




Public Meeting
August 5, 2020

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Detroit River AOC Hennepin Marsh Habitat Restoration Project

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Meeting Housekeeping

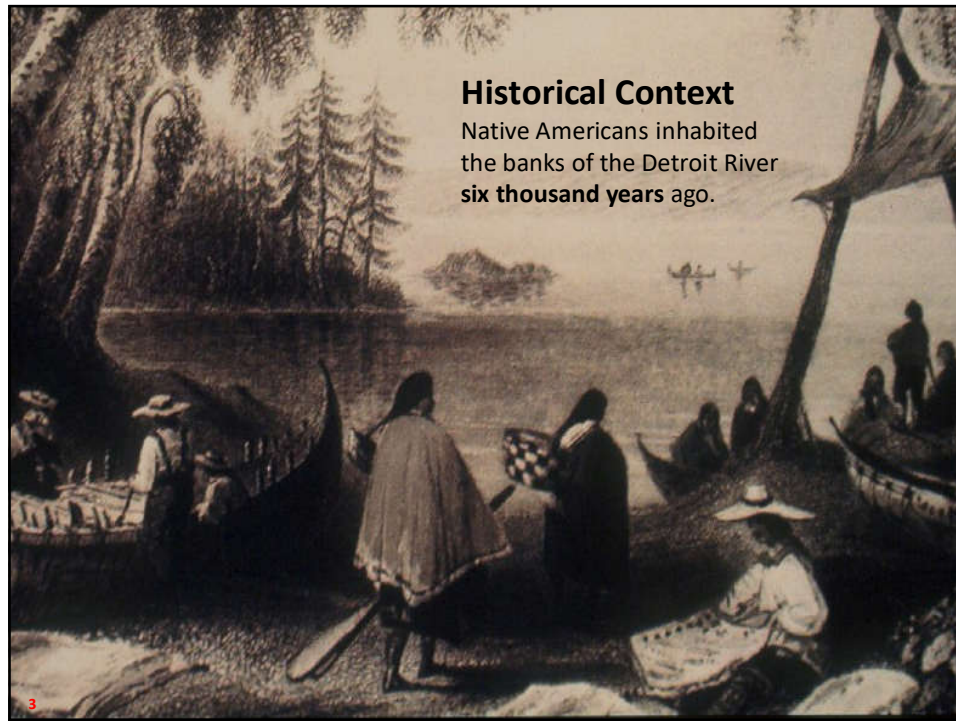


- Please mute your phones/devices
- There will be a question and answer period at the end
 - Type your question in the chat box
 - Type, "I have a question" in the chat box
 - Unmute yourself and ask



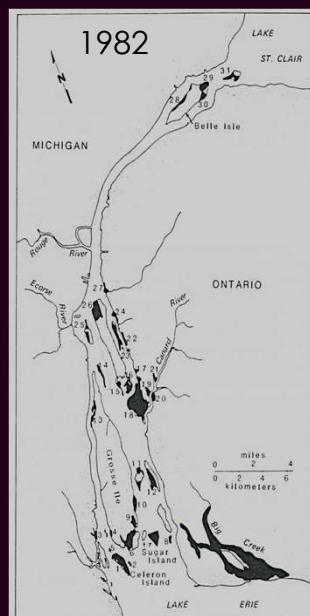
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Habitat loss and shoreline degradation happened in less than 200 years.



97% loss of coastal wetlands

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Channelization of the Detroit River – Livingston Channel

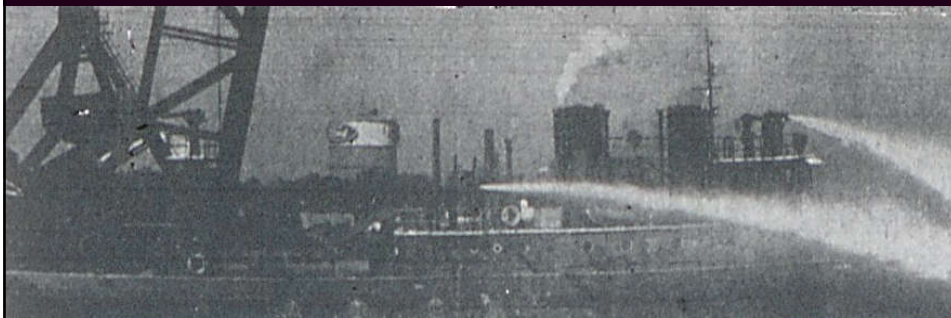


From 1874 to 1968, 60 miles of shipping channels were excavated in the Detroit River.

