

THE KANKAKEE RIVER BASIN, PAST AND PRESENT

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Executive Director

Kankakee River Basin and Yellow River Basin Development Commission

INDIANA LAW

- ◆ Commission's powers include:
 - ◆ Bank stabilization
 - ◆ Channel reconstruction
 - ◆ Acquisition of land for flood storage
 - ◆ Construction of levies
 - ◆ Sediment removal and sand traps
 - ◆ Tree removal and construction of access roads

A QUICK REVIEW OF WHAT “THE COMMISSION” DOES

INDIANA LAW (cont.)

- ◆ Regulating agencies (DNR, IDEM) are directed to coordinate and streamline permitting
- ◆ Preferences for Indiana workers and contractors on Commission projects
- ◆ Commission maintains the 75-foot easement on the Kankakee and Yellow River channels only; counties retain full rights for emergencies
- ◆ **NO** eminent domain powers
- ◆ Jasper, Lake, LaPorte, Marshall, Newton, Porter, St. Joseph, and Starke Counties are represented on Commission. A ninth voting member represents Indiana-DNR.

KANKAKEE RIVER BASIN



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.

"Everglades of the North"

The Kankakee River Basin once was home to the second-largest freshwater marsh in the United States.

ENGINEERING PLAN RECOMMENDATIONS

Active Management Recommendation	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	
Yellow River Upstream Improvements																																
Kankakee Bank Stabilization Improvements																																
Zone-Specific Access and Logjam Management																																
Large Wood Removal along Yellow River at Kankakee Fish and Wildlife Area																																
Selective and Temporary Berm Maintenance																																
Strategic Berm Removal & Setback Berm Construction																																
Yellow River Downstream Improvements																																
Bridge Removal / Replacement																																
Storage Areas to Offset Increased Runoff																																
Update Stormwater Ord. and Tech. Standards																																
Education, Outreach, and Implementation Program Management																																
Develop Flood Response and Resilience Plans																																
Remove Infrastructure from Berm-Reliant Areas																																

GRAND KANKAKEE MARSH



KANKAKEE RIVER BASIN PROFILE

- ◆ Kankakee River extends 133 miles from St. Joseph County to Illinois River
- ◆ Yellow River originating in St. Joseph County is the major Indiana tributary
- ◆ In Indiana alone, the basin covers about 1.3 million acres, of which 1.1 million acres produce crops.

Grand Kankakee Marsh

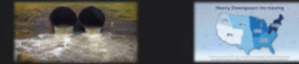


Drainage Completed during World War I



Outcomes and Consequences Remain with Us

- ◆ Drained areas continue to flood and hold water
- ◆ Relentless sediment and erosion clogs channels
- ◆ Basin tends to revert to original state
- ◆ Human activity coupled with increased precipitation quickly adds water to system



CHANNEL DREDGED AND MEANDERS CUT

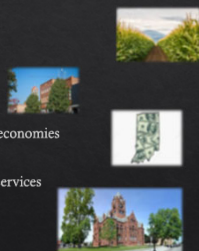


FLOOD OF FEBRUARY 2018

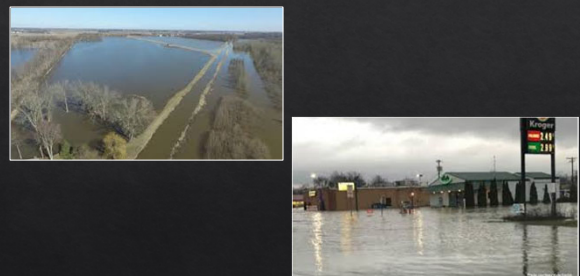
- ◆ All-time record water levels at two points along Kankakee River
- ◆ Water persisted in some areas for six weeks
- ◆ Costly damage to private property and public infrastructure
- ◆ Expensive allocations of resources for flood response and clear-up

Outcomes and Consequences Remain with Us

- ◆ Some of world's most productive farmland
- ◆ Communities grew and prospered on drier land
- ◆ Land generates wealth for local, regional, and state economies
- ◆ Taxes generated support schools, roads, and public services



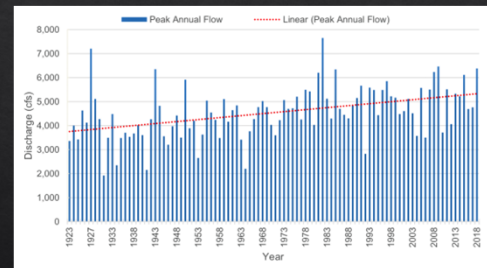
FLOOD IMAGES (2018)



FLOOD IMAGES (2018)



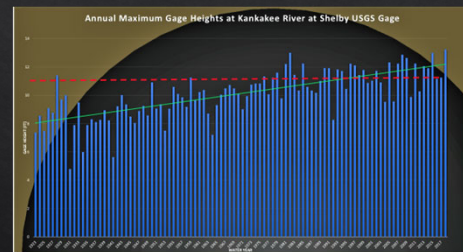
MORE WATER IN THE SYSTEM

SHELBY
GAGE

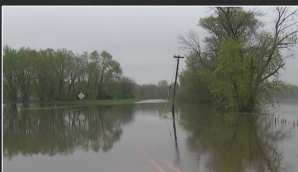
FLOOD IMAGES (2018)



THE RIVER IS RISING

RED IS MODERATE FLOOD
STAGE

FLOOD IMAGES (2018)



THE DILEMMAS

- ◆ More water in the system
- ◆ More water leads to more erosion
- ◆ Erosion makes it harder to contain the water

A TRIP DOWN THE KANKAKEE AND YELLOW RIVERS

Returning Marsh Behaviors



Kankakee Headwaters



Original Meanders Visible



Modest Beginnings



Heavier Sediment in Main Channel



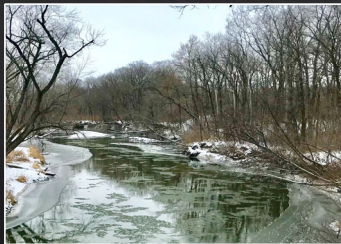
Yellow River



Drainage Adds Sediment



Severe Yellow River Erosion



Human Barriers



Sand Dunes Form Yellow River Banks



LOGJAMS RESTRICT FLOW



Bank Failures



WORK COMPLETED AND PATHS FORWARD

“The Indiana Trash Collector”



YELLOW RIVER BANK STABILIZATION

40% of sediment in Kankakee originates in the Yellow River

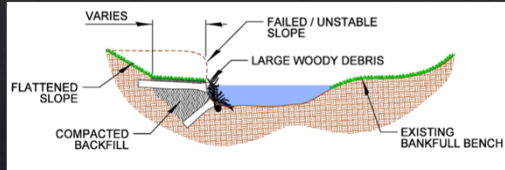
ILLINOIS



MARSHALL-STARKE COUNTY LINE, DECEMBER 2020



TECHNIQUES DEMONSTRATED



45' Sand Bank, June 1, 2022



PROJECT DRONE FOOTAGE, NOVEMBER 16, 2021



Facing West, December 2020



45' Sand Bank, December 2020



Facing West, September 17, 2021



Facing East, October 8, 2021



BERM REPAIR AND BANK STABILIZATION

Facing East, June 1, 2022
Following 4' increaseEXAMPE: LAKE COUNTY BANK CONDITONS
March, 2021

2022 WORK STARTED ON MAY 23



March, 2021



August, 2021



Typical Seeding Target



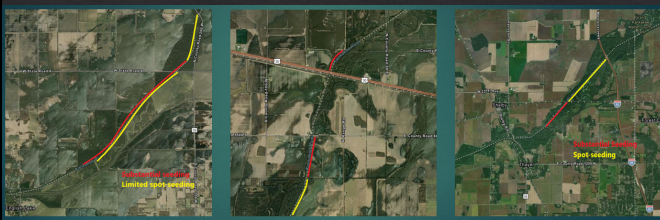
Channel View, October 2021



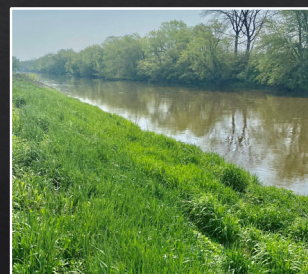
Hydroseeding Process



Hydroseeding Areas



RESULTS OF FALL SEEDING



LOGJAM MANAGEMENT

FLOOD CONDITION RESPONSES

Porter County Highway Coordination



UPSTREAM LOGJAM MANAGEMENT



BRIDGE CLEARING



DOWNSTREAM LOGJAM MANAGEMENT



BRIDGE CLEARING



FLOODWATER STORAGE DEVELOPMENT

AUKIKI WETLAND CONSERVATION AREA



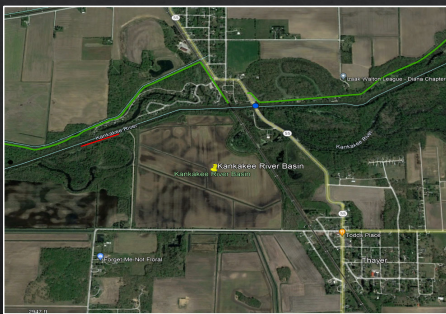
THAYER FARM – SLATED FOR 2022



WHEATFIELD POWER PLANT (Jasper Co.)



THAYER FARM



QUESTIONS?

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