

# ST. JOSEPH RIVER BASIN COMMISSION 2020 Annual Report

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### **Our Mission**

To conserve, enhance, and promote the health of the St. Joseph River Basin by connecting people, ideas and resources in an effort to increase understanding and collaboration.

### Our Vision

To have healthy lakes & streams in the St. Joseph River Basin.

### **Our Core Values**

Communication - Establishing connection and cooperation among local governments and key stakeholders. Transparency - Promoting honest and trustworthy information concerning the health of our watershed and the policies that impact it. Understanding - Providing context for watershed data and observations to inform management decisions.

### Contact Us

Website: www.sjrbc.com Phone: 574-287-1829 ext 800

# **ABOUT US**

The St. Joseph River Basin Commission was established by the Indiana General Assembly in 1988 to improve water quality, encourage conservation and increase coordinated management of water resources in the St. Joseph River Basin.

The Commission provides technical assistance, sponsors studies, supports demonstration projects and coordinates information sharing opportunities for local governments throughout the basin. It also serves as a liaison between federal and state water resource agencies and local land and water managers.

The Commission is led by a governing board of mayors, county commissioners, surveyors, health officers, and representatives from soil & water conservation districts and the Indiana Department of Natural Resources. A complete list of members is included on the last page. These individuals and their proxies provide oversight and direct the activities of the Commission.

### THE YEAR IN REVIEW

Although the COVID-19 pandemic created many challenges, the Commission adapted its meeting and communication techniques to maintain contact with members and partners. Conducting a study of flooding in the North Branch of the Elkhart River, analyzing the urban tree canopy in six communities and assisting drainage officials with benefit apportionment were the primary projects this year. Each of these projects is discussed in greater detail in the following pages.

#### Other accomplishments in 2020 include:

- hosting the 20th Annual Symposium virtually,
- hiring two new interns this fall,
- providing online communication training for members/partners.

# PROJECTS

# North Branch Elkhart River Planning

A flood risk management plan was developed to assess the overall functional health of the North Branch of the Elkhart River (NBER). The project was supported by a Grand Challenge grant from Indiana University as part of an effort to identify opportunities to mitigate flood hazards.

After performing field inspections and analyzing historic precipitation and streamflow data, the NBER was found to be an incredibly healthy river system. The large storage capacity of numerous lakes, and relatively little wetland loss, help maintain its resiliency. The fact that increased annual rainfall and storm intensity have not significantly increased flow volumes downstream demonstrates the stability of this watershed.

Although the mainstem of the NBER is stable, instability was found in the headwaters of the Middle Branch above Sylvan Lake. This was mainly due to channel modifications and floodplain disconnection downstream of the City of Kendallville. The negative impacts of these changes are generally not experienced beyond Sylvan Lake because the lake traps sediment and serves as a hydrologic shock absorber. This in turn reduces negative impacts further downstream in the NBER.

The study concluded that flooding in the NBER watershed is the product of geology and climate, two factors that cannot be controlled. According to the plan, it is not feasible or cost-effective to significantly reduce flood problems for homes built in the floodplain by creating additional upstream storage. Furthermore, the plan suggests clearing vegetation, or more intensive means of increasing the outflow from lakes, could create negative impacts elsewhere.

What is recommended instead is to take a series of steps to adapt to higher lake levels and flooding patterns. **View the plan** to learn more about specific adaptation strategies for maintaining the inherent resiliency of the watershed.



# PROJECTS

# **Urban Tree Canopy Assessment**

With the support of several partners, and a grant from the Great Lakes Restoration Initiative, six communities in the basin are receiving assistance to improve their urban tree canopy. An assessment of each community's tree canopy has been completed to understand existing coverage and to identify the most promising planting locations for the mitigation of stormwater. Each community will also receive 50 nursery sized trees that will be planted in strategic locations to complete the project.

The urban tree canopy is critical to a community's stormwater system. A mature tree can capture approximately 2,000 gallons of rainwater each year. Every gallon of water absorbed by a tree leads to cost savings on pipes, tanks, detention basins and other stormwater management strategies. Although there are costs associated with maintaining trees, they usually result in a net savings over time. Trees are a type of stormwater infrastructure that actually improve with age.