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Industrial Pollution



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The Rouge River is one of 3 Great Lakes tributaries to catch on fire – late 1960s.

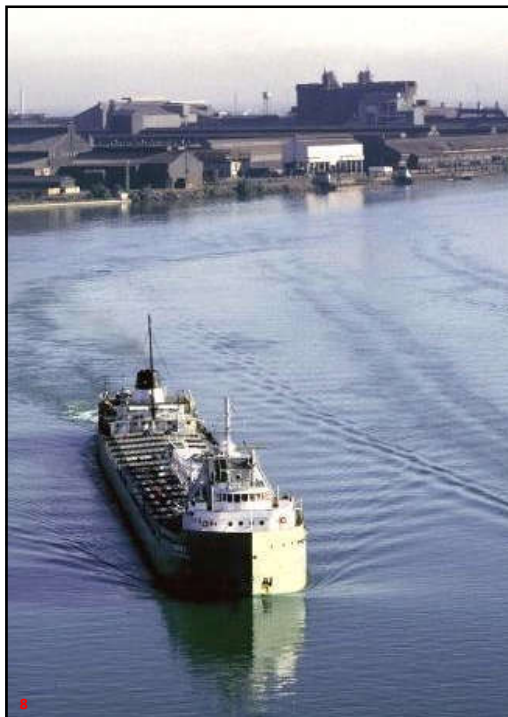
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Combined Sewer Overflow



More than 25% of this region has combined sewers.

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The Detroit River is an: Area of Concern (AOC)

Per 1987 amendments to the Great Lakes Water Quality Agreement between the U. S. and Canada.



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11 Beneficial Use Impairments (BUIs) were originally identified to be associated with the Detroit River:

1. Restrictions on fish and wildlife consumption
2. Tainting of fish and wildlife flavor
3. Degradation of fish and wildlife populations
4. Fish tumors or other deformities
5. Bird and animal deformities or reproductive problems
6. Degradation of benthos
7. Restrictions on dredging activities
8. Restrictions on drinking water consumption or taste and odor problems
9. Beach closings
10. Degradation of aesthetic
11. Loss of fish and wildlife habitat

The two BUIs highlighted in red have been removed.

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9 Beneficial Use Impairments (BUIs) remain:

1. Restrictions on fish and wildlife consumption
2. Degradation of fish and wildlife populations
3. Fish tumors or other deformities
4. Bird and animal deformities or reproductive problems
5. Degradation of benthos
6. Restrictions on dredging activities
7. Beach closings
8. Degradation of aesthetic
9. Loss of fish and wildlife habitat



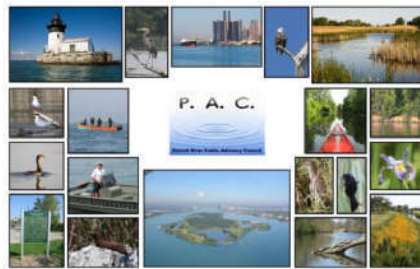
CSOs and contaminated sediments impede removal of many BUIs

Friends of the Detroit River is focusing on the two BUIs highlighted in red – fish and wildlife-related BUIs.

