



Maumee AOC Advisory Committee

August 15, 2024 1:30 pm – 3:00 pm

Click to [Join Microsoft Teams Meeting](#)

Audio Call in [+1 614-721-2972](#) Phone Conference ID: 864 401 143#

AGENDA

- **Welcome & Meeting/Call Logistics** (Mike Pniewski, Chair)
- **VOTE: Minutes** (Chair) (5 mins)
- **BUI 7 Removal Restrictions on Dredging Activities** (Cherie Blair, Ohio EPA) (10 mins)
 - [Summary Report](#)
 - [Full Report](#)
- **VOTE - BUI 7 Removal Letter of Support** (Chair) (5 mins)
- **US AOC Conference** (Kristina Patterson, OLEC) (10 mins)
 - Partners and Roles
 - Dates and a Rough Timeline
 - MAAC Assistance
- **US EPA Task Force Leader Report** (Leah Medley, US EPA - GLNPO) (5 mins)
 - 2025 Projections
 - Action Plan IV Status
- **Ohio EPA AOC Coordinator Report** (Cherie Blair, Ohio EPA) (10 mins)
 - MAP Updates
 - BUI Status Updates
- **Facilitating Organization's Report** (Jesse Stock, PCS) (10 mins)
 - Financial Update
 - Future Activities
 - Site Visit
- **MAP Spotlight** (Kat Kieffer, Water Monitor Coordinator, PCS) (10 mins)
 - Stream Restoration at Lathrop Park (MAP HTC-12.2)
- **Partner Updates** (10 mins)
- **Public Comments & Adjourn** (5 mins)
- **Next Meeting for 2024 – December 5 (1:30 pm – 3:00 pm)**



Minutes

Maumee AOC Advisory Committee

August 15, 2024 1:30 pm – 3:00 pm

Attendance: Cherie Blair, Vanessa Steigerwald Dick, Jim Carter, Mary Winkle, Brandon Heaney, Bill Burkett, Kris Patterson, Beth Sparks-Jackson, Kristopher Barnswell, Bill Murchison, Bryan Hinterberger, Jesse Stock, Zuri Carter, Amanda Kovach, Sara Guiher, Sally Gladwell, Ashlee Decker, Amber Bellamy, Leah Medley, Mike Pniewski, Joey Warner, Jenny Keffer, Jenna Meert, Kat Kieffer, Scott Butterworth, Archie Lunsey, Courtney Lopez, DJ Mears

1. Call to Order

Mike Pniewski, Chair called the meeting to order and welcomed everyone to the quarterly meeting.

2. Approval of Previous Minutes

Mike called for a vote on the May Minutes. Mike made the motion to accept as presented, Brandon Heaney seconded, and the motion passed.

3. BUI 7 Removal Restrictions on Dredging Activities

Cherie Blair - Ohio EPA shared that the draft document for the proposal to remove BUI 7 had gone out for public comment, and there were no public comments made over the 14-day period. She reviewed the details of this document, and then requested a letter of support from the MAAC so that can be included in the removal document. This document will be sent through the Ohio AOC Program sign-off and sent to the Great Lakes National Program Office (GLNPO) so they may approve it before the end of the federal fiscal year.

Cherie then introduced **Vanessa Steigerwald Dick – Ohio EPA** as the individual that is helping with this removal document as she has worked with similar BUI removal documents. Cherie offered a brief refresher on BUI 7 and the State of Ohio Listing Guideline and Restoration Target. Cherie highlighted the specific area of where this BUI is being evaluated for removal in the Toledo Harbor Federal Navigation Channel within the Maumee AOC.

Vanessa explained the evaluation process of BUI 7. She began with sharing that this evaluation was consistent with how it was done for both the Ashtabula River AOC's BUI removal in 2020, and the Black River AOC in 2022. The sediment risk-based screening included US EPA residential and industrial soil levels, Ohio Voluntary Action Program standards, and ecological soil screening levels. Results showed that sediment levels were generally below screening levels and comparable to background concentrations. Notable findings include low levels of PCBs (0.038 mg/kg), no detected pesticides, and sediment levels meeting residential and commercial standards. With that, Toledo Harbor sediments are deemed suitable for various beneficial uses, including residential, upland, commercial, industrial, recreational, and it meets criteria for potential aquatic beneficial uses, such as habitat restoration. The full presentation can be found

here.

4. VOTE - BUI 7 Removal Letter of Support

A motion to approve the MAAC recommendation letter to remove BUI 7 was moved, seconded, and passed unanimously, with Mike's signature to finalize the process.

5. US AOC Conference

Kris Patterson – Ohio Lake Erie Commission (OLEC) gave an overview of the AOC Conference that will be taking place in Toledo, Ohio next year. She shared that the grant agreement from the US EPA has been finalized, and administrative agreements are in place. Efforts are underway to establish a subaward agreement with Partners for Clean Streams (PCS) to facilitate conference planning. The upcoming AOC conference will span approximately one and a half days, including sessions, field trips, and optional evening activities. The event aims to attract around 300+ attendees, including government and AOC committee members.

OLEC will oversee the grant to PCS and support logistics, alongside Ohio EPA. This includes assistance with conference planning, field trip coordination, online registration, promotion, and financial transactions. Additional support from MAAC members is encouraged, particularly for field trip planning and sponsorship. The conference is expected to feature various field trips and optional events, with a focus on showcasing local AOC projects. Jesse Stock shared that the planning committee will start meeting, and a sponsorship packet will be available in the coming months to aid in budgeting and sponsorship decisions.

