

PROCEEDINGS OF THE BROWN COUNTY
LAND CONSERVATION SUBCOMMITTEE

Pursuant to Section 18.94 Wis. Stats., a regular meeting of the **Brown County Land Conservation Subcommittee** was held on Tuesday, January 24, 2023, in Room 200, Northern Building, 305 E. Walnut Street, Green Bay, WI.

Present: Supervisor Norb Dantine, Citizen Member Stan Kaczmarek, Supervisor Tom Friberg,
Supervisor Morgan Fuller, Supervisor Ray Suennen, Supervisor Dave Landwehr
Also Present: County Conservationist Mike Mushinski, Resource Conservationist Kevin Corbett

I. Call Meeting to Order.

The meeting was called to order by Chair Dantine at 5:30 p.m.

II. Approve/Modify Agenda.

Motion made by Citizen Member Stan Kaczmarek, seconded by Supervisor Landwehr to approve. Vote taken.
MOTION CARRIED UNANIMOUSLY

III. Approve/Modify Minutes of November 22, 2022.

Motion made by Supervisor Suennen, seconded by Supervisor Friberg to approve. Vote taken. MOTION CARRIED UNANIMOUSLY

Comments from the Public - None.

Land and Water Conservation Department

1. Budget Status Financial Report for November 2022 - Unaudited.

Motion made by Supervisor Landwehr, seconded by Supervisor Friberg to receive and place on file. Vote taken.
MOTION CARRIED UNANIMOUSLY

2. Directors Report.

County Conservationist Mike Mushinski informed one of the things they wanted to talk about was working with the Resource Recovery site and the landfill, speaking to restoration, preservation of floodplains, wetlands and repairing the corridor as far as the East River. They wanted to note this site as the county had been working on a lot of issues there. Referring to a PowerPoint presentation (attached), he informed the blue on the maps was the location of some of the locations they worked at. They took inventory of the site and developed plans, which were shared a few years ago. The plans for the Resource Recovery site had additional buffers, pollinator plantings, woodland habitat work, wetlands, flood storage, nutrient sediment reductions and habitat work were all planned into that project. He spoke to the funding and informed for Phase I, about \$297,000 of grant funds accomplished 70 acres of habitat work. Looking at Phase II, there's other sites on that property that they want to address. Once they get done, he believes they'll have an incredible habitat, water quality and a site to look at. Resource Conservationist Kevin Corbett further spoke to the PowerPoint under Item 2b.

a. Kayla Wandsnider, East River Community Resilience Coordinator, The Nature Conservancy: East River Collaborative Updates.

East River Community Resilience Coordinator Kayla Wandsnider was present to speak to a PowerPoint (attached) re: East River Collaborative *A community driven approach to resilience planning* Project updates and next steps.

b. Brown County Port & Resource Recovery, Brown County South Landfill, Habitat restoration update.

Motion made by Supervisor Friberg, seconded by Stan Kaczmarek to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY

Other

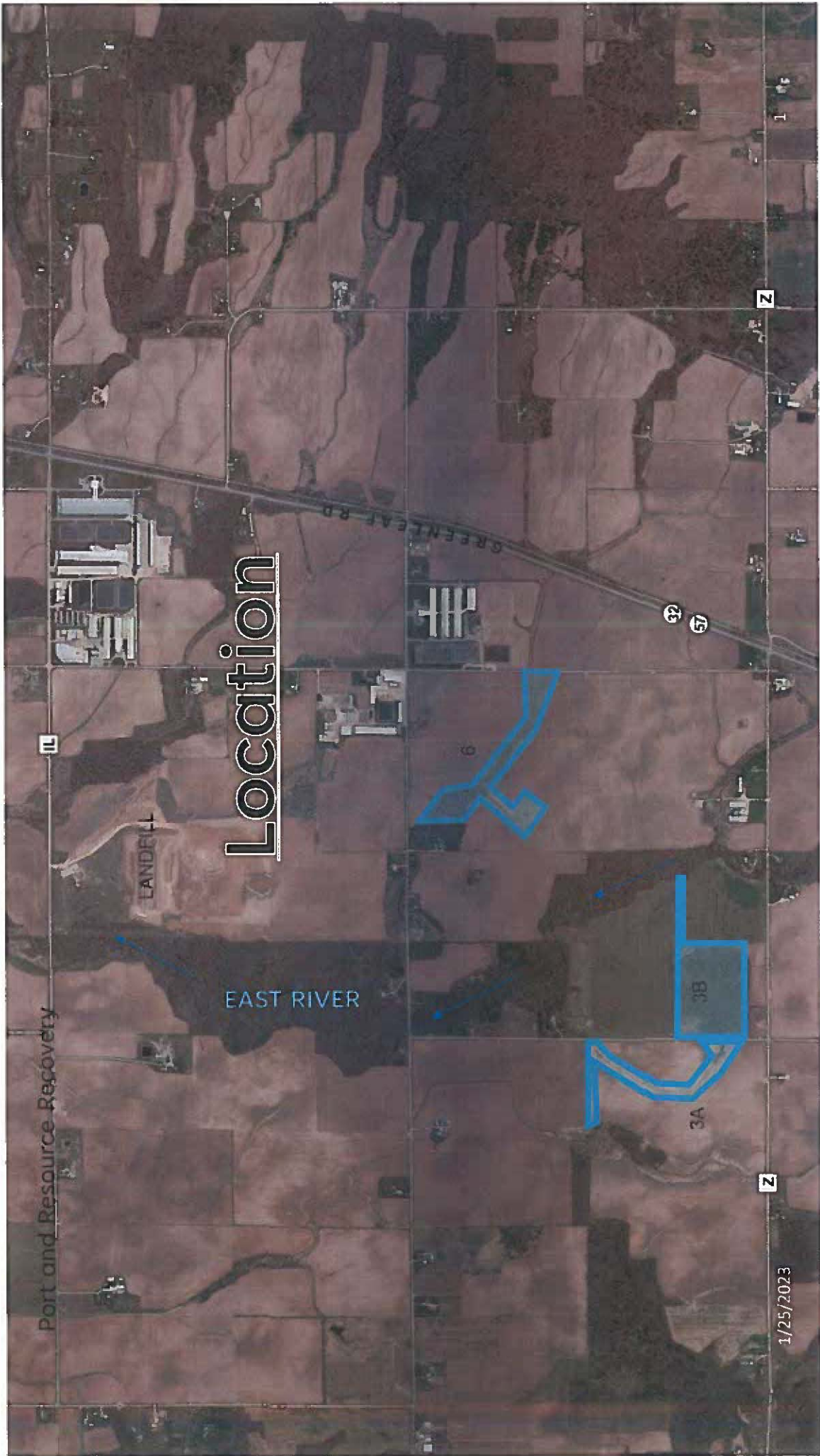
3. Such Other Matters as Authorized by Law.

