484-5848 x3
Fax: 260-484-5080
Website: www.sjrwi.org

PRSR STD
US Postage
PAID
Harlan, IN 46743
Permit No. 0030