The targeted week for the conference is September 15th, 2025, and members are encouraged to save the date.

6. US EPA Task Force Leader Report

Leah Medley – US EPA, GLNPO updated on Action Plan IV status. It is undergoing final reviews by States and Tribes as of the week of August 5th. After making a few alterations to the text, it will be submitted for final review by EPA management. Final review will occur from Mid-August to end of September. The final report will be published on GLRI.us by the end of September, and it will go into effect October 1st.

7. Ohio EPA AOC Coordinator Report

Cherie Blair – Ohio EPA provided the AOC Coordinator Report. The latest update covers several management action projects (MAPs), with a focus on AquaMAPs and SedMAPs. WildMAPs remain unchanged with only one ODNR project in progress. For aquatic projects, site assessments are underway for 4 projects, while design and permitting are ongoing for 22 projects, with 12 expected to move into construction soon. In total, nearly 20 projects will be in construction or completed this year.

Sediment projects include the Swan Creek feasibility study, which has been delayed for additional data collection and is expected to conclude next year. The lower Maumee River project is advancing with a remedial design set to be completed by next fall. The Ottawa River project involves further delineation of a contamination hotspot, with design expected by next year. Updates on BUIs include ongoing evaluations for BUI 4 (Deformities & Tumors) and the completion of the beach closings project, which ended in June. Improvements are anticipated, and BUI removal may be considered if inland lake beach advisory postings decrease significantly.

Resource sharing among projects is ongoing, with efforts to recycle and repurpose materials, such as trees and rocks, across different project sites.

8. MAP Spotlight

Kat Kieffer – PCS went through a MAP spotlight on the Stream Restoration at Lathrop Park (MAP HTC-12.2). She is the Water Monitoring Coordinator at PCS and the facilitator for the Lathrop Park project. This project involves restoring a 15,000-linear-foot section of the Ten Mile Creek in Berkey, Ohio. The project, approved in 2020 and funded in November 2023, aims to stabilize eroding banks, restore riparian buffers, and enhance in-stream habitat. Key milestones include community engagement, tree removal, invasive species treatment, and native mussel relocation. The project is on schedule, with construction set to begin the week of August 19th. An additional restoration area has been secured with a northern property owner. The team is working closely with the Davey Resource Group, who have provided the project's design plans. For further information or questions, Kat is available for contact at kat@partnersforcleanstreams.org

9. Facilitating Organization's Report

Jesse Stock – PCS provided a report as the facilitating organization for the MAAC. He gave a finance update, noting that 95% of a three-year grant awarded to PCS remains. In December, a site tour is anticipated as preparation for the AOC conference, with an open invitation for implementers to assist in planning. Looking ahead to 2025, the grant will support outreach, education, DEI initiatives, and electronic communication via social media and newsletters to promote AOC projects. Jesse noted that it is yet to be determined whether the AOC website will host the 2025 AOC Conference page, but it is likely that it will be a project that PCS undertakes.

Additionally, he shared that PCS staff member Mary Winkle is available for project ideas, and to kindly share any media from projects that would like to be seen highlighted on the AOC website and social media pages. Cherie Blair also commented that Mary can assist with verbiage, text, graphic elements, and input for educational and/or informational signage to be put up at project sites. She is available to be contacted at mary@partnersforcleanstreams.org

An annual report and potential retreat are planned for later this year. For further engagement or comments, contact the team at admin@partnersforcleanstreams.org

10. Partner Updates

Zuri Carter – Metroparks Toledo provided an update on two ongoing projects. The Blue Creek project is progressing well, with 60% design plans currently under review and LaRae Sprow, the Natural Resources Supervisor, overseeing it. The Audubon Islands project, however, has faced delays primarily due to permitting issues. The Army Corps of Engineers and the Ohio EPA are nearing approval, but the City of Maumee has yet to provide necessary documents. They have promised to deliver these documents by Monday August 19th, which is crucial for potentially starting the project this fall.

Courtney Lopez –Ottawa NWR gave a partner update. She shared that the Oxbow Channel project has officially commenced, marking an exciting milestone after a long planning period. This project pertains to the Kontz unit on Turtle Creek, located off Route 2 near the refuge. Expect to see significant activity, including earth-moving and construction of water control structures and fish passages, especially visible from the Turtle Creek Bridge.

Ashlee Decker – The Nature Conservancy updated on the Blue Creek fish habitat project (Maumee St Forest). It

is progressing smoothly and has been under construction for the past few weeks. As a project in a maintenance ditch, she noted that they've had to navigate some restrictions, but the installation of in-stream habitat features, such as log vanes, root wads, and rock boulders, is complete. A recent site visit revealed positive developments, including the sighting of a northern pike in the ditch, indicating the project's success so far. They will begin work on the wetland features and construction within the next week, with completion expected in the coming weeks.

Scott Butterworth – ODNR shared an update. They recently held the dedication for the Little Portage Wildlife Area Restoration, located along the Little Portage River. This project involved restoring 250 acres of wetland and incorporating over 400 acres of agricultural drainage. They will soon begin the Mallard Club Marsh Wildlife Area Restoration project. Additionally, the Ford Ditch H2Ohio project has been completed. They are now starting a new project, funded in part by a grant from the Department of Agriculture, which will involve constructing another two-stage ditch.

Kris Patterson – OLEC gave the last partner update. She announced to keep an eye out on the OLEC website in September for the upcoming Lake Erie Communities and Coastal Resiliency Grants. They are launching a new round with increased funding available. The previous round supported planning, design, and permitting for projects related to coastal resiliency. These grants helped advance projects such as wetlands for flood management and infrastructure improvements. They also focused on enhancing community engagement by incorporating features like trails, benches, and water access, rather than just traditional flood defenses.

11. Public Comments

None

12. Meeting Adjourned at 2:55pm



**Maumee AOC Coordinator Report
for the Maumee AOC Advisory Committee
August 15, 2024**

- **WildMAPs** (*BUI 14b: Wildlife Habitat*)
 - ODNR continues to work toward completing the final WildMAP in 2025.
 - No updates to the Summary Table of the WildMAPs since the last version dated 1/29/24.
 - A detailed narrative tracking of the WildMAPs is available upon request.
- **AquaMAPs** (*BUI 3a, 6, 14a: Fish Pops, Benthic Pops, Fish Habitat*)
 - Project Status Summary
 - Early funding/site assessment: 4 projects
 - Design/permitting: 22 projects (12 expected to start implementation in next 3 months)
 - Implementation/construction: 4 projects
 - Substantially Complete/establishment/warranty: 3 projects
 - Project complete: 5 projects
 - Several projects are working on additional funding to support their efforts, and several have requested grant extensions. Due to numerous pending changes, there are no updates to the Summary Table of the AquaMAPs since the last version dated 5/7/24.
 - A narrative tracking of the AquaMAPs is available upon request.
- **SedMAPs** (*BUIs vary by project site, GLLA contaminated sediment*)
 - Ohio continues to work with federal partners to make progress on these sediment projects.
 - Additional data is needed from Swan Creek in order to select a preferred remedial alternative and complete the *Swan Creek Focused Feasibility Study (FFS)*. This additional work will be collected over the next 9-12 months.
 - The Toledo/Lucas County Port Authority has hired EA as the lead consultant for the remedial design for the two Lower Maumee River GLLA sites (Sway Bridge, WWTP). The PMT is meeting weekly (as of now). The RD is expected to be complete by Fall 2025.
 - Sediment sampling is planned in the Ottawa River 4Y hot spot in October to further delineate the conditions. A feasibility study is expected to be complete this coming winter/spring with remedial design and clean up to follow.
 - No updates to the Summary Table of the SedMAPs since the last version dated 5/10/24.
 - A narrative tracking of the SedMAPs is available upon request.
- **Misc. MAPs** (*BUIs 4, 7, 8, 10*)
 - **BUI 4: Deformities & Tumors** – We are still awaiting data, so a full status evaluation of this BUI can be done to see if it can be removed.
 - **BUI 7: Dredging** – Public comment is complete. Once received, a MAAC letter of support will be added to the package so it will be routed through Ohio sign-off and sent to GLNPO for concurrence with the removal. Expect to see this accepted by end of September.
 - **BUI 10a: Beach Closings (advisories)** – This project is complete. Ohio would like one season of data (hopefully it will show reductions in postings), then we can consider removing this BUI.
 - **BUI 8b: Eutrophication** – I will update the committee at a future meeting.
- **AOC Program Updates**
 - U.S AOC Conference: This will be reported on as a regular MAAC agenda item from now until Fall 2025. Let's make it the best AOC Conference --- EVER!! ☺
 - Resource/Material sharing sheet: Headwaters Tenmile project (Lucas SWCD) will be sharing trees with Metroparks Toledo for two of their projects in the Oak Openings (Blue, Neis) this fall. They are coordinating construction schedules and hauling between the projects. The sharing of materials between TPS and Toledo's Bandore Park project is still pending Toledo hiring their construction contractor. Let me know if you have materials to share or if you have a need for your project.



August 15, 2024

Anne M. Vogel, Director
Ohio EPA – Director's Office
P. O. Box 1049
Columbus OH 43216-1049

Joy Mulinex, Executive Director
Ohio Lake Erie Commission
P.O. Box 1049
Columbus OH 43126-1049

RE: Support to Request to GLNPO for Removal of Beneficial Use Impairment for Restrictions on Navigational Dredging Activities

Dear Directors Vogel and Mulinex,

The Maumee Area of Concern (AOC) Advisory Committee (MAAC) reviewed the removal recommendation document for the beneficial use impairment (BUI) for Restrictions on Navigational Dredging Activities (BUI 7). The MAAC supports the Ohio AOC Program's BUI 7 removal recommendation documentation submittal to the U.S. EPA Great Lakes National Program Office (GLNPO) requesting their approval consideration.

Upon removal of this BUI, four of the original ten BUIs would be removed from the Maumee AOC. If approved, the following impairments would remain:

- BUI #3: Degradation of Fish & Wildlife Populations
- BUI #4: Fish Tumors or Other Deformities
- BUI #6: Degradation of Benthos
- BUI #8: Eutrophication or Undesirable Algae
- BUI #10: Beach Closings (Recreational Contact)
- BUI #14: Loss of Fish & Wildlife Habitat

The MAAC looks forward to continuing to work in coordination with the Ohio AOC Program and GLNPO to complete the work necessary to remove remaining BUIs.

Sincerely,

Mike Pniewski, Chair
Maumee AOC Advisory Committee

cc: Kris Patterson, OLEC and Cherie Blair, Ohio EPA

AOC Conference

Toledo, September 2025



Overview

- Pre-conference field trips (3 or 4 routes), AOC 101 sessions, & gathering (optional)
- Conference sessions – 1.5 days
- Extra evening activity/reception during conference – additional cost and sign up
- Keep conference registration low (under \$100) and provide scholarships & optional gatherings
- Around 320 attendees (or more), mostly government and AOC committee members



Partnership

- This conference has a long history, set of expectations, and collaborative approach
- US EPA & State AOC reps across Great Lakes will lead the content, structure, call for presenters, and provide input on optional activities and field trips (and provide people power during it)
- Ohio Lake Erie Commission (OLEC) is state lead, in conjunction with US EPA
- Ohio EPA will support the AOC planning & showcasing
- OLEC will subaward to PCS to support the conference planning & logistics

OLEC & Ohio EPA Role

OLEC

- Liaison with US EPA and other state AOC coordinators
- Overall planning
- Oversee grant to PCS
- Overall logistics during conference

Ohio EPA

- Liaison with MAAC
- Support field trip planning
- Oversee Erie 22 grant & how it intersects or augments the conference grant
- Back up OLEC on EPA-States team
- Additional support during the conference

PCS Role

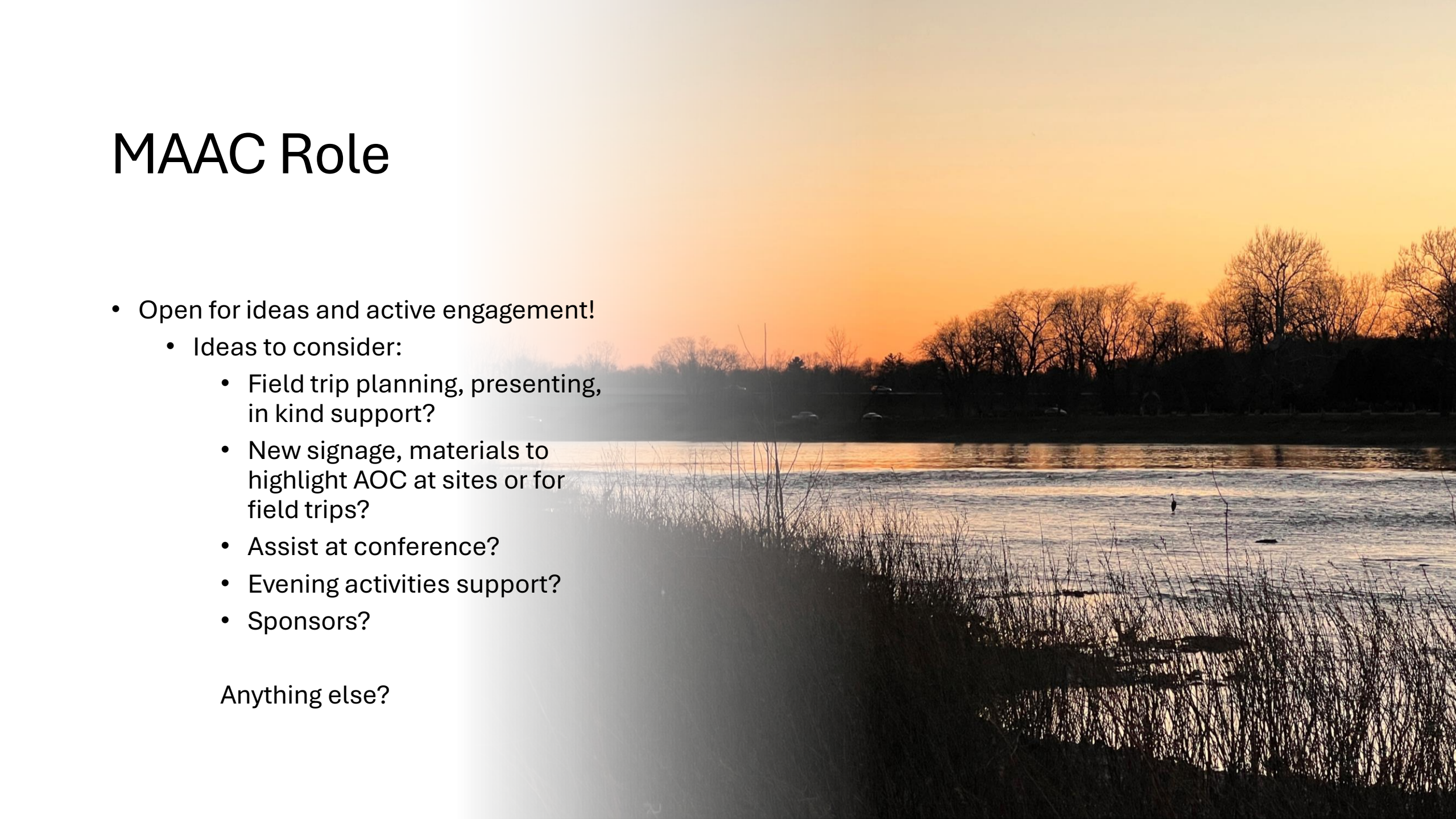
- Lead conference logistics
 - Secure venues for conference & hotels & on-site resources (food, A/V)
 - Set up & manage online registration, promoting the conference, digital agenda & session management platform
 - Handle all payments, bills, and scholarship distribution
 - Set up logistics for field trips (buses and/or boat rental)
 - Provide materials & supplies (tripods, oversized printing, posters)
 - Arrange for supplemental activities (non-grant funded) to augment the conference with networking & showcasing the AOC
 - Liaison with sponsors to augment the grant support for the conference basics
- Maintain regular, frequent communication with OLEC
- Administer this grant per federal reporting & fiscal management rules and per the scope in the workplan



MAAC Role

- Open for ideas and active engagement!
 - Ideas to consider:
 - Field trip planning, presenting, in kind support?
 - New signage, materials to highlight AOC at sites or for field trips?
 - Assist at conference?
 - Evening activities support?
 - Sponsors?

Anything else?



Supporting Progress on Lathrop Park Stream Restoration Project

AquaMAP Project Updates
MAAC Quarterly Meeting, Aug. 15, 2024
Kat Kieffer, Partners for Clean Streams

Project Location

- Lucas County - Berkey, OH
- Public park + adjacent stream corridor on Tenmile Creek, ~1500 linear feet
- Submitted and approved by GLNPO as an Aqua MAP in 2020; grant funding began Nov. 2023



Conditions Prior to Project

- Southern bank stabilized in areas with broken concrete, some plant growth
- Erosion occurring on bends with no stabilization, bend in the middle of the site has highest erosion rate
- Flashy flows indicated by drift deposits and undercutting on banks
- BUI Status for Headwaters Tenmile HUC-12
 - BUI 6 (Degradation of Benthos) - Impaired, 88% of target
 - BUI 14a (Loss of Fish Habitat) - Impaired, 67% of target



Undercut bank at the upstream end of the site



Highly eroding bank along the bend in the middle of the site

Restoration Plan Goals

- Restore 900 feet (~0.75 acres) of riparian buffer
- Stabilize 600 feet of eroding streambank
- Create/enhance 165 feet of riffle habitat
- Restore riffle-pool sequence across the site
- Enhance in-stream habitat

ICI



2 to 6 points

QHEI



12 to 18 points

IBI



0 points



MODIFIED ROCK SILL AND VANE STRUCTURES WILL BE USED TO STABILIZE THE GRADE OF THE STREAM BED AND DIRECT FLOWS AWAY FROM ERODED BANKS.

POOLS WILL BE LOCATED DOWNSTREAM OF ROCK SILLS AND VANES TO PROVIDE FISH HABITAT AND SLOW WATER FLOW ALONG OUTSIDE BENDS.

BOULDER RIFFLES WILL PROVIDE HYDRAULIC COVER AND HABITAT FOR FISH AND MACROINVERTEBRATES. HYDRAULIC COVER WILL PROMOTE FISH PASSAGE THROUGHOUT THE RESTORED REACH.

COMPOSITE ROOTWAD STRUCTURE AND SOIL LIFTS WITH BRUSH LAYERING WILL HELP STABILIZE AND REVEGETATE HEAVILY ERODED BANK. ROOT WADS OVERHANGING NEWLY EXCAVATED POOLS WILL PROVIDE VALUABLE HABITAT FOR A WIDE VARIETY OF FISH SPECIES IN TENMILE CREEK.

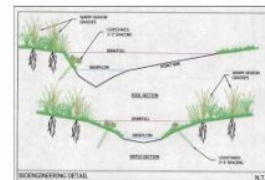
MODIFIED ROCK SILL STRUCTURES WILL BE USED TO STABILIZE THE GRADE OF THE STREAM BED AND DIRECT FLOWS AWAY FROM ERODED BANKS.

EXISTING CONCRETE TO BE LEFT IN PLACE FOR BANK STABILIZATION.

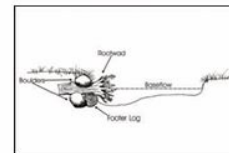
STREAM CAN BE WIDENED TO REMOVED CONSTRICTION POINT AND ENGAGE FLOODPLAIN ON INSIDE BEND.

ROCK TOE PROTECTION AND LIGHT BANK GRADING WILL BE USED TO STABILIZE ERODED BANKS. EXISTING CONCRETE WILL BE TOP DRESSED TO PROVIDE A MORE NATURAL LOOK AND PROMOTE REVEGETATION OF THE STREAM BANKS.

AREAS OF BANK GRADING WILL BE SEEDED WITH A NATIVE RIPARIAN SEED MIX, PLANTED WITH NATIVE LIVE STAKES, AND MATTED TO MINIMIZE FUTURE BANK EROSION.



COIR MATTING, NATIVE RIPARIAN SEEDING, AND NATIVE LIVE STAKES AND POLES SUCH AS WILLOW AND DOGWOOD WILL BE INSTALLED ON THE NEWLY GRADE BANKS. AFTER ESTABLISHMENT, THIS RIPARIAN SUFFER WILL PROVIDE STABILITY TO THE STREAM BANKS AND SHADY COVER ALONG THE STREAM CHANNEL. ADDITIONALLY, THE VARIOUS PLANT COMMUNITIES WILL ABSORB NUTRIENTS FROM THE ADJACENT FIELDS BEFORE THEY CAN REACH THE STREAM.



ROOTWADS INSTALLED IN AREAS OF HIGH EROSION WILL STABILIZE THE STREAM BANK, INCREASING RUNOFFERS TO THE

Before



After (DRG rendering)



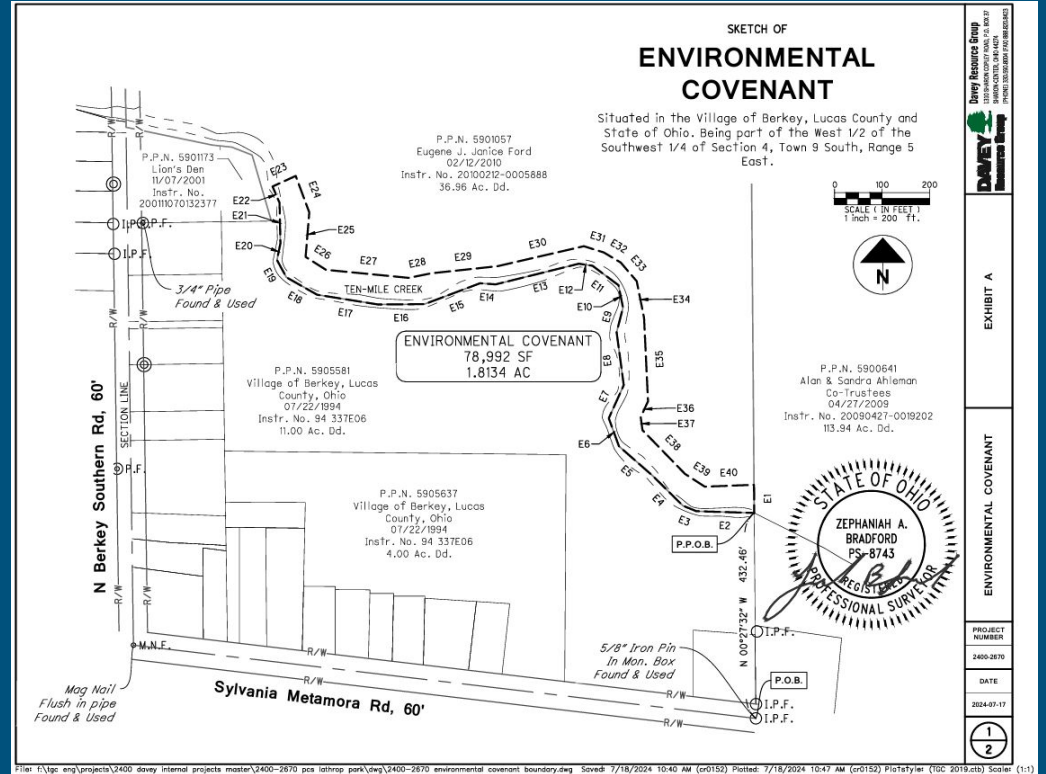
Timeline + Progress

- Project on target with grant timeline through July 2024
- Highlights:
 - Community meeting + informational mailing sent in March 2024
 - Site preparation:
 - Tree removal/topping - March
 - Initial invasive species treatment - June
 - Native mussel survey/relocation - June
 - All permits complete (Floodplain in progress)
 - Staging underway this week (August)



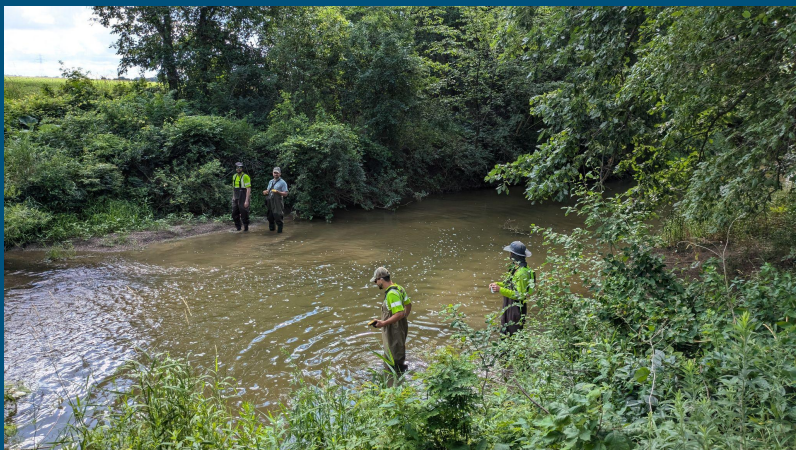
Updates

- Worked with property owners to add additional acreage (~1.8) for restoration on the northern streambank
- Environmental covenant completed August 2024



Looking Ahead

- Construction kickoff set for August 20th
- On track to meet all project implementation goals



Timeline	Description	Responsible Party
July 30, 2024	Progress report due	PCS to Ohio EPA
August/Sept 2024	Project implementation begins	PCS/Contractor
Fall 2024	Project Implementation as weather allows	PCS/Contractor
Winter 2024	Operations and Maintenance Plan developed, once project complete	Contractor with support of PCS and PMT
Jan. 30, 2025	Progress report due	PCS to Ohio EPA
Spring 2025	Monitor plantings for acceptable hardiness and density; and replant as needed if acceptable hardiness and density have not been achieved per QAPP	PCS/Contractor
Summer/Fall 2025	Monitor site for issues or maintenance	PCS
July 30, 2025	Progress report due	PCS to Ohio EPA
September 30, 2025	Design/Build contract ends	PCS
Fall 2025	Conduct ribbon cutting celebration event for community	PCS, with support from PMT and Ohio EPA
November 30, 2025	Subaward grant with PCS ends	Ohio EPA
Jan. 15, 2026	Final report submitted to Ohio EPA for subaward	PCS provides to Ohio EPA

Thank you!

Questions?

Contact Kat Kieffer

kat@partnersforcleanstreams.org



Removal Recommendation for the Restrictions on Navigational Dredging Activities Beneficial Use Impairment (BUI 7) in the Maumee AOC



MAAC Update – August 15, 2024

State of Ohio Restoration Target

State of Ohio Listing Guideline

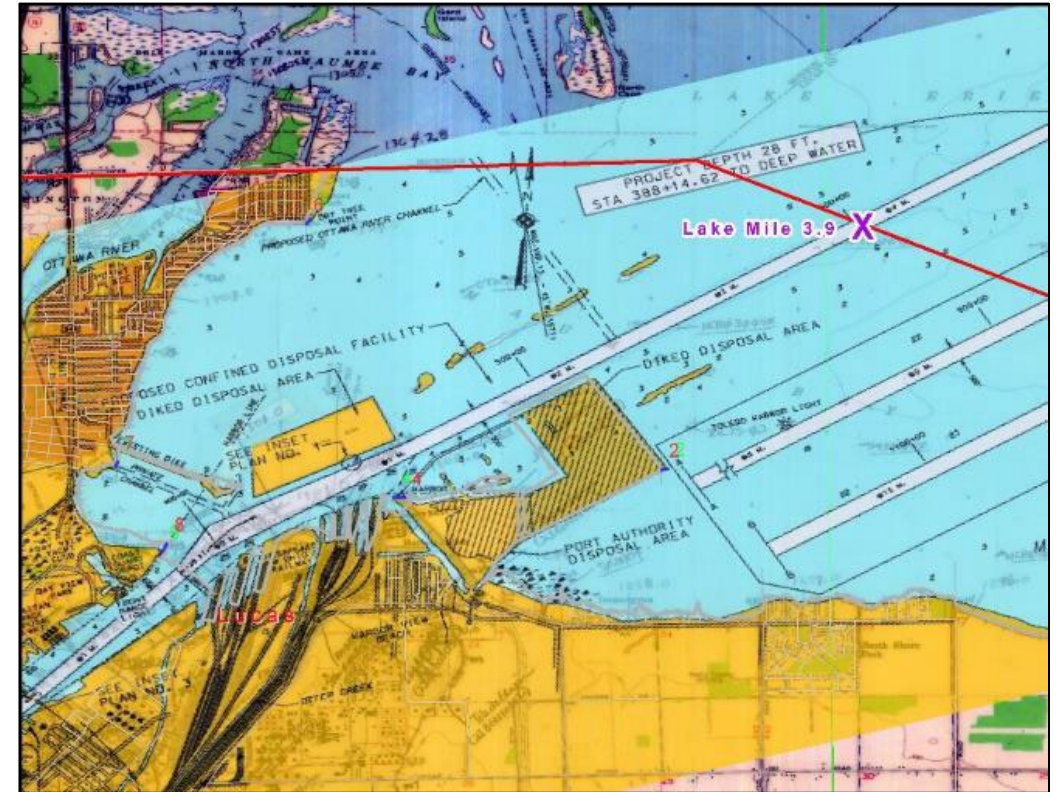
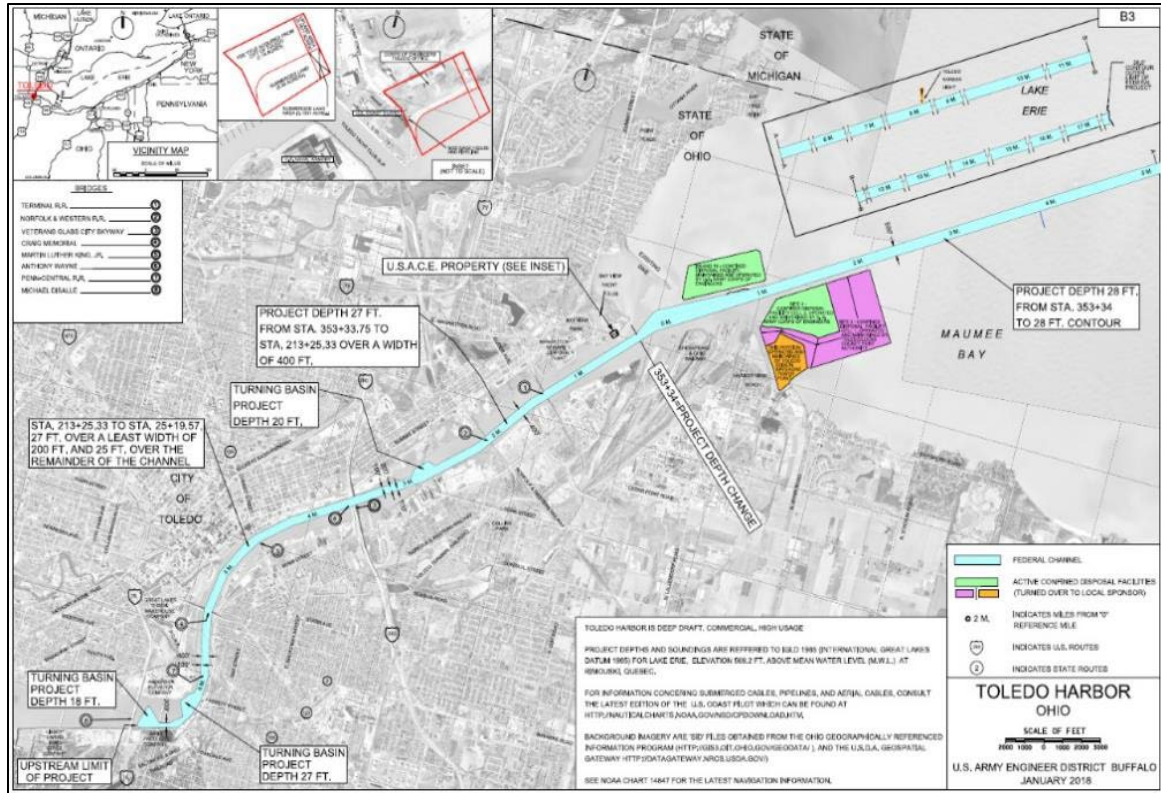
This beneficial use shall be listed as impaired if:

- Contaminants in sediment exceed sediment quality guidelines used by the State such that there are restrictions on navigational dredging or disposal activities.