4. Adjourn.

Motion made by Stan Kaczmarek, seconded by Supervisor Fuller to adjourn at 5:56 p.m. Vote taken. MOTION CARRIED UNANIMOUSLY

Respectfully submitted,

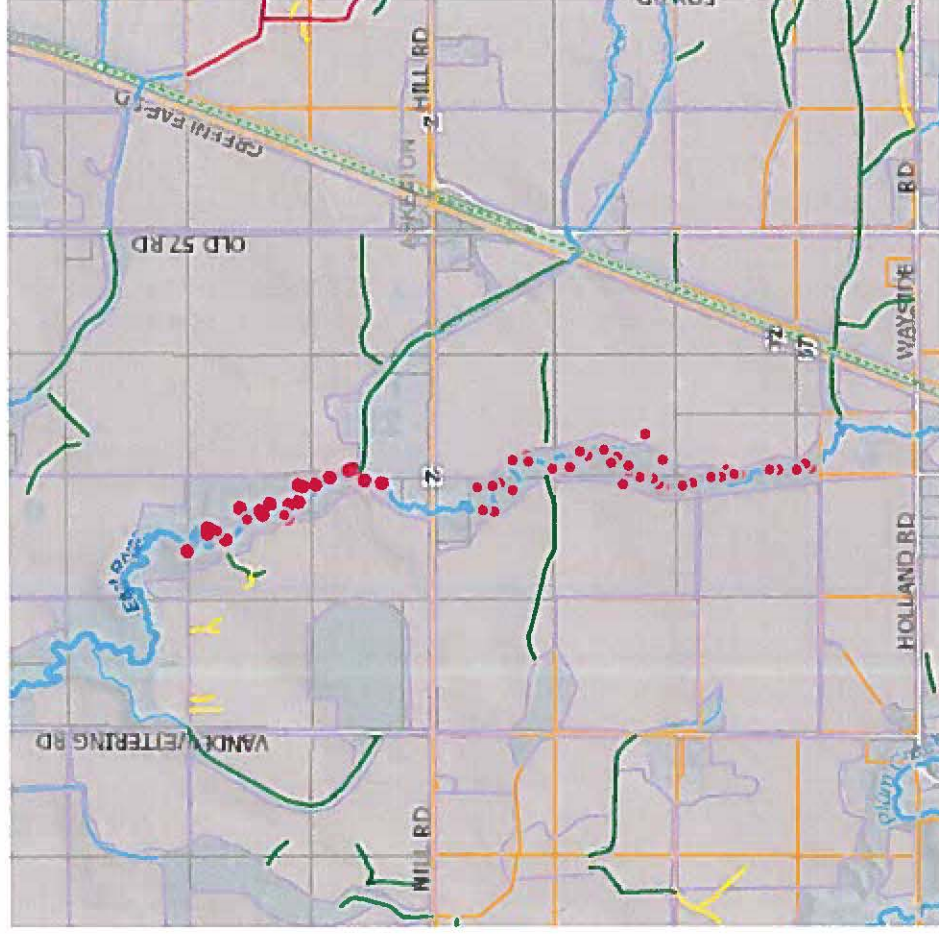
Alicia A. Loehlein
Legislative Specialist



Location

Inventory of Resource Concerns

Groundwork completed to
continue with new projects
in the area.

