# Residents Working Against Huron River Flooding

Annual In-Person Meeting August 23, 2025

## Agenda

- Introductions, Organization History
- Huron River Watershed Inputs & Outputs
- Review of USACE and Hydrologist Reports
- Small Group Discussions
- Share out
- Determine Role of Organization
- Next Steps & Closing

## Introductions

Dr. Amber Bismack Executive Director



Kerry Adams
Technical Director

Jeff Henry Website Director

Maureen Molloy Secretary **Advisory Board** 

Jay McDowell Tony Licata

Mark Ten Brink

Kurt Richardson (resigned)

Kerry Adams

Jeff Henry

Maureen Molloy

Diane Henry

Dr. Amber Bismack

Diane Henry
Assistant Director



## **History of Organization**





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## **Thriving Earth Exchange**

AGU's Thriving Earth Exchange advances community solutions. We help scientists, community leaders and sponsors work together to solve local challenges related to natural resources, climate change and natural hazards.

## Flood Inundation Study (USACE & Hydrologists)



Community Science Fellow

#### **Dr. Wendy Robertson**

Associate Professor of Hydrology @ CMU

#### Mr. Scott Dierks

Senior Water Resources Engineer @ GEI Consultants

#### **Dr. Rod Lammers**

Assistant Professor of Engineering @ CMU

#### Ms. Emma Giese

Water Resources Engineer @ GEI Consultants

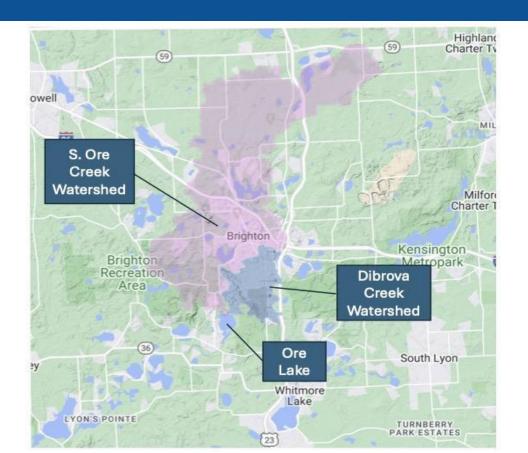




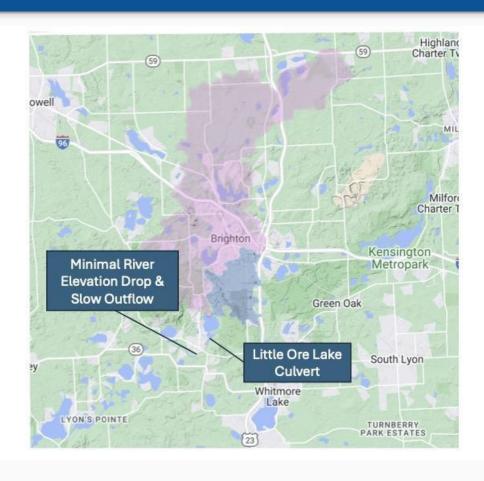




## **Huron River Watershed**



## **Huron River Watershed: Outputs**



#### **Huron River Watershed: Dams**



## Real Time Gages on S. Ore Creek & Dibrova Creek

Through a partnership with Huron River Watershed Council, we now have two new real time water gages:

- S. Ore Creek
- Dibrova Creek

## **Partnership with Huron River Watershed Council**

## Wetland Analysis completed along Dibrova Creek:

- This wetland complex received a high ecological integrity score compared to other wetlands surveyed in the Huron River watershed, despite the presence of several different invasive species including dense cattail stands. Surveyors noted a surprising diversity of native plants among the cattail stands and buckthorn thickets, as well as the presence of remnant bog and fen species, including Sphagnum Moss and mature Tamarack (Larch) trees on the southern edge of the wetland complex.
- High Ecological Integrity Score

#### **Summer 2025**

## **Two Weed Harvesting Events:**

- Resident-Funded Weed Harvesting July 14-15
  - Upstream of the Hamburg/Winans Bridge
- Hamburg Township Weed Harvesting July 16-23
  - Downstream of the Hamburg/Winans Bridge

