

St. Louis River Area of Concern Remedial Action Plan Update

HTAC Meeting
March 1, 2017



Great Lakes RESTORATION

- Water Infrastructure Improvements for the Nation's bill authorizes GLRI at \$300 million a year through 2021
- Dedicates Great Lakes port maintenance funding
- Strengthens programs for restoring and protecting fish and wildlife.



The Great Lakes Restoration Initiative is Accelerating Great Lakes Protection and Restoration

2010: GLRI Action Plan I

2014: GLRI Action Plan II

2019

Cleaning up Great Lakes Areas of Concern

Preventing and Controlling Invasive Species

Reducing Runoff that Contributes to Algal Blooms

Restoring Habitat to Protect Native Species

Science-Based Adaptive Management

Legacy Contaminants



The result of many years of industrial and municipal pollution directly discharged to the St. Louis River. These discharges and their legacy are from the days prior to adoption of our current environmental protection laws and rules.

Legacy Habitat Loss

The result of many years of dredging and filling the estuary to create the Duluth-Superior Port. An estimate 7,000 acres of aquatic habitat was dredged and/or filled. These habitat alterations took place prior to the adoption of our current environmental protection laws and rules.



St. Louis River Area of Concern Remedial Action Plan

BUI 3 –Fish Tumors and Other Deformities
Removal Goal - 2017

Fish Sampling

2016
3 sample
periods over 6
years
(2011 – 2015)



Action Complete

Reference Site Determination

2014
Migratory
Population from
Western Lake
Superior



Action Complete

Residency Determination

2016
Stable Isotope
Method
Chosen



Action Complete

St. Louis River Area of Concern Remedial Action Plan

BUI 6 – Excess Loading of Nutrients & Sediments
Removal Goal - 2018

Perform Area-wide Water Quality Sampling and Analyses

2015
Paper
Published by
EPA-MED

Action
Complete

Perform Expanded Historical Data Analysis

2015
Paper
Published by
EPA-MED

Action
Complete

Paleolimnological Investigation

2016
Documented
Water Quality
Trends and
More

Action
Complete

Special Assessment of Pokegama, Allouez and Kimball Bay Condition

2017
Funded

In Progress

Assessment & Implementation Planning Nemadji River Basin

2017
Last of four
parts
underway

In Progress

Compilation of three projects - Complete

St. Louis River Area of Concern Remedial Action Plan

BUI 2 – Degraded Fish & Wildlife Populations
Removal Goal 2018

Bird Inventory
and Assessment

2016
Historic and
Current

Report
Complete
Tech Team
Review

Fish Population
Monitoring

2018
Agency
Support

Data Analysis
Complete
Tech Team
Review

Ruffe
Assessment

2017
Agency
Support

Report in
Final Phase
Tech Team
Review

Small Aquatic
Mammal Survey

2016
Estuary
compared
to Reference
Site

Report
Complete

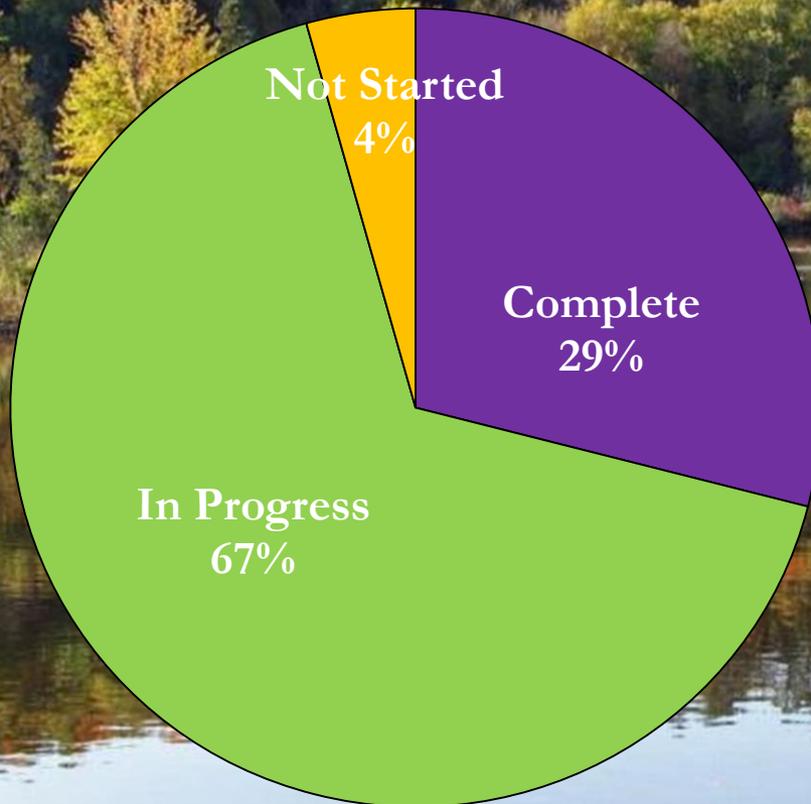
Piping Plover
Habitat/Naviga-
tional Dredge
Material/Beach
Nourishment