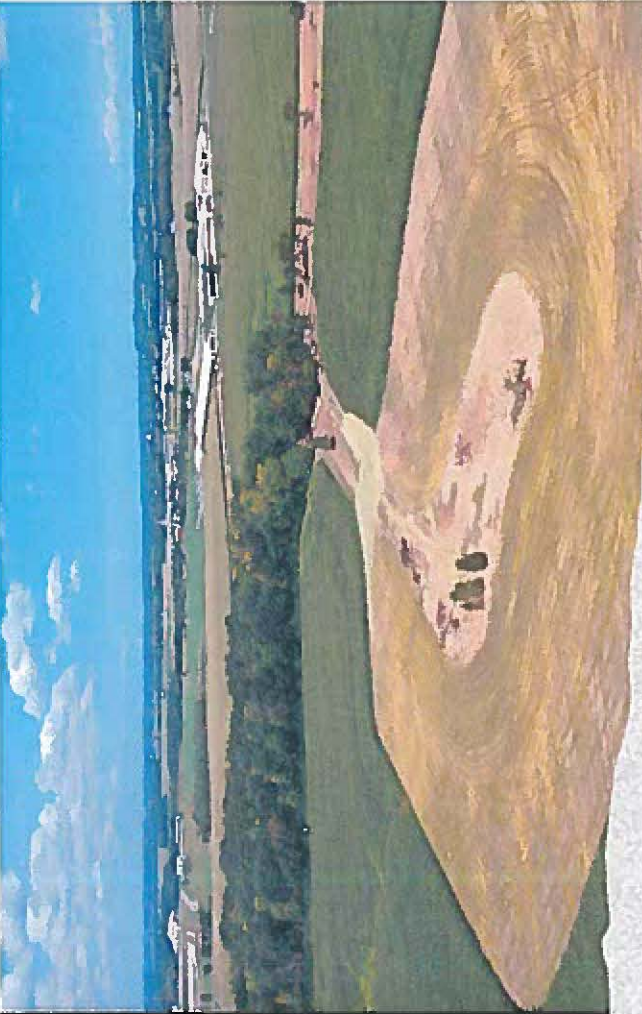


1. The Nature Conservancy
2. Fox River Natural Resources
Damage Assessment
3. Fund for Lake Michigan

\$297,000

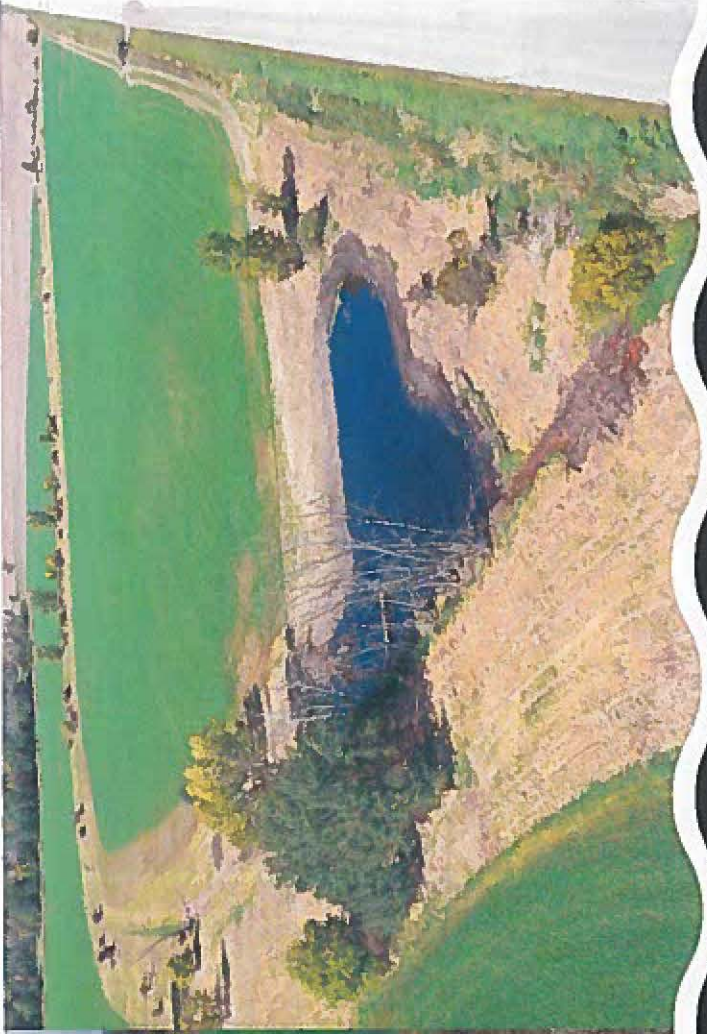


PRESENTATION TITLE



Before & After

Wetland creation



Before & After

Widened Buffer Planted to Pollinators with Tree & Shrub Pockets with Wetland Enhancement.



Removal of Invasives &
Promotion of Habitat

Woodlot improvement

Wrightstown Road
08/09/21



East River Collaborative

A community driven approach to resilience planning

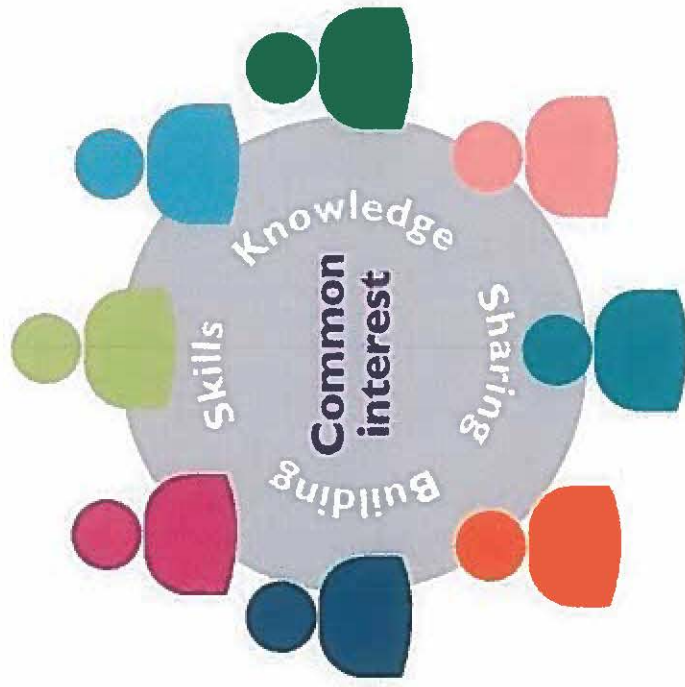
➤ Project updates and next steps

Kayla Wandsnider
East River Community Resilience
Coordinator
The Nature Conservancy



