St. Louis River Area of Concern

2015 Progress Report

Prepared by the St. Louis River Alliance, a partner of the Area of Concern Coordination Team which includes:

Minnesota Pollution Control Agency
Minnesota Department of Natural Resources
Wisconsin Department of Natural Resources
Fond du Lac Band of Lake Superior Chippewa

Funded by:

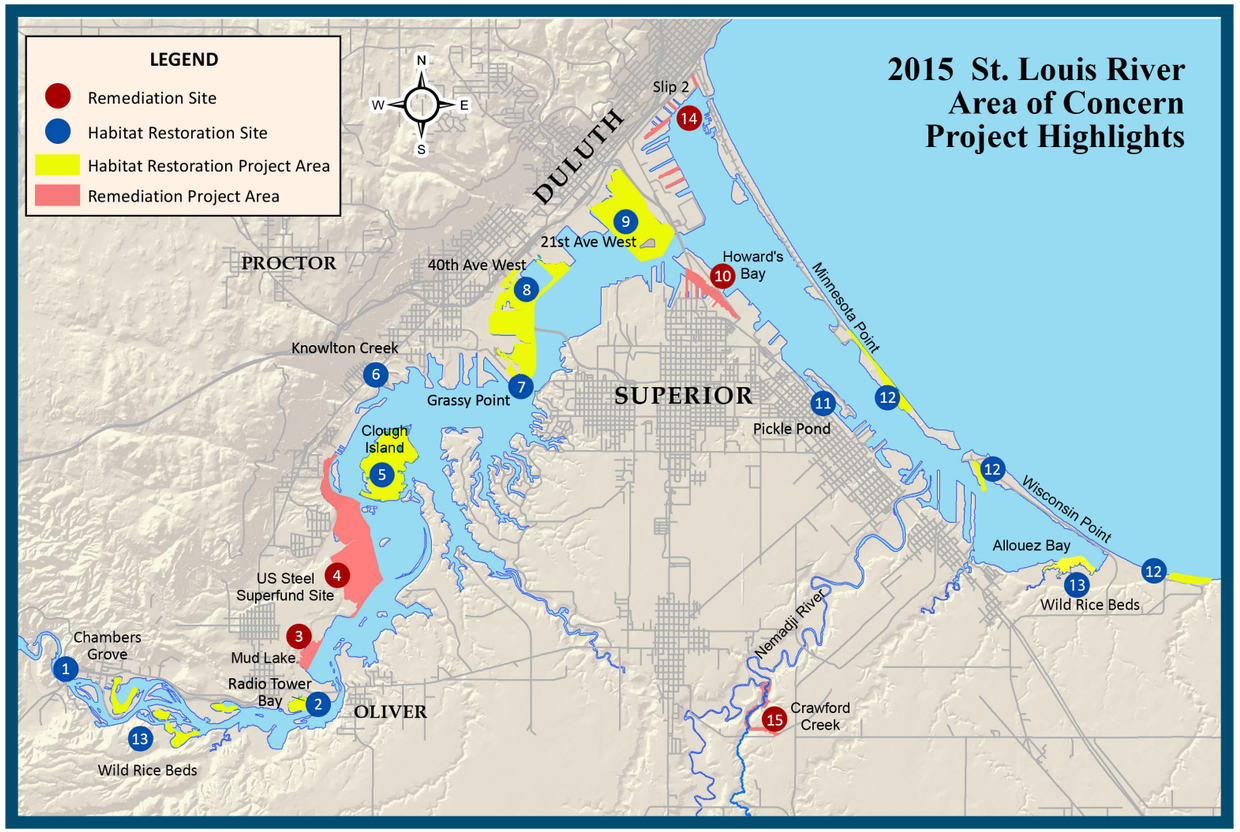
Area of Concern 2015 Highlights

Implementing the Remedial Action Plan

The St. Louis River Area of Concern Remedial Action Plan (2013) is a road-map to remove nine impairments listed for the river. State, Tribal, and Federal agencies, nonprofit organizations, and research institutions are working together to clean up contaminated areas and restore habitat that was lost due to historical impacts before regulations better protected our water resources. The goal is to remove these impairments and delist the St. Louis River Area of Concern (AOC) by 2025.

Current projects in the St. Louis River AOC:

- Habitat restoration engineering designs and construction specifications are being developed for Grassy Point 7, 40th Ave W 8 ,21st Ave W 9, Pickle Pond 11, and Shafer Beach Nourishment /Piping Plover Project 12. The project designs are funded by GLRI, MN Clean Water Legacy, and WDNR.
- Habitat on Clough Island 5 is being enhanced through conifer planting and invasive species control, and wild rice planting. 13
- Piping Plover habitat restoration 12, public outreach, and beach monitoring is in its 4th year on Minnesota and Wisconsin Point. Piping Plovers are federally endangered shorebirds and are seen on these beaches but none have stayed to nest since the 1980's.
- Remediation projects are underway to characterize and clean up contaminated sediments in the estuary. Project sites include Mud Lake West 3, U.S. Steel Superfund Site 4, Crawford Creek 15, Howards Bay 10, and several other slips in the harbor, including slip 2. 14



Chambers Grove 1

The section of the St. Louis River between the Fond du Lac Dam and Highway 23 is designated as critical spawning area for Lake Superior migratory fish species including lake sturgeon, walleye and long-nose sucker. In the 1960s, Chambers Grove Park was developed within this section. The shoreline was stabilized and lined with metal piling and rock baskets, creating a "hardened" shoreline. A walkway and fishing piers were also constructed at that time. Recent floods damaged the pier and walkway. The City of Duluth has partnered with the St. Louis River AOC to restore the shoreline to a more natural condition and establish spawning habitat for these migratory fish species. The project will also improve recreational user access to the river.