2018
Funding
underway

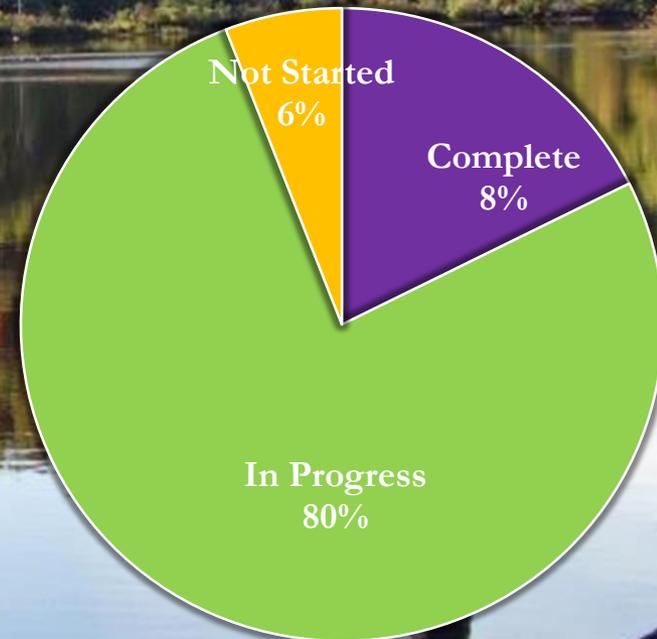
Site Feasibility
In Progress

Remedial Action Plan Progress

2016



2015



Sturgeon Natural Reproduction Documented



MDNR



FDL 2015



USFWS

Piping Plover Spotted in the past 4 years



Meeting population targets for Walleye and Muskie



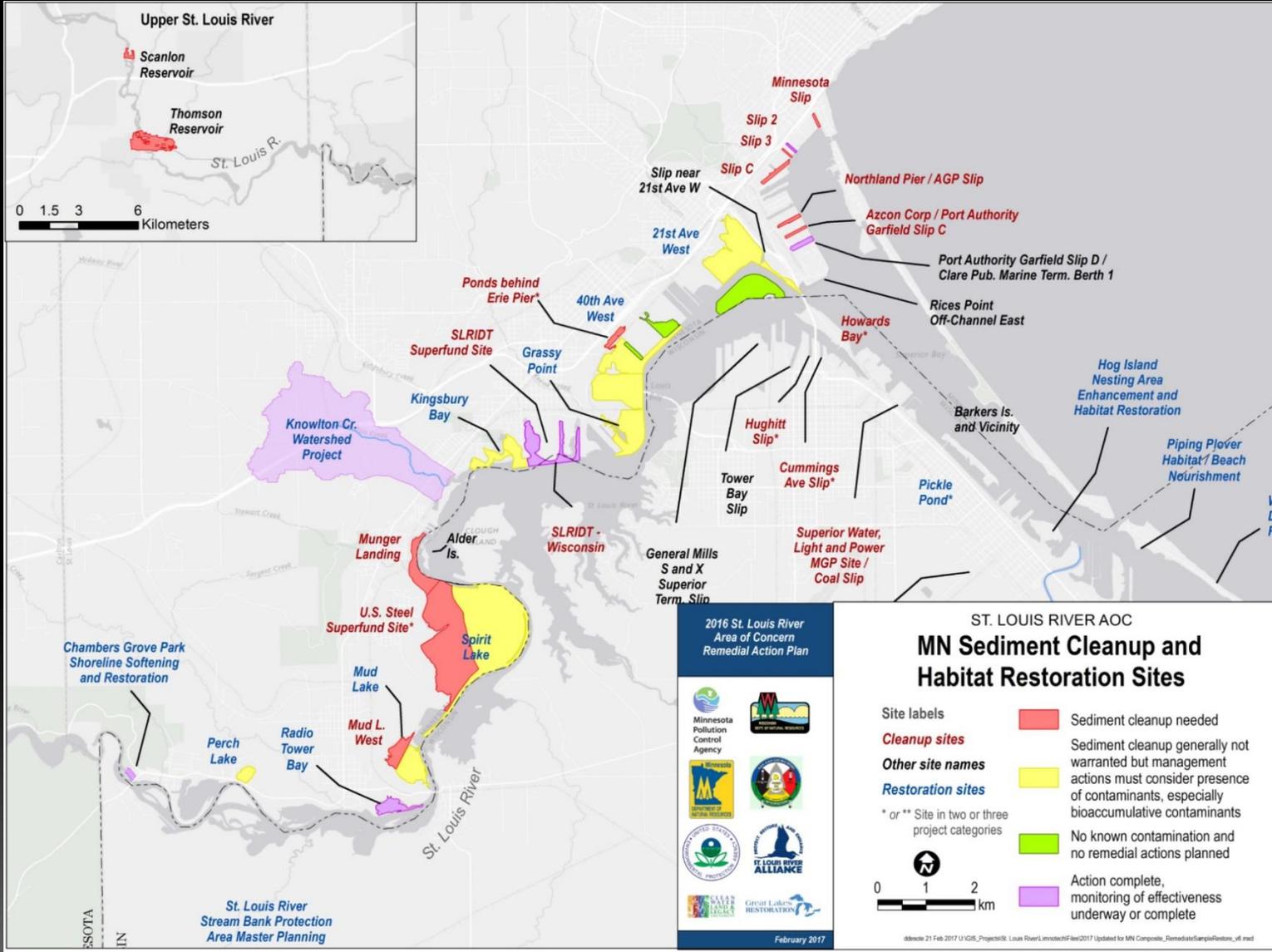
Wild Rice Seeding in the SLRAOC is on target