Angola, Middlebury, and Syracuse in Indiana, along with Buchanan, Coldwater, and Sturgis in Michigan were the beneficiaries of the project. They each received detailed reports on the current condition of their urban tree canopy along with recommendations on how to improve it. With the help of municipal leaders and volunteers, a special event will be held in each community to plant the trees and educate the public about their benefits. Overall, this project will result in improved water quality, cost savings and public engagement in stormwater mitigation efforts. To learn more about the project and see the results of the assessments visit the **project website**.



Figure 3A. Angola prioritized planting area:





The map above shows priority tree planting locations for the City of Angola, while the map on the left shows tree canopy coverage in the City of Buchanan by census block.

# PROJECTS

# Streamgage Installation

Following recommendations provided in the Flood Risk Management Plan for the North Branch of the Elkhart River, three new streamgages have been installed within the watershed. The plan identified priority locations where additional information would be of greatest benefit to the community. Gathering data in these areas will allow more effective management decisions to be made in the future.

The plan recommended utilizing United States Geological Survey (USGS) streamgages, but the cost of installing just one of these gages would exceed the current water monitoring budget of the Commission. In order to avoid losing momentum while seeking

additional funding, the Commission identified a low-cost alternative to the USGS streamgages called CrowdHydrology. Although this alternative will not provide the robust data needed for modeling, it will allow community members to get involved in understanding and protecting their resources.

CrowdHydrology relies on individuals making observations and delivering them via text messages to the phone number on the sign. Once the information is received, it is graphed and provided to the public in real time via the CrowdHydrology website. The streamgages were installed in public areas with high visibility in order to maximize participation and reduce data gaps.

Using the site recommendations from the Flood Risk Management Plan as a guideline, three public parks were selected for streamgage installation. They included Delt Church Park on the mainstem of the North Branch in LaGrange County, Wolcott Park on Little Elkhart Creek in the Town of Wolcottville, and Sunset Park on Bixler Lake Ditch in the City of Kendallville.

The installation of the streamgages would not have been possible without the assistance of Martin Franke of the LaGrange County SWCD, Mary Franke of LaGrange County Parks, Steve Cords of the Wolcottville Town Council, and Jim Pankop of Kendallville Parks. To see the data collected from these streamgages, click **here**.



(Left to right) Conner Flora, Martin Franke and Steve Cords stand next to the streamgage installed on Little Elkhart Creek at Wolcott Park.





# **PROJECTS | FAQ**

## **Better Drain Benefit Apportionment**

The Commission is working with local drainage authorities to test an alternative method for apportioning costs associated with drain maintenance. This method improves fairness by analyzing land cover and soil data in a Geographic Information System to estimate the portion of benefit each parcel receives from the drain. Information about individual land management practices can also be incorporated to create an even greater incentive for conservation.

By accounting for differences in land use and soil drainage, costs can be allocated more directly to landowners who receive the greatest benefit from drainage improvement projects. In doing so, a financial incentive is created for conservation and less intensive land use.

The Commission recently analyzed four regulated drain watersheds in LaGrange County at the request of drain officials. Two of the watersheds included significant natural areas and large wetland complexes. Landowners in these areas had concerns with the proposed drainage project and the analysis was helpful for understanding individual benefits received.

For more information, click **here**.



This map was created for LaGrange County to illustrate differences in land use and soil drainage. These factors impact the need for drain maintenance, so they are used to allocate the cost and benefit to individual landowners.

### FAQs

#### What is the St. Joseph River Basin?

The St. Joseph River Basin, or watershed, is the area of land that drains to the St. Joseph River of Lake Michigan. It includes 7 counties in northern Indiana and 8 counties in southwest Michigan.

#### Is Michigan included in the Commission?

Although funding and governance come solely from the Indiana side of the basin, the Commission is authorized to collaborate with state and local officials in Michigan to fulfill our purpose.

#### How is the agency funded?

□ The Commission currently receives about \$100K annually from the State of Indiana. Local government members contribute a total of approximately \$60K annually to fund basic operations. Grants and special project income make up the remainder of annual revenue.

#### Who do you serve?

Although the Commission provides some education and resources for the general public, our target audience is local government officials, staff and partners involved in land and water management.

#### Where is the Commission located?

The Commission is currently headquartered in the Michiana Area Council of Governments offices in South Bend, Indiana. An ongoing partnership between the two entities exists through a cooperative agreement.

### **MEETINGS**



Stakeholder meetings are regularly organized by the Commission to solicit input on watershed planning and implementation projects.

### **QUARTERLY**

The St. Joseph River Basin Commission meets quarterly at 10:00 a.m. on the first Thursday of March, June, September and December. In addition to conducting regular business, these meetings provide opportunities for members to share information about water related projects and issues. The business meeting is often followed by a short presentation on a project or initiative taking place in the basin.

### **COVID RESPONSE**

As a result of the COVID-19 pandemic, the Commission held its first virtual quarterly meeting on June 4th, 2020. Participation was limited to Commission members, but the meeting was advertised and live-streamed on YouTube for the public and stakeholders. The September meeting was offered as a hybrid meeting with both virtual and in-person options for attending. The in-person location was moved to the Schrock Pavilion in Goshen in order to accommodate social distancing guidelines. The final meeting in December was only held virtually due to the worsening state of the pandemic.

### 2021 Meeting Schedule

- March 4
- June 3
- September 2
- December 2

# **2020 Members**

#### **ELKHART COUNTY**

Commissioner Suzie Weirick Proxy Frank Lucchese

*Health Officer* Lydia Mertz, M.D. Proxy Bill Hartsuff

*Surveyor* Philip Barker Proxy Steve Schweisberger

Soil & Water Conservation District Appointee Jim Hess

*City of Elkhart Mayor* Rod Roberson Proxy Daragh Deegan

#### LAGRANGE COUNTY

Commissioner Larry Miller Proxy Martin Franke

Health Officer Tony Pechin, M.D. Proxy Jarod Nisley

Surveyor Zach Holsinger Proxy Steven Vaughn

Soil & Water Conservation District Appointee Dona Hunter

*Town of LaGrange Council President* Ray Hoover Proxy Diane Cameron

#### **ST. JOSEPH COUNTY**

Commissioner David Thomas Proxy Roger Nawrot

Health Officer Robert Einterz, M.D. Proxy Mark Espich

Surveyor John McNamara Proxy John Law

Soil & Water Conservation District Appointee Sarah Longenecker

*City of Mishawaka Mayor* David Wood Proxy Adam Bowden

*City of South Bend Mayor* James Mueller Proxy Kieran Fahey

#### **KOSCIUSKO COUNTY**

Commissioner Cary Groninger Proxy Jon Roberts

Health Officer Bill Remington, M.D. Proxy Robert Weaver

Surveyor Michael Kissinger Proxy Jim Moyer

Soil & Water Conservation District Appointee Jewel Wise

*Town of Syracuse Council President* Paul Stoelting Proxy Mike Noe

#### **NOBLE COUNTY**

*Commissioner* Anita Hess Proxy Dan Lash

*Health Officer* Terry Gaff, M.D. Proxy Jason Pippenger

*Surveyor* Randy Sexton Proxy n/a

Soil & Water Conservation District Appointee Stacey McGinnis

*City of Kendallville Mayor* SuzAnne Handshoe Proxy Sue McGee

#### **STEUBEN COUNTY**

*Commissioner* James Crowl Proxy Tara Lee

Health Officer Ted Crisman, M.D. Proxy Alicia Walsh

*Surveyor* Mike Ruff Proxy n/a

Soil & Water Conservation District Appointee Janel Meyer

*City of Angola Mayor* Dick Hickman Proxy Kris Thomas

INDIANA DEPARTMENT OF NATURAL RESOURCES

Director Daniel Bortner Proxy Rod Edgell

## Staff

Matt Meersman, Director Conner Flora, Intern Madison Ward, Intern