East River Collaborative

1. Cross-boundary collaboration
2. Building community capacity
3. Data-informed decision-making
4. Inclusion of vulnerable and underrepresented residents
5. Encourage implementation of nature-based solutions



Stakeholder Interviews

29 individuals

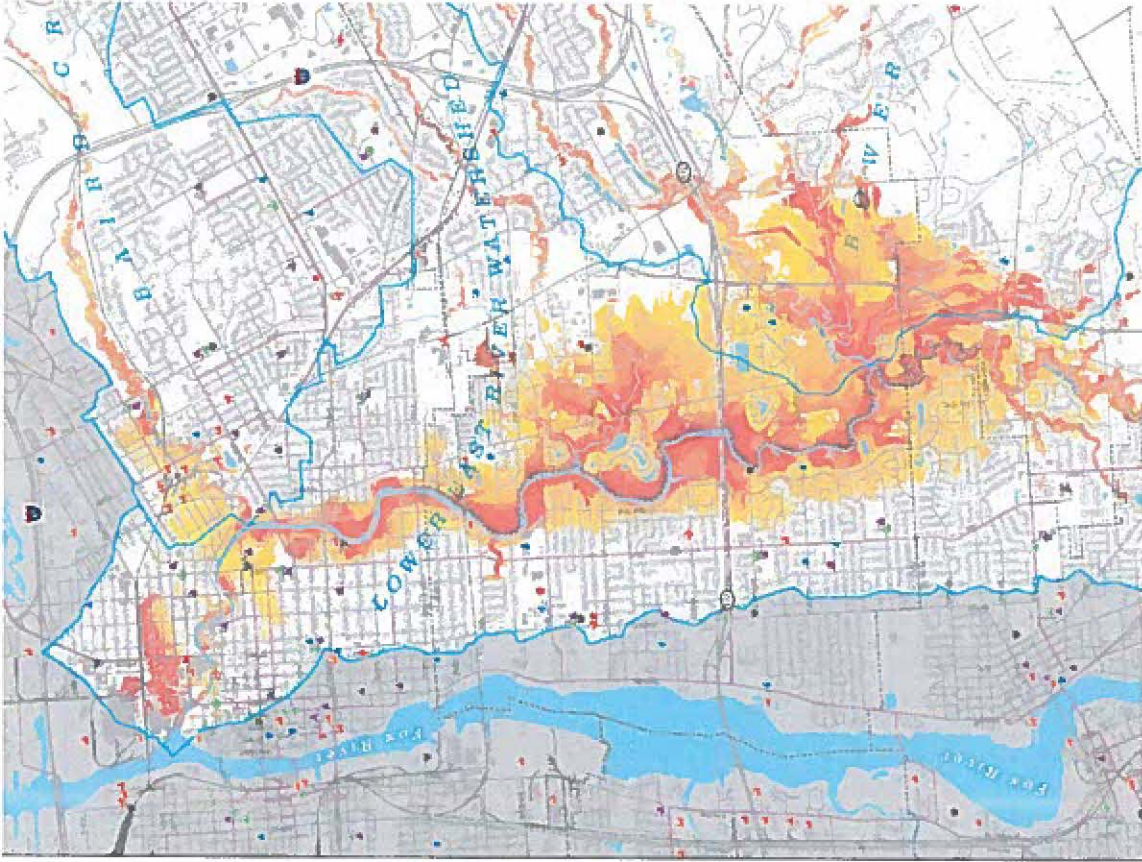
(municipal and county officials and staff,
university, state agency and NGO)

- Change in land cover/land use: wetlands, agricultural runoff, increased development
- Flood impacts are not limited to downstream communities
- Policies allow development in floodplain
- Undersized, aging infrastructure
- Cost of infrastructure
- Data needed: downstream development impacts, tributaries
- Desire for community coordination