The project is fully designed with plans for construction to begin in July 2015 and be completed by October 2015. The City of Duluth will improve Chambers Grove Park in 2016. The construction work is funded by the MN Legacy Amendment – Outdoor Heritage Fund and NOAA.

Radio Tower Bay 2

Phase 2 of the Radio Tower Bay project is underway and will be completed in Summer 2015. The project involves removing an estimated 115,000 cubic yards of wood waste and sediment. The restored bay will support a more diverse aquatic plant and macro-invertebrate community and enhanced sport fishing. The project is funded by the MN Legacy Amendment – Outdoor Heritage Fund and a NOAA Partnership grant.

Dredging Operations in Radio Tower Bay- Photo by MN DNR

Knowlton Creek 6

A 2-year project to restore and enhance Knowlton Creek and two smaller upstream tributaries to the St. Louis River will begin in Fall 2015. Knowlton Creek has been severely degraded by land use activities over the past few decades leading to increased stream flow and erosion during snow melt.

Restoration efforts will use Natural Channel Design techniques to create a more resilient channel and install in-stream structures to create riffles and pools for fish habitat. A water control project by the City of Duluth and the Spirit Mountain Recreation Authority will include a new pipeline using river water rather than chlorinated municipal water for snow-making and will further reduce sediment entering the creek with settling basins. The project is funded by the MN Legacy Amendment – Outdoor Heritage Fund and a National Fish and Wildlife Foundation-Save Our Great Lakes grant.

Wild Rice Restoration 13

St. Louis River AOC Partners completed a Wild Rice Restoration Implementation Plan for the estuary in 2014. Wild rice is valued as both a cultural and ecological resource that was once abundant in the St. Louis River estuary. It has been reduced to a few remnant stands over the past 50 years. The plan proposes to restore 250 acres of wild rice in the estuary by 2025. Restoration work includes seeding, vegetation management, and protection against herbivory (e.g., Canada geese, common carp). Restoration areas will be monitored yearly to judge success and inform future management decisions. This work will begin in September 2015.

In Wisconsin, AOC partners will seed 25 acres in a 3-year project starting in 2015. Exclosures will be installed around 10 of those acres after seeding. The Lake Superior National Estuarine Research Reserve's Rivers2Lake program will work with school groups to seed an additional 5 acres, for a total of 30 acres in Allouez Bay in 2015. Seeds purchased from the Fond du Lac Band will be used to plant five sites in the upper estuary totaling 160 acres.

These projects are funded through The National Fish and Wildlife Foundation – Sustain Our Great Lakes, USFW Great Lakes Coastal Program, Great Lakes Restoration Initiative Wisconsin Capacity Grant, MN Legacy Amendment – Outdoor Heritage Fund, and NOAA.

Measuring water clarity in a wild rice bed -Photo by Nick Yuknis

Clough Island 5

This summer, as part of the final year of the Clough Island Preservation & Restoration Land Acquisition National Coastal Wetlands Conservation grant from the US Fish and Wildlife Service, WDNR will be implementing further habitat restoration efforts including: controlling invasive honeysuckle and buckthorn on up to 81 acres and planting white pine, white spruce, and balsam fir on up to 12 acres. Additionally, the St. Louis River Alliance will coordinate a volunteer event in August 2015 to help plant wild rice seed over approximately 10 acres.

New for 2015: stlouisriverestuary.org is updated to include Area of Concern Projects!

www.stlouisriverestuary.org

the Stories and the Science

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AOC-Wide Beneficial Use Impairment Assessment Projects

Small Aquatic Mammal Survey

The Wisconsin DNR and University of Wisconsin Madison researches are conducting a study of small aquatic mammals. The study is designed to assess the relative abundance of beaver, otter, muskrat and mink in the AOC and at reference locations. Biologists are conducting aerial surveys to observe animal signs such as lodges, dams and slides. Biologists have also deployed trail cameras throughout the estuary and in reference locations. These data will be analyzed statistically to calculate the relative abundance of the mammals. The results of the 2-year study will be available in the summer of 2016.

A trail-cam captured this image of an otter
Photo by WDNR

Bacterial Source Tracking

The University of Wisconsin Superior – Lake Superior Research Institute and Wisconsin DNR are gaining more information about sources of bacteria at impaired beaches in the AOC. The study will help beach managers better understand bacteria sources through monitoring and supplemental DNA analysis of the bacteria. These data will be used to determine if the bacteria sources are originating from human waste or from animals. Samples will be collected during the 2015 and 2016 beach seasons.