RIVER NEWS

JOURNAL OF THE KANKAKEE RIVER BASIN AND YELLOW RIVER BASIN DEVELOPMENT COMMISSION

EXECUTIVE DIRECTOR'S LETTER ON STATE LINE BRIDGE

State Line Bridge has not been open to vehicular traffic since the 20th Century, and serves no purpose for commerce, transportation, or emergency response vehicles.

It does, however, act as a magnet for heavy debris and logjams during frequent flood events. Given its overall condition and close proximity to the ordinary high-water mark, large wood trapped by the bridge substantially aggravates flood conditions through the entire Kankakee River Basin.

The Commission's forty-year work plan adopted under Indiana law specifically calls for the removal of State Line Bridge. Not only is the structure palpably unsafe for even foot traffic, it presents a direct impediment to effective flood mitigation and a barrier to navigation.

In May, the Commission formally directed that State Line Bridge to be removed or relocated. While there may be further hurdles to overcome, the Commission's directive must be factored in to any resolution. Our position is shared by a wide group of stakeholders, including our partners at the county level. The bridge simply cannot safely remain where it is.

I remain available to answer questions on our website or at <u>sdpelath@gmail.com</u>. Questions, ideas, and thoughtful input are always welcome.

Sincerely,

Scott Delath

Scott D. Pelath Executive Director Kankakee River Basin and Yellow River Basin Development Commission



Section of Yellow River reconstruction in progress, June 30, 2022.

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Yellow River Improvements Underway in Starke County

The Kankakee River Basin and Yellow River Basin Development Commission commenced reconstruction of over a mile of failing Yellow River banks in Starke County. The \$1.6 million project, which lies immediately downstream of the Marshall-Starke County Line, is expected to continue through November.

"Last year in Marshall County, we saw an impressive start to this long-term project," said Commission Treasurer and Starke County Surveyor Bill Crase. "The scope of this year's work in Starke County is twice as large, and just as challenging. Fortunately, we've already seen how this multi-county effort directly benefits not only Starke County, but our entire region of Indiana."

The mitigation of severe Yellow River erosion upstream of Knox is a top priority for the Commission. Since the straightening of the Kankakee River over a century ago, the Yellow River continues to release major sediment deposits into both rivers. These mounting accumulations in turn reduce the rivers' water capacity during both major and minor flood events.

"The Commission is attacking channelclogging sand at the watershed's singlelargest source of erosion," said Commission Executive Director Scott Pelath. "If weather conditions permit, more than a mile-and-a-half will be reconstructed in just over fourteen months." In September 2021, the current project began a half-mile upstream of the Marshall County line, and was completed within three months. The 2022 effort resumes where previous work ended, and continues downstream though Starke County. Project tasks include 1) reducing bank grades, 2) using stone and repurposed wood to direct water velocities away from the banks; 3) increasing channel capacity; and 4) reseeding banks with native erosion-control vegetation.

"This method has been tested in both Starke and Marshall Counties, and it is effective," said Crase. "As more work is completed, we can expect to see an overall reduction in the amount of sand that inhibits the natural flow of our water through Northwest Indiana."

The purposeful reduction of Yellow River sediment is a key facet of the Commission's forty-year work plan, which was adopted under state law in 2019. Another stretch of Yellow River reconstruction is currently in the design phase, with work slated to take place in 2023. Earlier this year in Bremen, the Commission completed a separate bank reconstruction in partnership with the Marshall County Soil and Water Conservation District.

"No single effort is by itself a solution to every issue along the Kankakee and Yellow Rivers," said Pelath. "But this Yellow River work undeniably is a lynchpin."

BANK RECONSTRUCTED FOR EROSION CONTROL, RECREATION AT BREMEN TOWN PARK

Earlier this year, the Commission completed a key Yellow River project in direct partnership with the Marshall County Soil and Water Conservation District SWCD).

For some time, town officials and residents had noted severe bank degradation immediately downstream of IN-106 at Shumaker Westside Park. The issue spurred the SWCD to pursue a Lake and River Enhancement Grant not only to stabilize the Yellow River's east bank, but to enhance natural recreation through the construction of a public kayak launch.

To expand the initiative, the Commission then pledged funding to stabilize the west bank immediately across from the park. Because of the partnership, the project was doubled in scope and positive impact.

Erosion mitigation upstream of Plymouth is a facet of the Commission's forty-year work plan, and strong partnerships with local stakeholders increase both the speed of implementation and the long-term value to area residents.



New public kayak launch at Bremen's Shumaker Westside Park, April 2022.



Stabilized bank immediately downstream of IN-106 Bridge in Bremen, April 2022.

TEAM MEMBER PROFILE

Ross St. Clair Water Resources Engineer

Cardno, now Stantec



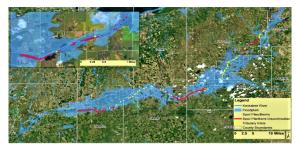
Cardno, now Stantec, in Walkerton, Indiana, has designed the first phase of the Yellow Bank reconstruction in Marshall and Starke Counties. Later this year, the St. Joseph County firm will have completed a design for the second phase, with construction expected to commence in 2023.