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TARGETS FOR REMOVAL OF THE LOSS OF FISH & WILDLIFE HABITAT AND DEGRADATION OF FISH & WILDLIFE POPULATIONS BENEFICIAL USE IMPAIRMENTS OF THE DETROIT RIVER AREA OF CONCERN



Prepared by:
Detroit River Public Advisory Council
Fish & Wildlife Technical Committee

Submitted to:
Michigan Department of Environmental Quality
Office of the Great Lakes
Lansing, Michigan

Originally Adopted: April 17, 2009
Revised: May 12, 2014

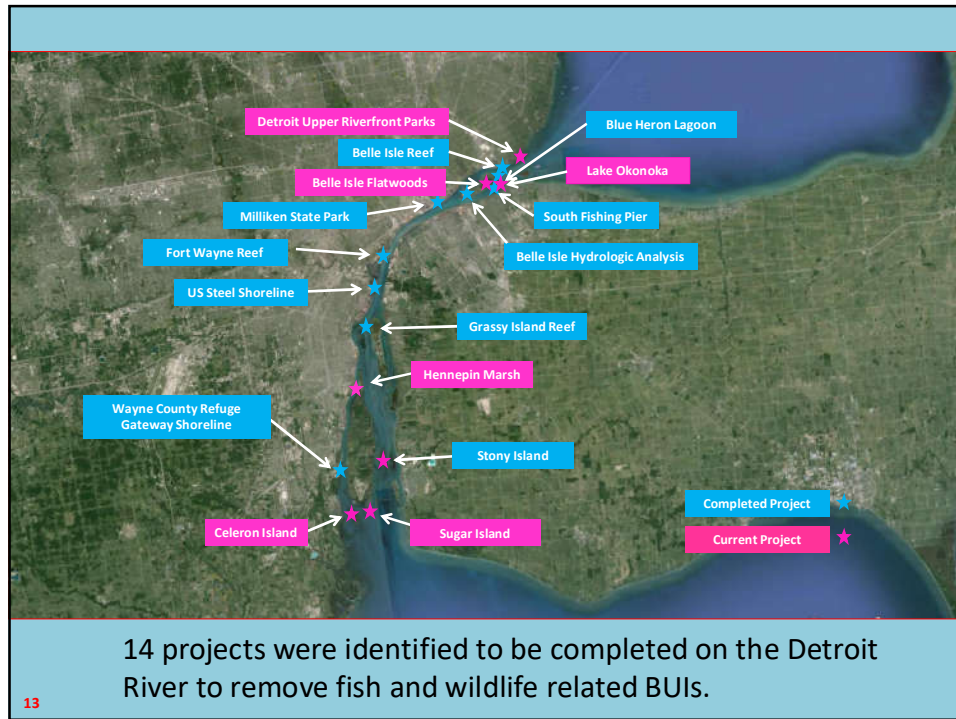
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A guidance document for removing fish and wildlife related BUIs was completed in May 2014.

Authors:

Tricia Blicharski, Friends of the Detroit River
Mary Bohling, Michigan Sea Grant and PAC Chair
Jeff Braunscheidel, Michigan Department of Natural Resources
Robert Burns, Detroit Riverkeeper and PAC Vice Chair
Suzan Campbell, Michigan Natural Features Inventory
Zach Cooley, Michigan Department of Natural Resources
Rose Ellison, U.S. Environmental Protection Agency
Paul Evanoff, SmithGroup JJR
Melanie Foote, Michigan Department of Environmental Quality, AOC Coordinator
Natalie Green, Detroit River Canadian Cleanup
Terry Heatlie, National Oceanic and Atmospheric Administration
Matt Herbert, The Nature Conservancy
Rick Hobria, Michigan Department of Environmental Quality
Tim Karl, City of Detroit, General Services Department
Richard Kik IV, Belle Isle Aquarium
Sam Lovall, Friends of the Detroit River
Bruce Manny, U.S. Geological Survey
Paul Max, City of Detroit Environmental Affairs
David A. Mifflid, Herpetological Resource and Management, LLC
Kurt Newman, U.S. Geological Survey
Doug Pearsall, The Nature Conservancy
Melvadean Pearson, The Belle Isle Conservancy
Meghan Price, ECT, Inc.



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Project Team



- **Funding Recipient/Contracting Owner:** Friends of the Detroit River (FDR)
- **Property Owner:** Various
- **Granting Agency:** National Oceanic and Atmospheric Association (NOAA)
- **Permitting Agency:** Michigan Department of Environment, Great Lakes and Energy (EGLE)
- **Permitting Agency:** United States Army Corps of Engineers (USACE)
- **Engineer:** Environmental Consulting & Technology, Inc. (ECT)



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Project Overview

Project Purpose

Maintain Recreational Benefits

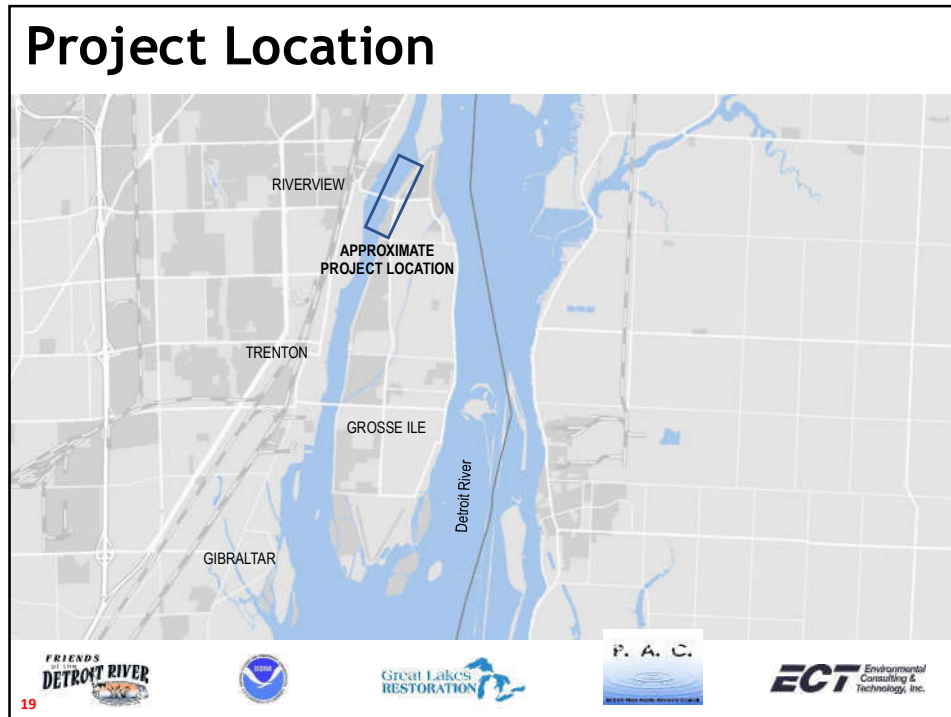
Restore Habitat

Address Degradation of Fish and Wildlife Populations BUI
Address Loss of Fish and Wildlife Habitat BUI



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Hennepin Marsh Aerial

North Hennepin Marsh



South Hennepin Marsh



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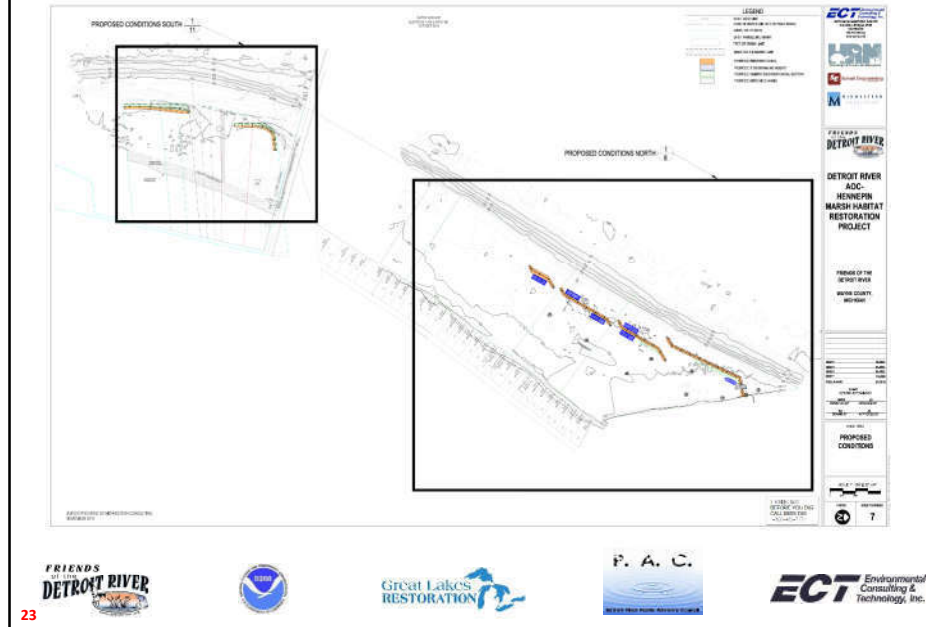
Project Summary

- Approximately 3,700 linear feet of habitat shoals/islands to be constructed in the Detroit River along Grosse Ile
- Native plantings on variety of shoals
- Approximately 6,000 ft² of fish spawning habitat to be constructed
- Approximately 5 habitat structures surrounding the north shoals to be constructed with an undetermined amount around the south shoals



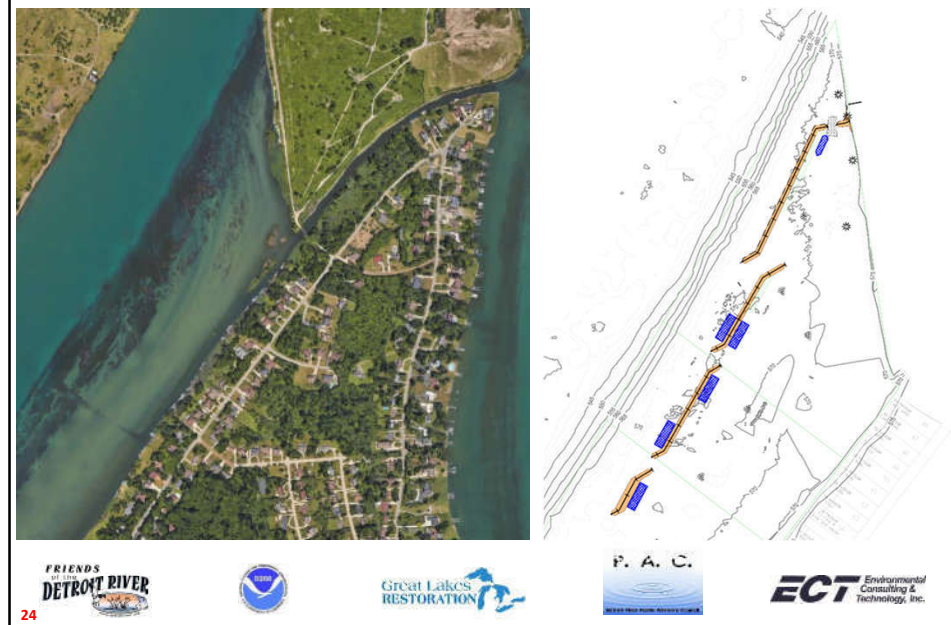
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Hennepin Marsh Design

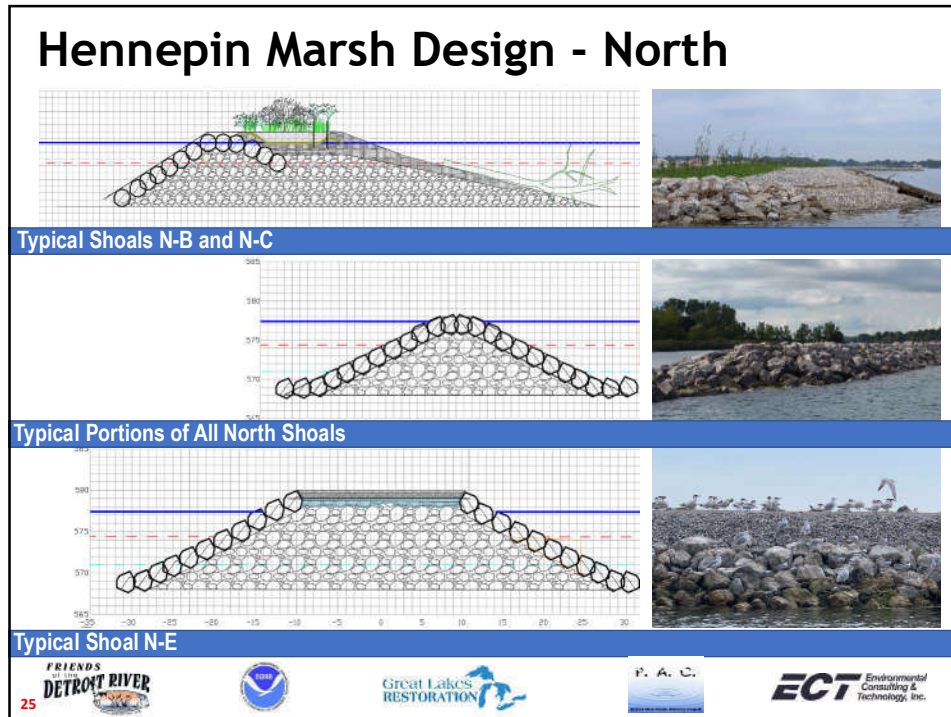


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Hennepin Marsh Design - North



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Hennepin Marsh Design - North



Typical Portions of all North Shoals



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Hennepin Marsh Design - North