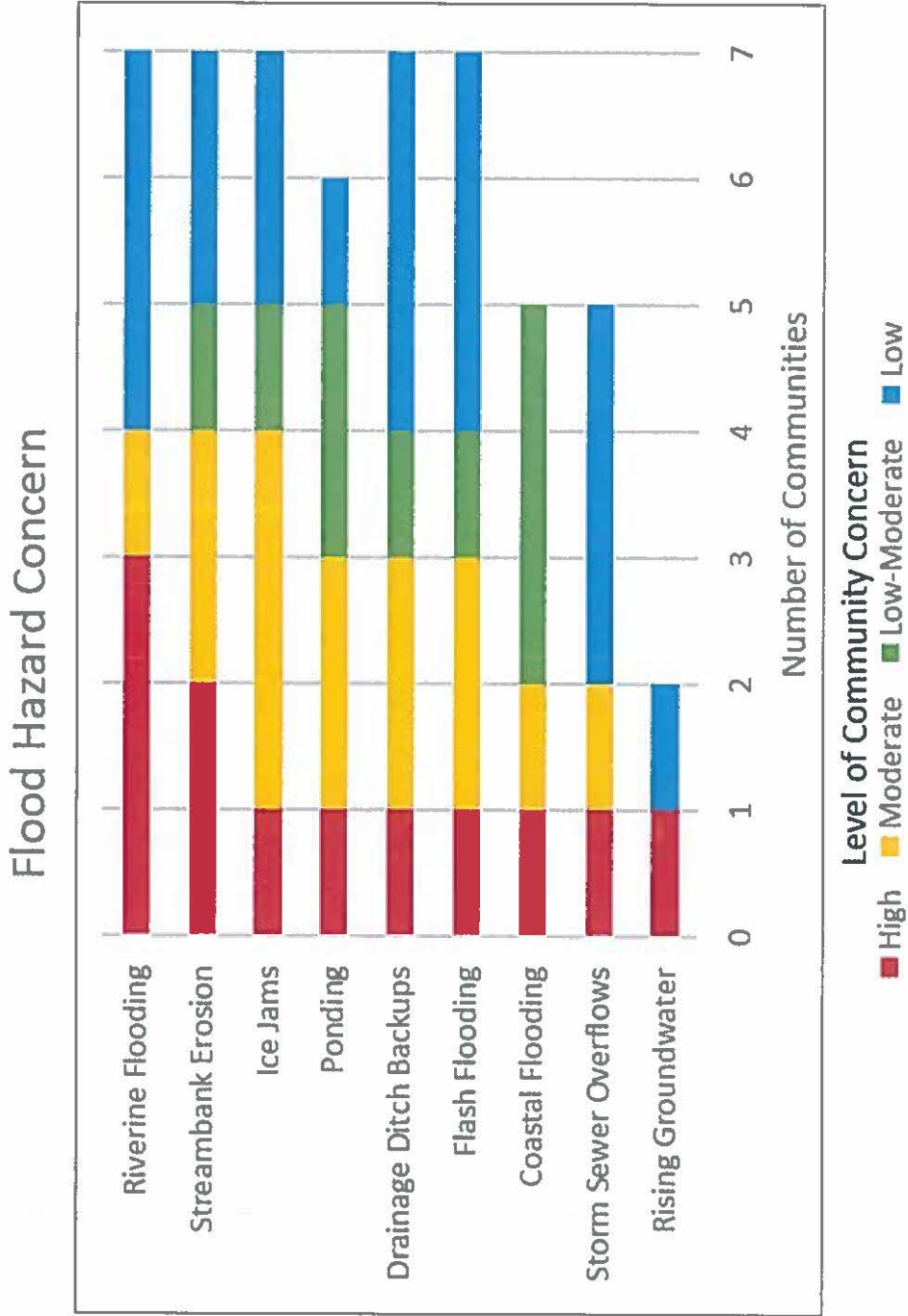


Flood Modeling & Mapping

- Baseline flood model of East River (includes lake levels)
- Flood scenarios of precipitation and lake level changes (Low, medium, and high risk)
- Online data hub



Community Flood Resilience Assessments



Brown County's Flood Hazards

Flood Hazard	Hazard Concern
Ice Jams	High/moderate
Drainage ditch backups	
Flash flooding	
Riverine/floodplain flooding	
Coastal flooding	
Surface water drainage and sheet flow	
Ponding	High/low
Streambank erosion	Moderate/low
Storm sewer backups	



Flooding CTH ZZ, May 2020
Photo credit: Brown County Public Works

Community Impacts

Moderate	Low
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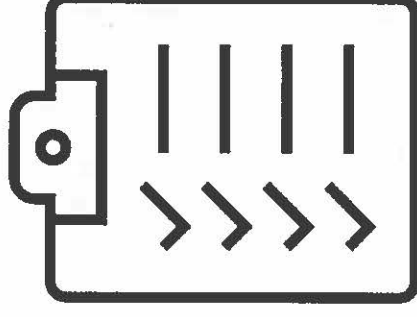
Impact on Socio-Economics	
Disruptions to individuals' livelihood and prosperity	Loss of trust in local governments officials and staff

Impact on Critical Infrastructure, Facilities, & Services			
Power utilities	Wastewater treatment systems	Critical roadways and evacuation routes	Stormwater facilities and infrastructure
			Hazardous materials sites and facilities
			Water utilities

Impact on Community Assets	
Contamination of waterways	Top soil and nutrients (loss of)
	Parks and recreational trails

Brown County Resilience Actions

1. Model county-wide stormwater ordinance.
2. Adopt county-wide erosion control ordinance for all development in unincorporated areas.
3. Identify important flood storage areas
4. Maintenance of waterway buffers to reduce erosion.
5. Use ArcHydro flow modeling and flow accumulation maps to visualize local flooding.
6. Update All-Hazard Mitigation Plan with local information.
7. Develop community- and facility-specific emergency plans.