Aesthetic Beauty and Recreational Use

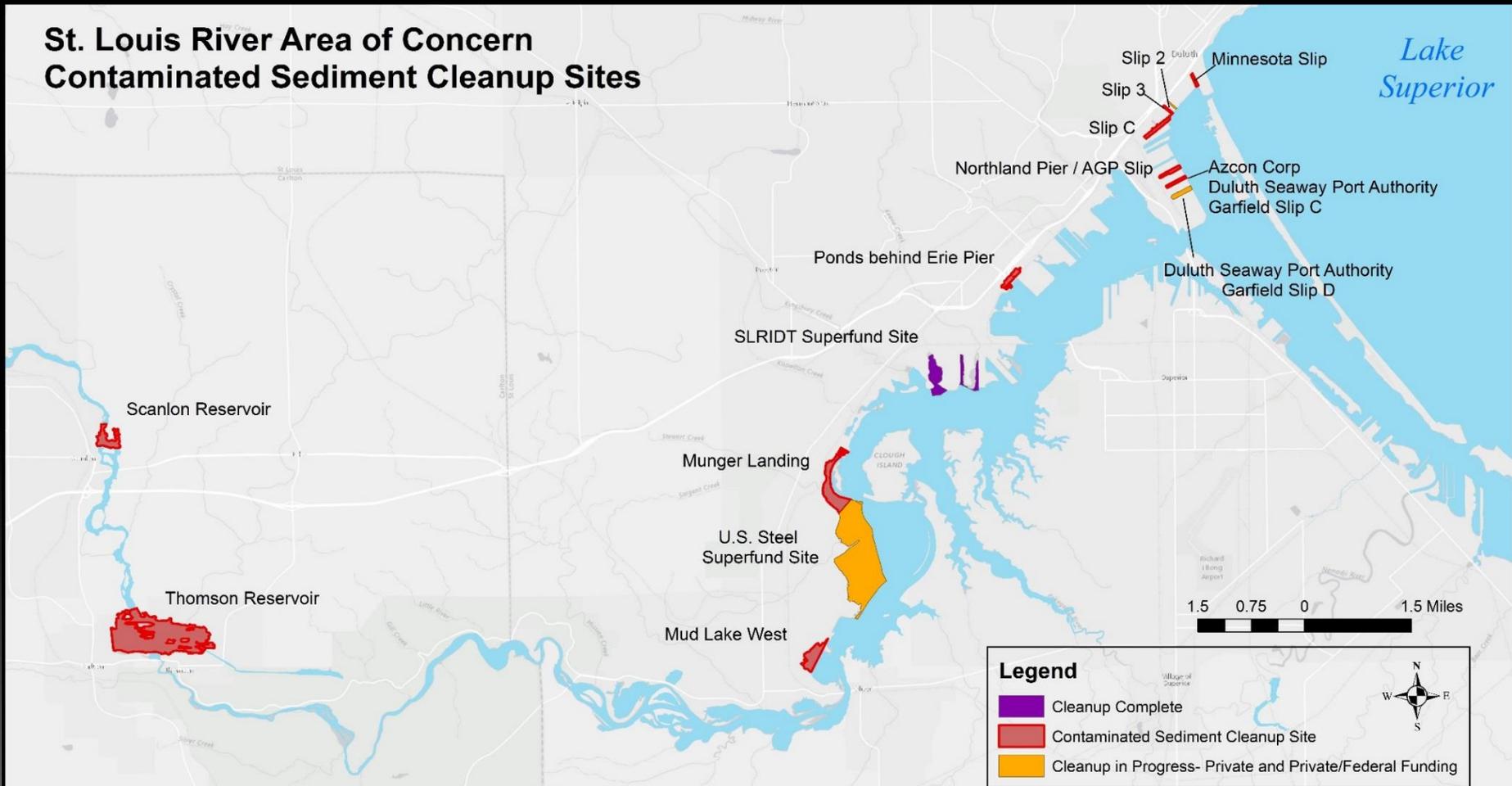
Major Actions

St. Louis River Area of Concern - Remedial Action Plan

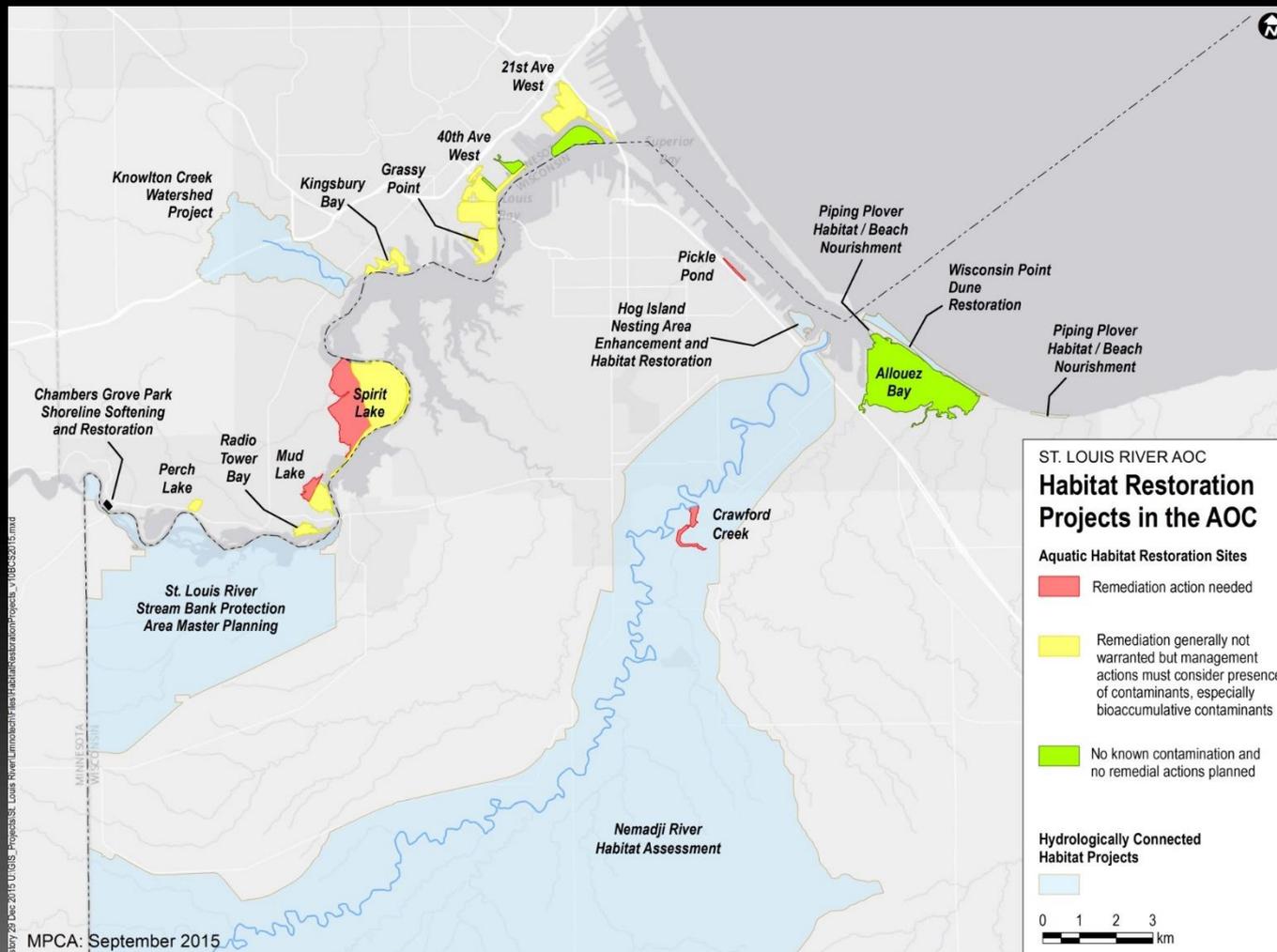


St. Louis River Area of Concern Remedial Action Plan

Minnesota Contaminated Sediment Clean Up - Status



St. Louis River Area of Concern Remedial Action Plan Habitat Restoration Sites



Major Minnesota Actions 2017-2020

Contaminated Sediment

GLLA-Bonding Projects

- Minnesota Slip – In Design
- Slip 3 – FS
- Slip C – FS
- Northland Pier/ AGP Slip - FS
- Azcon/DSPA/Garfield Slip C - FS
- Ponds Behind Erie Pier - FS
- Munger Landing - FS
- Mud Lake West - FS
- Thomson Reservoir - FS
- Scanlon Reservoir - FS

Non-Capital Budget Sites

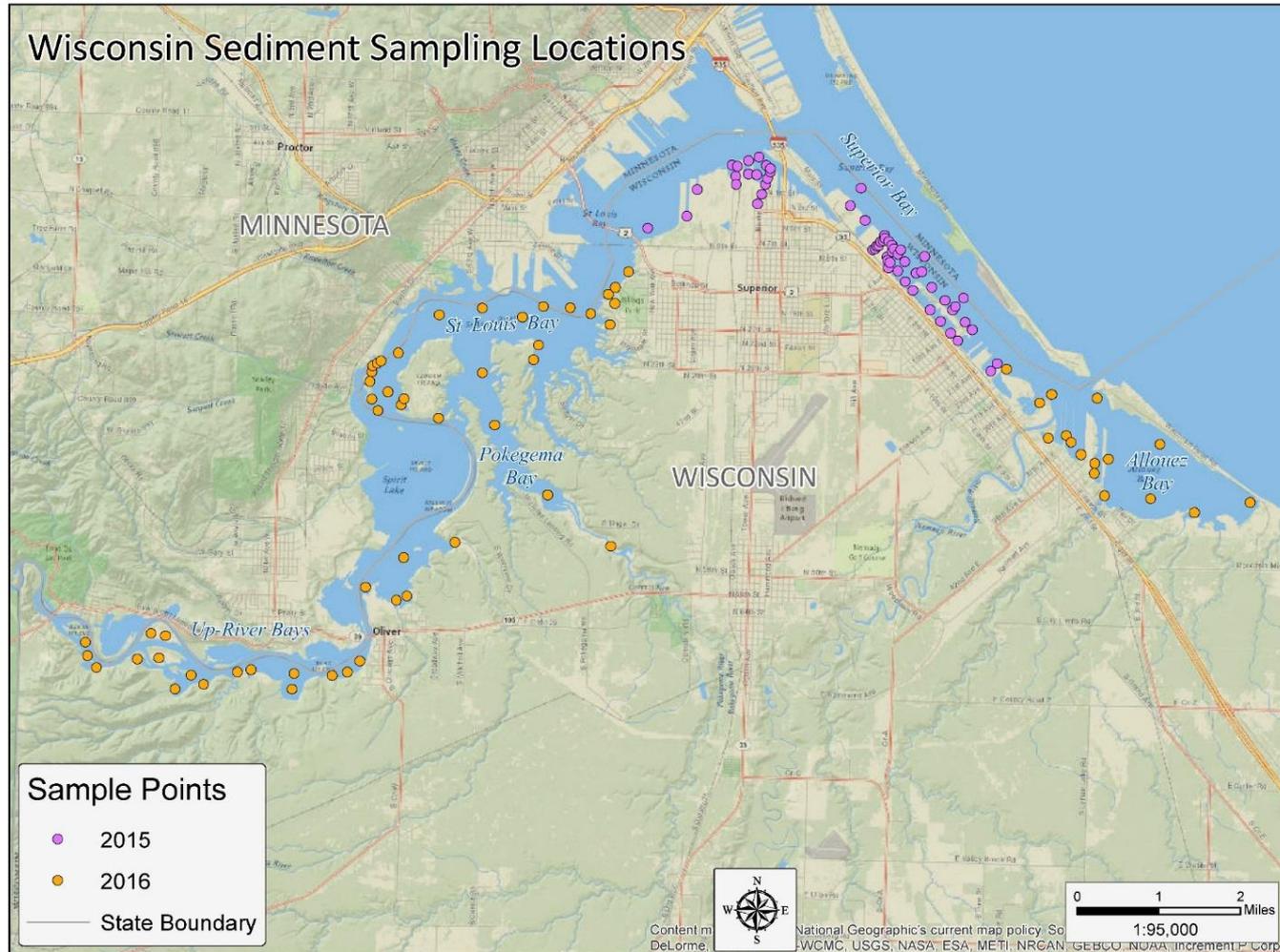
- ~~Slip 2~~
- ~~DSPA Garfield Slip D~~
- US Steel Spirit Lake West