## **Two River Clean-Up Events:**

- May 31, 2025
- July 12, 2025

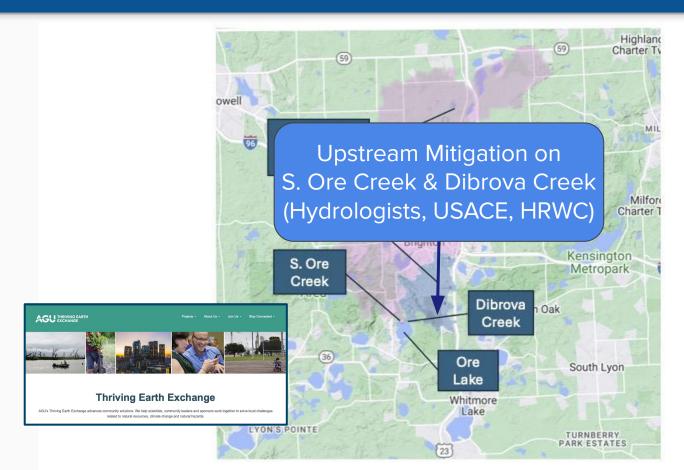


#### Summer 2025

- After Harvesting July 2025:
  - River dropped over 4.5 inches
  - Ore Lake dropped 6 inches
  - Previous years: 1.69 inches of rain has led to approximately 1 foot of lake level rise
    - This year, the lake level rose 6 inches
- July Rainfall
  - July 2025: 3.88 inches
  - July 2024: over 13 inches
- August 2025 Rainfall
  - 1.13 inches



## **Huron River Watershed: Inputs - PROJECTS**







## **Input:** Flood Inundation Study (USACE)

- USACE FPMS Study:
  - Modeling the effect of different parameters on the Ore Lake flood levels
    - S. Ore Creek
    - Dibrova Creek
    - Outlet at Little Ore
    - Huron River

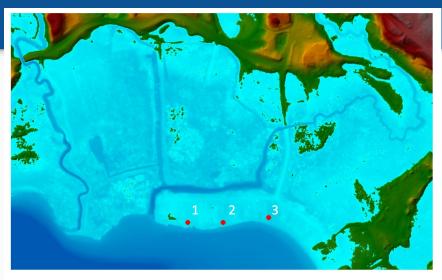


Figure 57 - Flooding with No Connection to Huron River, August 30, 2023 at 13:00

## **Input:** Flood Inundation Study (USACE)

- USACE FPMS Findings:
  - Removing inflow from S. Ore Creek
    - Depth changes of less than
       0.15 feet (1.8 inches) for
       August 30, 2023 flood
  - Reducing flows from Dibrova
     Creek
    - No significant impact on water depth for August 30, 2023 flood

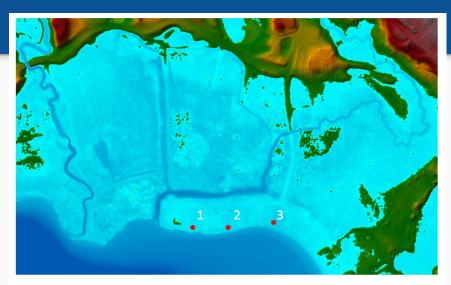
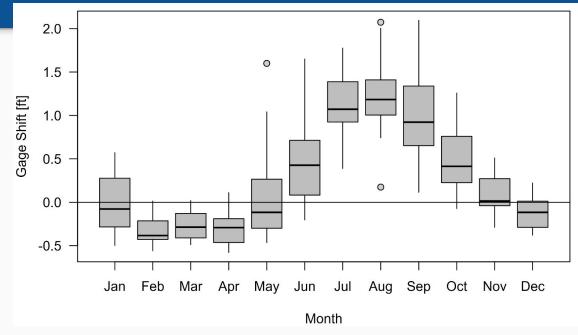


Figure 57 - Flooding with No Connection to Huron River, August 30, 2023 at 13:00

## **Hydrologists Report**

- Uses the USACE model to test further mitigation strategies for Ore Lake flooding
  - Inputted
    - Rainfall data
    - Weed shift data