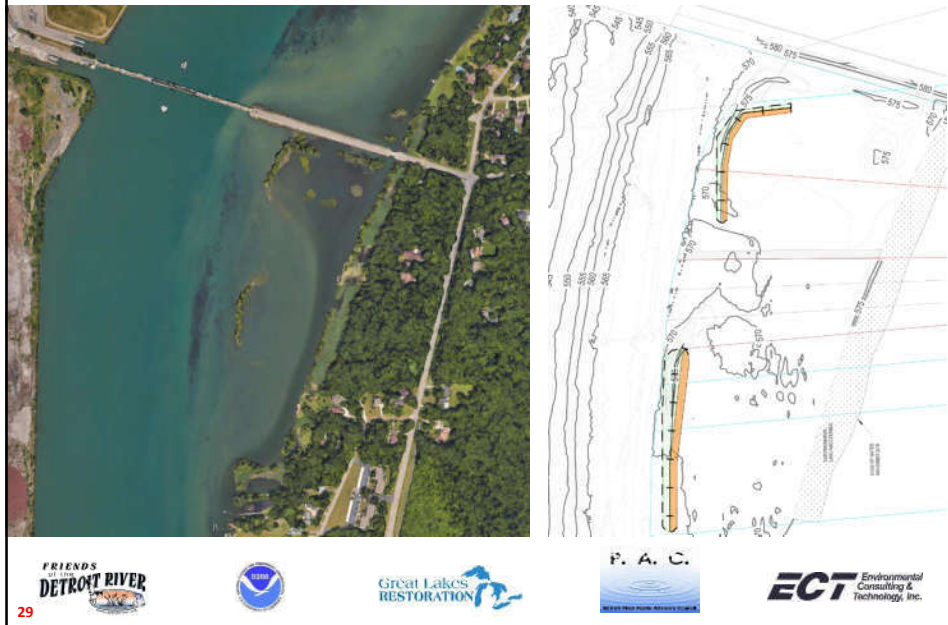
Typical View from Shore



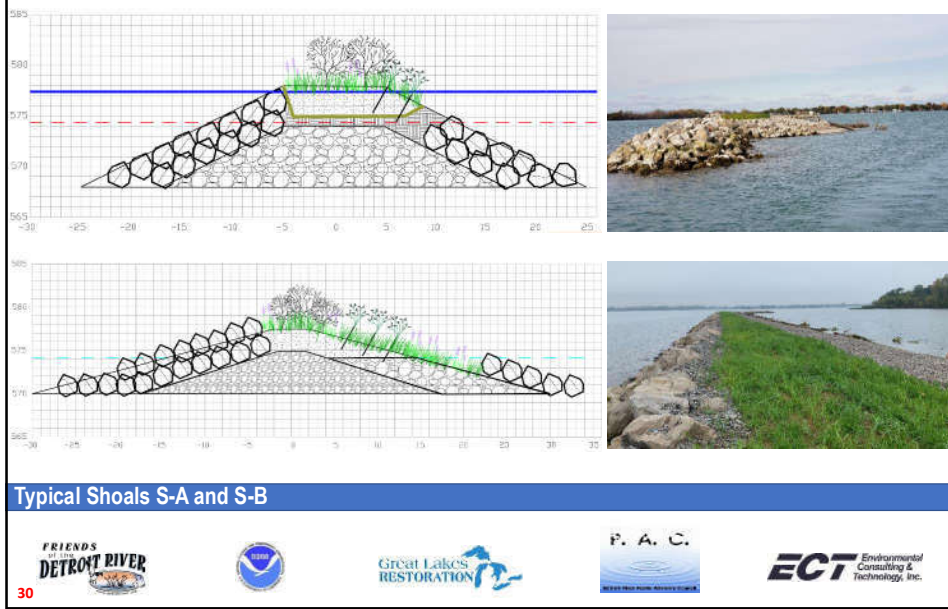
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Hennepin Marsh Design - South



Hennepin Marsh Design - South



Hennepin Marsh Design - South

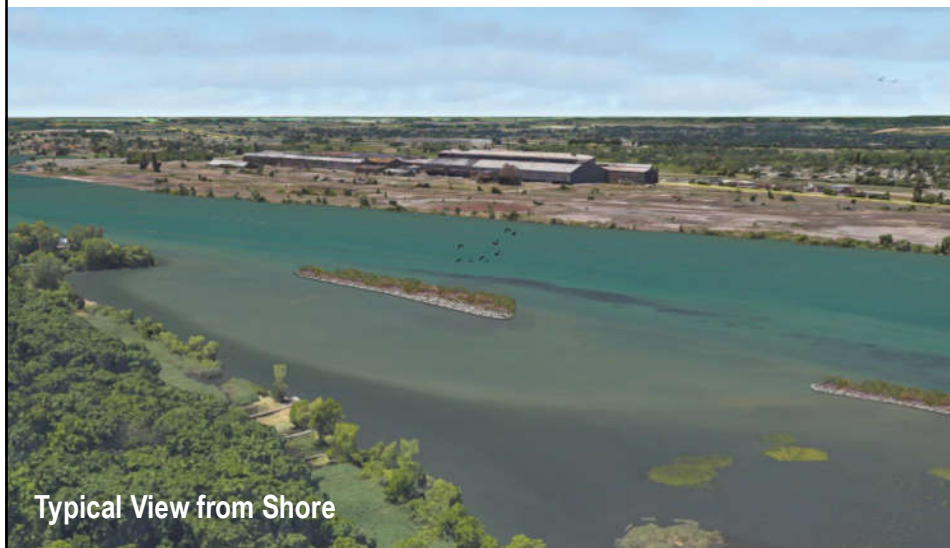


Typical South Shoals



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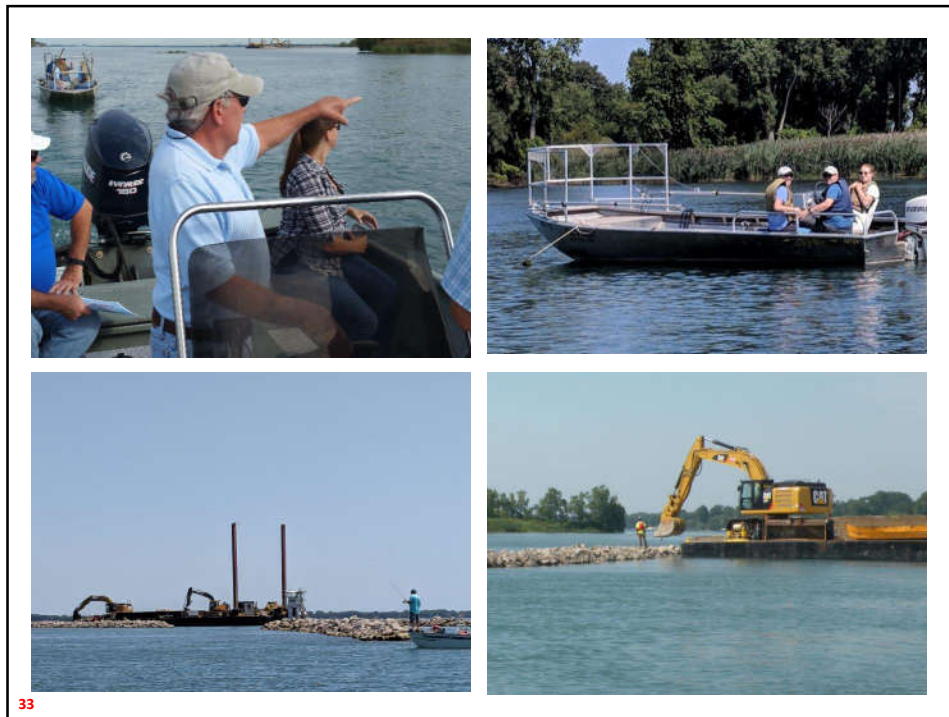
Hennepin Marsh Design - South



Typical View from Shore

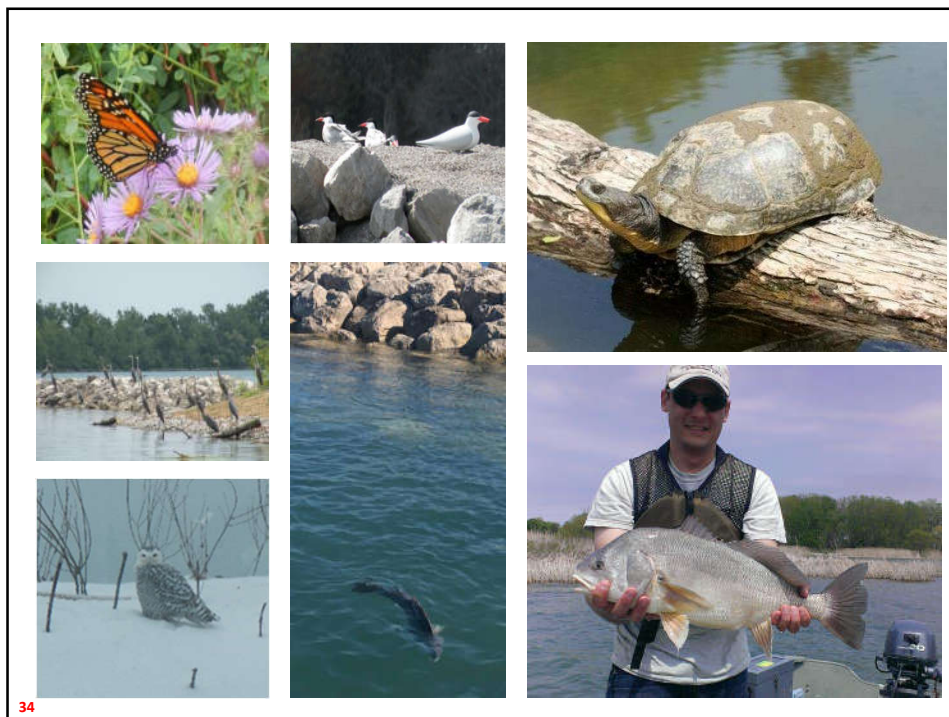


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Questions?