State of Ohio Restoration Target

- There are no restrictions on navigational dredging or disposal activities due to contaminants in sediment, such that there are suitable options available for reuse or disposal of the material.

Toledo Harbor Federal Navigation Channel within the Maumee AOC



The Toledo Harbor federal navigation channel includes the lower seven miles of the Maumee River and a Lake Approach Channel extending approximately 18-miles out into Lake Erie.

The Maumee AOC includes the lower seven miles of Maumee River and up to Lake Mile 3.9.

State of Ohio Target Evaluation Criteria

- To evaluate this BUI for the Maumee AOC, Toledo Harbor dredged sediment data were compared to several standards and screening levels, including:
 - Residential and industrial soil U.S. EPA Regional Screening Levels (RSLs); and
 - Information regarding ambient background conditions for the upland beneficial use of dredged sediment.

➔ *If the sediment was found suitable for upland beneficial use based on this evaluation, then the restoration target for this BUI would be met.*
- An alternate evaluation method for achieving the restoration target for this BUI is related to the aquatic beneficial use of dredged sediment such as in-water habitat restoration projects.

➔ *If the sediment would be permittable for aquatic beneficial use based on the 401-certification process, then the restoration target for this BUI would be met.*

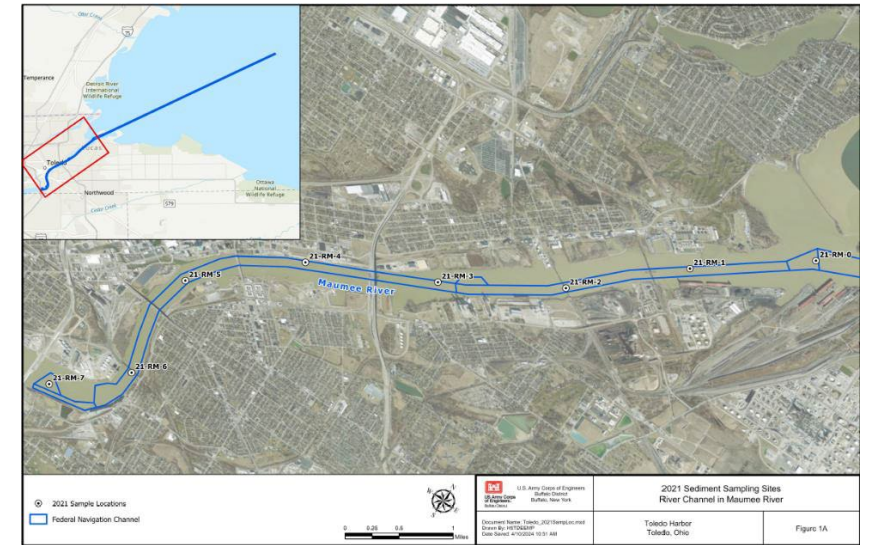
Process and Data for BUI Status Evaluation

Sediment Data Evaluation

- Review of previous sediment data: USACE 2016, 2018
- Evaluation of recent sediment data: USACE 2021

BUI Evaluation

- Sediment Risk-Based Screening Evaluation:
 - U.S. EPA Regional Screening Levels (RSLs) for residential and industrial soil;
 - Ohio Voluntary Action Program (VAP) generic standards for residential, commercial, and industrial land uses
- Comparison to Background Levels
- Comparison to Ecological Soil and Sediment Screening Levels



Lower Maumee River Sediment Sampling Locations.



Lake Approach Channel Sediment Sampling Locations.

Sediment Data Evaluation Results

Based on the risk-based screening evaluation of residential use for the Toledo Harbor sediment data within the Maumee AOC, it was determined that:

- **Metals** concentrations are **below U.S. EPA's residential soil RSLs** or are similar to ambient background soil and sediment concentrations;
- **PAH** concentrations are **less than the cumulative risk goals for residential soil RSLs**;
- There was **only one low level detection of total PCBs** at 0.038 mg/kg, below screening levels;
- **Pesticides** were **not detected**;
- Sediment concentrations are **below Ohio VAP residential soil standards** or are similar to ambient background soil and sediment concentrations;
- Toledo Harbor sediment is **suitable for residential upland beneficial use**, as well as commercial, industrial, and recreational land use, and the restoration target for this BUI has been met; and
- Toledo Harbor sediment **may be permittable for aquatic beneficial use projects** based on the 401-certification process.

Conclusions

- **All dredged sediment** from the Toledo Harbor federal navigation channel within the Maumee AOC **has the potential to be beneficially used upland** based on the evaluation of the sediment data to the U.S. EPA residential soil regional screening levels, information regarding ambient background conditions, and ecological screening levels.
- Dredged sediment may be able **to be used for aquatic beneficial uses such as in-water habitat restoration projects**, in accordance with the 401 water quality certification process.



Metroparks Toledo has beneficially used Toledo Harbor dredge sediment at Glass City Metropark, a former brownfield.

Next Steps

- Maumee AOC Advisory Committee (MAAC) review (early July)
- Public comment period (late July/early August)
- MAAC letter of support (August 15)
- Official submittal to GLNPO for review (late Aug/early Sept)