East River Watershed Resilience Framework

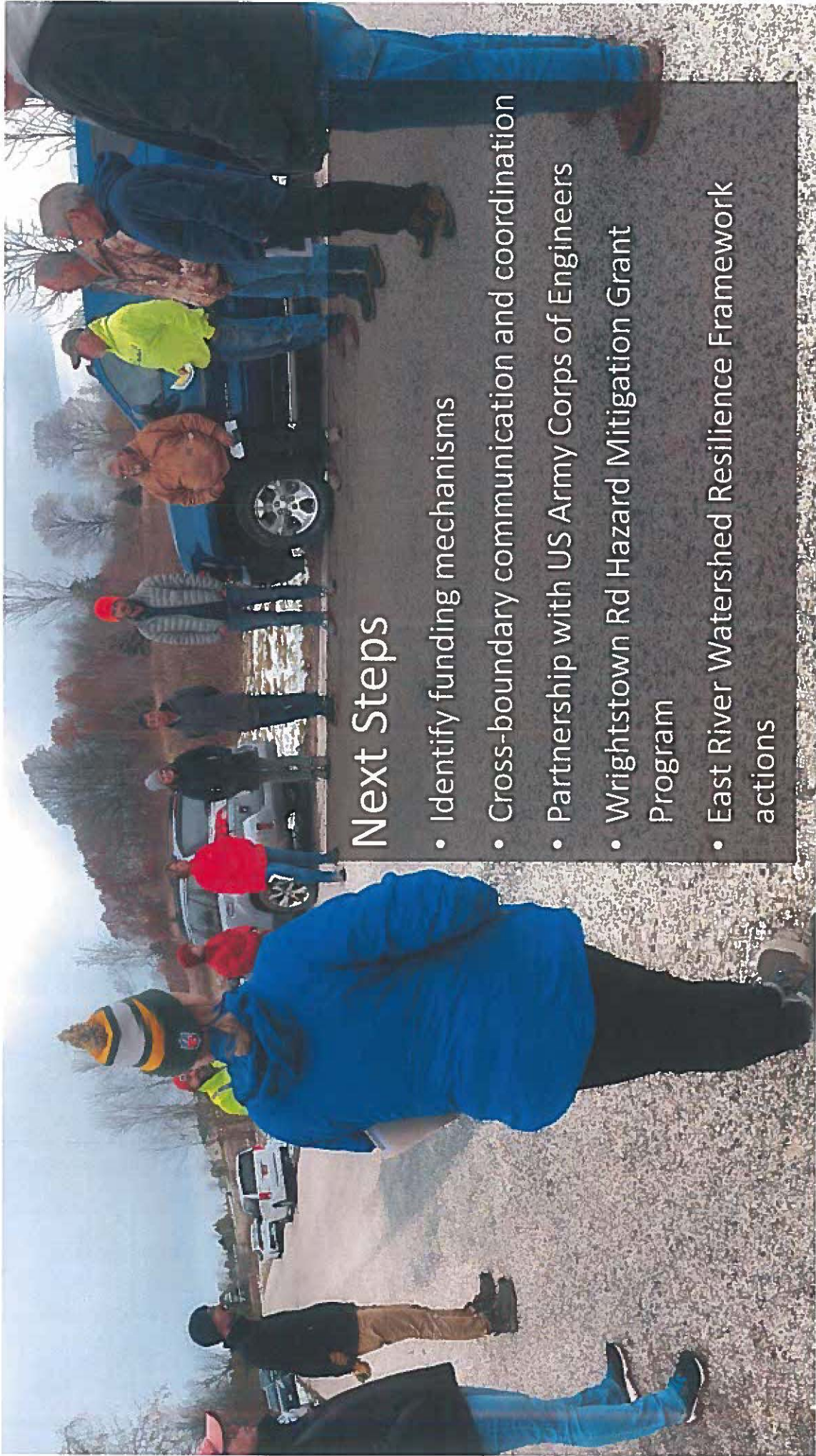
The East River Collaborative is a coalition of organizations and individuals in the East River Watershed who are committed to addressing the challenges of climate change, water quality, and riparian habitat. The collaborative is a coalition of organizations and individuals in the East River Watershed who are committed to addressing the challenges of climate change, water quality, and riparian habitat. The collaborative is a coalition of organizations and individuals in the East River Watershed who are committed to addressing the challenges of climate change, water quality, and riparian habitat.

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Goal	Key Action Items	Lead	Timeline
Enhance riparian habitat and water quality	Develop a Riparian Habitat Management Plan for the East River group	Lead: JSTW & Co., The Storm Center and the University of Wisconsin Sea Grant Program	2023-2025
Support restoration and preservation of floodplains, wetlands and riparian corridors	Develop a Floodplain and Wetland Management Plan for the East River group	Lead: JSTW & Co., The Storm Center and the University of Wisconsin Sea Grant Program	2023-2025
Address critical infrastructure	Develop a Critical Infrastructure Resilience Plan for the East River group	Lead: JSTW & Co., The Storm Center and the University of Wisconsin Sea Grant Program	2023-2025
Strengthen community preparedness	Develop a Community Preparedness Plan for the East River group	Lead: JSTW & Co., The Storm Center and the University of Wisconsin Sea Grant Program	2023-2025
Encourage/support responsible growth and development	Develop a Responsible Growth and Development Plan for the East River group	Lead: JSTW & Co., The Storm Center and the University of Wisconsin Sea Grant Program	2023-2025
Advance innovative green infrastructure solutions	Develop a Green Infrastructure Solutions Plan for the East River group	Lead: JSTW & Co., The Storm Center and the University of Wisconsin Sea Grant Program	2023-2025

Goals:

1. Invest in a regional partnership
2. Enhance recreation opportunities and access to the East River
3. Support restoration and preservation of floodplains, wetlands and riparian corridors
4. Address critical infrastructure
5. Strengthen community preparedness
6. Encourage/support responsible growth and development
7. Advance innovative green infrastructure solutions



Next Steps

- Identify funding mechanisms
- Cross-boundary communication and coordination
- Partnership with US Army Corps of Engineers
- Wrightstown Rd Hazard Mitigation Grant Program
- East River Watershed Resilience Framework actions



Department of Civil and Environmental Engineering



Fund for Lake Michigan
Conservation and Stewardship



WISCONSIN COASTAL MANAGEMENT PROGRAM



Thank you!