Habitat Restoration

- ~~Chambers Grove Park~~
- ~~Radio Tower Bay~~
- ~~Knowlton Creek~~
- ~~Mud Lake~~
- ~~Spirit Lake~~
- 40th Avenue West
- 21st Avenue West
- Kingsbury Bay
- Grassy Point
- Perch Lake
- US Steel Spirit Lake West

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2015-2016 WI Sediment Characterization – Assessment Underway

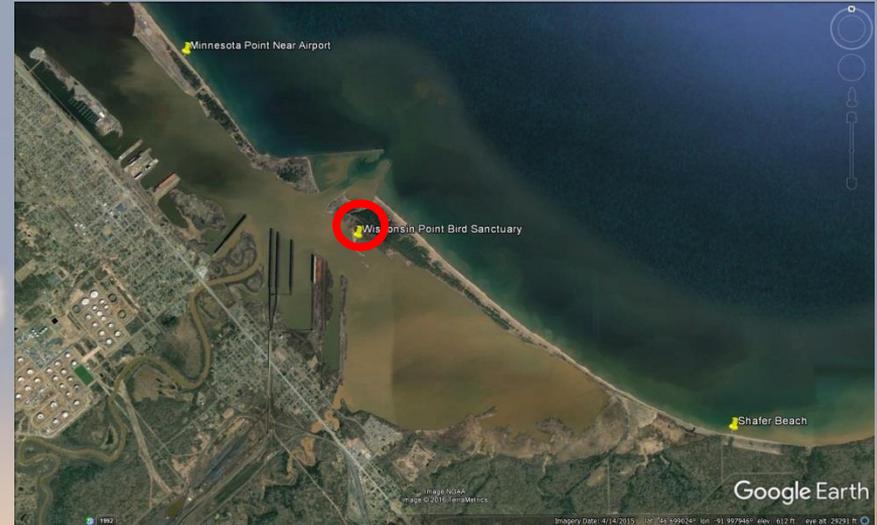


Major Wisconsin Actions 2017-2018

- Howard's Bay Remediation
- WI Sediment Characterization Assessment
- Pickle Pond Remediation & Restoration
- Piping Plover Nesting Habitat Restoration
- Wild Rice Restoration in Estuary
- Barkers Island Beach Restoration
- Fish Passage Culvert Assessment & Replacement
- WI Point Dune Restoration
- Allouez Bay Vegetation Restoration
- Allouez, Pokegama, Kimball Bay Condition Assessment
- Nemadji River Watershed Habitat Assessment
- Bacterial Source Tracking Assessment

Piping Plover Nesting Habitat Restoration WI Point Bird Sanctuary

- Site Recommended by Piping Plover Experts
- Is Site Viable for Beach Nourishment-Underway
- Is Sandy Dredge Material Available -Underway
- If Viable – Target Design 2017 & Construct 2018



St. Louis River Area of Concern Remedial Action Plan

Contacts

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