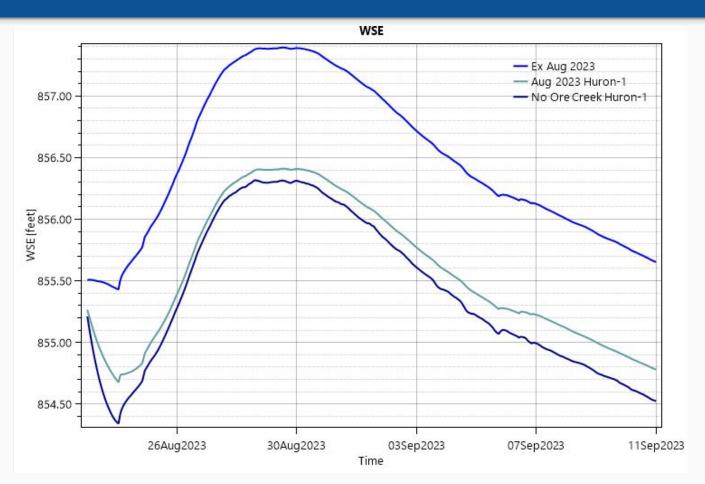


# **Hydrologists Report**

## Findings:

 Reduction of weeds in huron river is estimated to lower Ore Lake levels by approximately 1 foot - using the August 2023 flood data

## **Hydrologists Report**



## **Next Steps**

- (Potential) Mitigation Strategies:
  - Study the seasonal weed growth in the Huron River (e.g., when weeds start growing, how much, invasive and/or nuisance, etc.)
  - Weed Harvesting:
    - Frequency
    - Duration
    - Location

## **Next Steps: Potential Mitigation Strategies**

- Weed Growth Study:
  - Study the seasonal weed growth in the Huron River (e.g., when weeds start growing, how much, invasive and/or nuisance, etc.)
- Current and Potential Weed Harvesting Options:
  - Ore Lake S.A.D.
  - Resident-Funded weed harvesting
  - Purchasing of own weed harvester
  - Other options?

Weed Harvesting Options	Task	Management & Decision Making	Benefits & Constraints	RWAHRF Role
Ore Lake S.A.D.	<ul> <li>Pass with over 50% of property owners along Ore Lake and Little Ore Lake voting in favor</li> <li>Harvest downstream of Hamburg/Winans Road Bridge</li> </ul>	<ul> <li>Hamburg         Township         determines         when to         harvest     </li> </ul>	<ul> <li>Only lakefront property owners pay into the S.A.D.</li> <li>Two harvests per year</li> </ul>	No Involvement
Resident- Funded Weed Harvesting	<ul> <li>Collect donations annually</li> <li>Determine location of launching the harvester</li> <li>Harvest upstream of Hamburg/Winans Road Bridge</li> </ul>	Managed by Residents Working Against Huron River Flooding (as 501c3)	Number of harvests varies depending on donation amounts     Flexibility of harvesting     Requires annual funding	Lead, Coordinate, and Assume Responsibility for the Project
Purchasing Own Weed Harvester	<ul> <li>Grant funding for harvester (and other needs)</li> <li>Determine location of launching the harvester</li> <li>Maintenance, Operation, Storage, and Disposal of Weeds</li> <li>Harvest upstream of Hamburg/Winans Road Bridge</li> </ul>	Managed by Residents Working Against Huron River Flooding (as 501c3)	<ul> <li>Flexibility of harvesting</li> <li>Infinite number of harvests</li> <li>Annual funds needed to maintain, operate, and store harvester</li> </ul>	Lead, Coordinate, and Assume Responsibility for the Project

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## Structure of Final Discussions & Meeting

- Small group to share ideas
- Share out briefly from each small group
- Place dots on your choice of what role you feel RWAHRF should assume
- Whole group discussion
- Wrap up

# **Small Groups: Tasks**



- Review possible options for weed harvesting with particular focus on the proposed role for RWAHRF
- Share ideas, questions, concerns
- Raise any other options for future weed harvesting and/or ways to increase river outflow
- Raise options for RWAHRF'S future involvement with weed management

## **Dots Task**



- Place your dots on the Proposed Role(s) of the Organization you feel fit your perspective at this moment
- Example options:
  - "I only like Option A" Place all 3 dots on this option
  - "I like Option A and Option B" Place 2 dots on first and 1 dot on second choice
  - "I am not sure" Place one dot on each option

# Whole Group Discussion



- Review dots and options
- Discuss Majority Proposed Role(s) for Organization:
  - What questions do you have about this option?
  - What are challenges that will need to be addressed with this option?
- Follow Up Actions:
  - What do you see as the following actions for this work?

## Wrap Up



- Keep an eye out for a follow-up survey based on today's meeting
- Future Meetings:
  - Thursday, May 14, 2026 7:00 p.m.
  - Saturday, August 22, 2026 10:00 a.m.
  - Additional meetings scheduled as needed