Leading the design effort is Ross St. Clair. A native of Whitley County and current resident of Porter County, Ross is a graduate of Purdue University, where he earned a Bachelor of Science degree in Agricultural Engineering.

As a Professional Engineer, Ross formerly gained experience at both Huff and Huff, Inc., in Illinois and AECOM in South Carolina before returning home to Indiana, where he joined the local Cardno team in 2019.

Ross' wide expertise includes Stream Restoration, Stormwater Design, Hydrologic Modeling, Wetland Restoration, Soil and Groundwater Investigation, and Subsurface Remediation.

However, Ross also brings a number of intangibles to the Commission's sediment reduction projects. Not only does he seek cooperation from various stakeholders and public agencies, but he monitors construction, ensures execution of the design, and builds relations with property owners at the project site. His service to the Commission has been valuable as it seeks to mitigate decades of sediment erosion along the Yellow River.



FREQUENTLY ASKED QUESTIONS

Who started the Kankakee River Basin and Yellow River Basin Development Commission?

The Indiana General Assembly passed legislation to form the Commission in 2019. Once Gov. Eric Holcomb signed the measure into law, the Commission came into being on July 1, 2019.

What are the powers and duties of the Commission?

Indiana Code 14-13-9-18 gives the Commission the ability to conduct 1) bank stabilization; 2) tree removal; 3) the construction and operation of sand traps; 4) channel reconstruction; 5) sediment removal; 6) acquisition, construction, and maintenance of access roads to levees and the channel of each river; and 7) other flood control actions considered necessary. The Commission may acquire interests in land, including easements, for the commission's use in providing flood storage and constructing levees or other flood control improvements. Any acquisitions are completely voluntary on the seller's part. The law also grants the Commission an exclusive, 75-foot easement from the top of each bank of the Kankakee and Yellow Rivers to conduct flood control and sediment management activities.

Does the Commission have a long-term plan to address flooding and erosion?

Yes. In September 2019, the Commission adopted a 40-year plan to address over a century of mounting flood and erosion problems. The state of Indiana funded the plan's development, and our neighbors in Illinois contributed to a share of the total cost. The full document is available for review at *kankakeeandyellowrivers.org*.

How are we paying for flood control and sediment management projects?

In 2019, the state of Indiana contributed \$2.3 million to begin work. After May 2021, capital projects will be funded by a limited annual assessment of properties within the Kankakee and Yellow River Basins. Under Indiana Code 14-13-9-21, these assessments are listed as \$7 per residential parcel; \$1 per farm acre; \$2 per undeveloped commercial acre; \$50 per commercial parcel; and \$360 per industrial or utility parcel. Funds are used for capital improvements, and Indiana workers and businesses are granted preferences for the work.

At any time, counties may choose to enact funding of their own as a substitute for these assessments. Otherwise, the amounts in state law took effect in January 2021.

HYRDOSEEDING PROVIDES BANK STABILITY

Beginning in 2021, the Commission developed and implemented a system of seeding vulnerable and eroding river banks from the channel itself. This method bypasses existing access challenges, and economizes the use of material through an optimal angle of seed distribution.

The reintroduction of native, stabilizing grasses such as Virginia wildrye, riverbank wildrye, switch grass and other species mitigate erosion and the release of channel-clogging sediment through their deep root structures. These grasses also serve to supplant invasive species and prevent future costly repairs.



Starke County, May 2022.

MISSION

The Kankakee River Basin and Yellow River Basin Development Commission advances Northwest Indiana's safety, economic prosperity, and quality of its natural resources.

VISION

The Kankakee River Basin and Yellow River Basin Development Commission is building a region where its residents, farms, and communities prosper in concert with one of the nation's most unique natural environments.





DID YOU KNOW?

The Indiana state record walleye was caught on the Kankakee River. Weighing-in at 14 1/3 lbs., Leon Richart angled the winner in Lake County in 1974. The record later was tied – but not surpassed – by Donald Tedford along the Tippecanoe River in 1977.

The Kankakee River remains home to scores of prized fish species, including bass, northern pike, crappie, blue gill, and catfish.

KANKAKEE RIVER BASIN: AN OVERVIEW

- The Kankakee River Basin in Indiana consists of areas that drain to the Kankakee River and its major tributary, the Yellow River.
- Prior to the 20th Century, the Grand Kankakee Marsh was once the second-largest freshwater marsh in the United States.
- A measurable increase in major precipitation events, relentless sediment erosion, and an inefficient use of flood control assets have made the Kankakee and Yellow River channels increasingly difficult to manage.
- Precipitation volatility is predicted to continue, suggesting that a new management strategy for economic vitality, sustainable agriculture, and our natural resources is necessary.
- Investments in the Kankakee River Basin are intended to reduce the future costs resulting from flood frequency and magnitude.

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Kankakee River Basin and Yellow River Basin Development Commission 6100 Southport Road Portage, Indiana 46368 https://kankakeeandyellowrivers.org