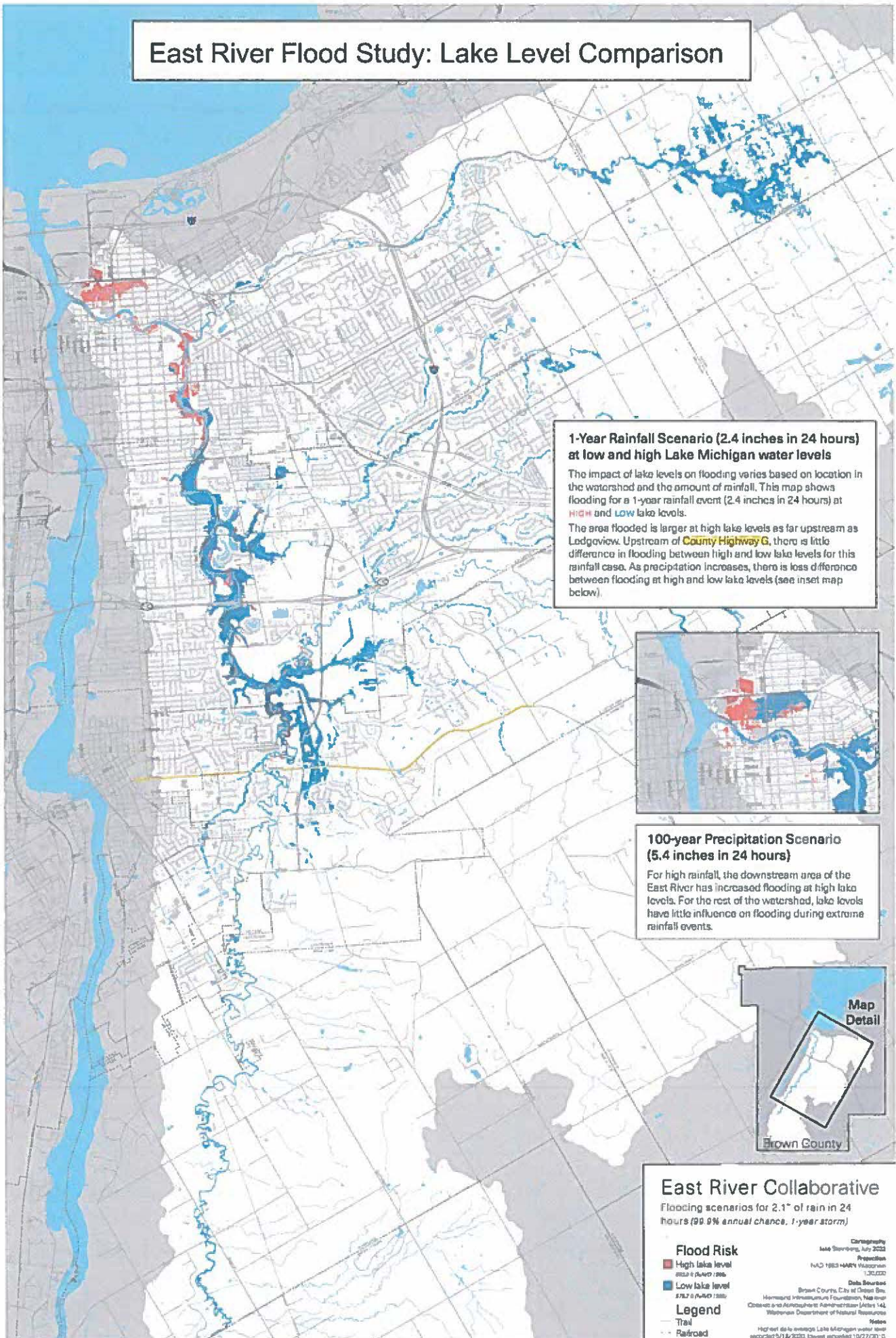
Kayla Wandsnider

East River Community Resilience Coordinator

kayla.wandsnider@tnc.org

<https://east-river-collaborative.tnc.org>

East River Flood Study: Lake Level Comparison



1-Year Rainfall Scenario (2.4 inches in 24 hours) at low and high Lake Michigan water levels

The impact of lake levels on flooding varies based on location in the watershed and the amount of rainfall. This map shows flooding for a 1-year rainfall event (2.4 inches in 24 hours) at **HIGH** and **LOW** lake levels.

The area flooded is larger at high lake levels as far upstream as Lodgeview. Upstream of **County Highway G**, there is little difference in flooding between high and low lake levels for this rainfall case. As precipitation increases, there is less difference between flooding at high and low lake levels (see inset map below).



100-year Precipitation Scenario (5.4 inches in 24 hours)

For high rainfall, the downstream area of the East River has increased flooding at high lake levels. For the rest of the watershed, lake levels have little influence on flooding during extreme rainfall events.



East River Collaborative
 Flooding scenarios for 2.1" of rain in 24 hours (99.9% annual chance, 1-year storm)

Flood Risk

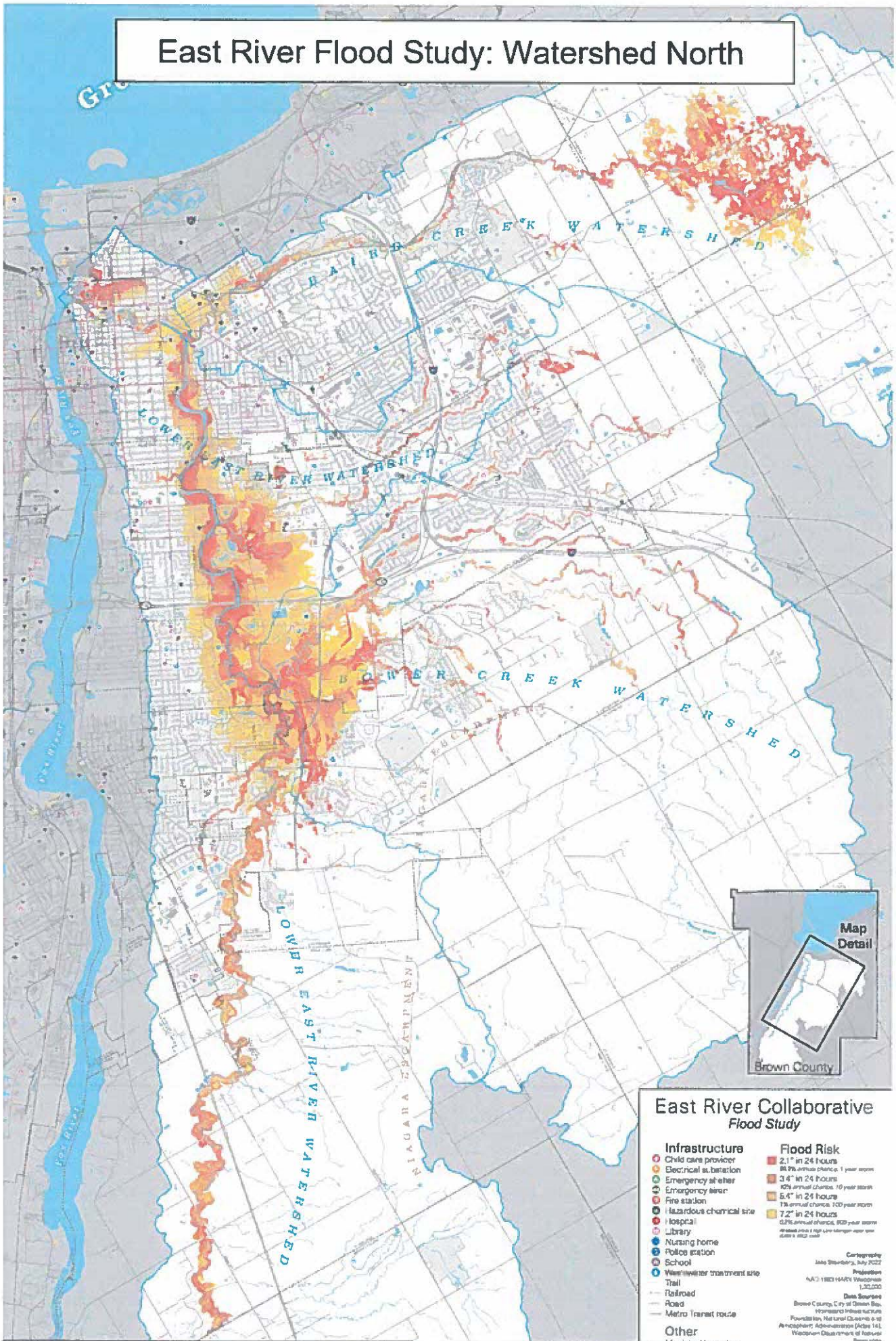
- High lake level (2022 & 1963)
- Low lake level (1967 & 1988)

Legend

- Trail
- Railroad
- Road
- Municipal boundary
- Stream

Citation
 Lake Stewards, July 2022
 Projection: NAD 1983 HARN Wisconsin State Plane
 Data Sources: Brown County, City of Oostburg, Homeland Infrastructure Foundation, Map of Wisconsin
 Notes: Highest date to average Lake Michigan water level recorded 20/10/2023, lowest recorded 19/7/2012

East River Flood Study: Watershed North



East River Collaborative Flood Study

<p>Infrastructure</p> <ul style="list-style-type: none"> ● Child care provider ● Electrical substation ● Emergency shelter ● Emergency shelter ● Fire station ● Hazardous chemical site ● Hospital ● Library ● Nursing home ● Police station ● School ● Wastewater treatment site ● Trail ● Railroad ● Road ● Metro Transit route <p>Other</p> <ul style="list-style-type: none"> — Municipal boundary — Watershed boundary — Stream — Green space 	<p>Flood Risk</p> <ul style="list-style-type: none"> 2.1" in 24 hours 84.9% annual chance, 1 year storm 3.4" in 24 hours 12% annual chance, 10 year storm 5.4" in 24 hours 1% annual chance, 100 year storm 7.2" in 24 hours 0.2% annual chance, 500 year storm <p><small>Legend based on a high water management report from 2011 & 2012 report</small></p>	<p>Cartography Jake Steinhilber, July 2022 Project No. NA211803 HARN Watershed 1:30,000</p> <p>Data Sources Brown County, City of Green Bay, Wisconsin Infrastructure Foundation, National Oceanic & Atmospheric Administration (NOAA), U.S. Geological Survey, Wisconsin Department of Natural Resources</p>
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Project Partners:



Project Funders:

