



Lessard-Sams Outdoor Heritage Council

St. Louis River Restoration Initiative Phase 8
Laws of Minnesota 2021 Accomplishment Plan

General Information

Date: 03/27/2025

Project Title: St. Louis River Restoration Initiative Phase 8

Funds Recommended: \$2,024,000

Legislative Citation: ML 2021, First Sp. Session, Ch. 1, Art. 1, Sec. 2, subd. 5(l)

Appropriation Language: \$2,024,000 the first year is to the commissioner of natural resources to restore and enhance priority aquatic, riparian, and forest habitats in the St. Louis River estuary. Of this amount, up to \$500,000 is for an agreement with Minnesota Land Trust. A list of proposed restorations must be provided as part of the required accomplishment plan.

Manager Information

Manager's Name: Jeramy Pinkerton

Title:

Organization: Minnesota Department of Natural Resources

Address: 525 Lake Ave S #415

City: Duluth, MN 55802

Email: Jeramy.Pinkerton@state.mn.us

Office Number: (218) 302-3253

Mobile Number:

Fax Number:

Website:

Location Information

County Location(s): St. Louis.

Eco regions in which work will take place:

Northern Forest

Activity types:

Restore

Priority resources addressed by activity:

Forest

Habitat

Narrative**Abstract**

MNDNR's St. Louis River Restoration Initiative (SLRRI) is a collaborative program enhancing and restoring the St. Louis River estuary. This 12,000 acre estuary is a unique resource of statewide significance. SLRRI's vision for the estuary includes diverse, productive, and healthy aquatic and terrestrial ecosystems of the river and watershed. MNDNR and MN Land Trust's SLRRI Phase 8 will restore an additional 155 acres of priority aquatic, wetland, and forested habitat for important fish, game, and SGCN. To date, the OHF has supported approximately 661 acres of estuary habitat restoration, leveraging over \$23 million in federal funding.

Design and Scope of Work

The SLRRI Phase 8 will restore and enhance priority habitats in the St. Louis River estuary. With LOSHC support, SLRRI has successfully developed and implemented critical projects in the estuary since 2014. SLRRI employs a collaborative approach using a network of resource managers, researchers, and key stakeholders. As partners in the SLRRI, the MNDNR and MN Land Trust have effectively and efficiently restored wetland, stream and open water aquatic habitats while leveraging significant federal support.

Minnesota DNR will continue to restore and enhance 30 acres and 5,000 feet of priority habitats identified in the 2002 Lower St. Louis River Habitat Plan and 2019 St. Louis River Area of Concern (AOC) Remedial Action Plan (RAP), with an emphasis on the following:

Mud Lake is a warm water fish and migratory bird restoration project. Mud Lake is an estuarine bay and coastal wetland complex. It is degraded by legacy wood waste and a railroad causeway. The SLRRI team will work in close coordination with the MPCA, USEPA, and the City of Duluth to restore ecological function to support birds and aquatic life.

Perch Lake is a shallow sheltered bay that is isolated from the Estuary by Minnesota Highway 23. The goal is to restore a hydrologic connection with the Estuary to improve water quality, promote diverse aquatic vegetation, and establish recreational boat access.

Kingsbury, Lower Knowlton, and Keene Creeks are trout stream restoration projects. These multi-partnered projects will enhance the creeks' connection to their floodplains, reduce sedimentation, restore trout habitat, remove barriers, and increase resiliency of estuary restoration efforts currently being completed with earlier OHF appropriations.

MN Land Trust will expand the work of SLRRI and begin restoration of avian habitat for globally and regionally important bird guilds in the St. Louis River Estuary Important Bird Area (SLR IBA). The first phase of the effort includes restoration of 100 acres of forest for land birds and 25 acres of coastal wetlands for marsh birds:

Forest restoration will be conducted in priority degraded forest stands in the City of Duluth. Restoration will improve forest health of the stands, while maximizing the benefit to migrating and breeding birds. Proposed work consists of thinning, controlling invasive species, and planting native trees and understory plants with species and

patterns that maximize bird habitat.

Hemi-marsh restoration will be conducted in coastal wetlands within the St. Louis River Natural Area in Duluth. Improvements will restore habitat conditions to be more attractive to migrating and breeding birds and other native wildlife communities. Proposed work includes recreating the historic ratio of water interspersed with emergent vegetation in locations now dominated by invasive species such as narrow-leaf cattail or reed canary grass.

MNDNR and MN Land Trust will continue to closely coordinate with SLRRI partners to integrate, prioritize, and develop additional fish and wildlife restoration projects to improve fish and wildlife populations throughout the estuary and surrounding watersheds. Work on project sites previously identified within the SLRRI program area will continue.

How does the plan address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species?

The 12,000-acre St. Louis River estuary, at the head of Lake Superior, is a unique Minnesota resource. It is the largest source of biological productivity to Lake Superior as well as the world's largest freshwater shipping port. The combination of extensive wetlands, warmer waters, and the connection to Lake Superior resulted in it becoming the primary source of productivity for the western Lake Superior fishery and a critical flyway for waterfowl and other migratory birds. Nearly two-thirds of the estuary's native wetlands have been altered, eliminated, or impaired as a result of historic impacts of dredging, filling, and waste disposal associated with industrial activities. Although economic uses in the industrialized portion of the Estuary continue, many of the historic problems associated with waste disposal have been addressed through the Clean Water Act and subsequent actions. The proposed projects represent an opportunity to balance economic activities, while restoring the negative impacts of historic uses. Additionally, restorations will directly benefit SGCN and other species by improving habitat quality and quantity in strategic locations to maximize benefits to populations.

As the Outdoor Heritage Fund's 2009 25-year framework states, "Success in conservation will depend highly on leveraging traditional and other sources of conservation funding with available OHF funds and coordinating efforts with conservation partners." The proposed project is integrated with local, state, federal, tribal, and non-government partners that have worked together to advance projects and secure non-OHF funding of approximately 50% of the total cost. Minnesota's legacy funds are an integral part of the overall strategy to restore the health of this unique resource.

Describe how the plan uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

Science-based targeting is used to identify, design, monitor, and ensure the quality of all SLRRI projects. This comes in the form of comprehensive planning, team-lead project development, and partnering with researchers and subject matter experts.

The MNDNR worked with many local, state, tribal, and federal resource professionals as well as stakeholders to develop the Habitat Plan, a comprehensive science-based plan for protecting, restoring, and managing the estuary's

fish and wildlife habitat. Partners developed the Habitat Plan to guide and prioritize restoration work, and it has been the foundation of the SLRRI.

While developing a Remedial Action Plan for the estuary, AOC partners used a source-stressor model to identify legacy impairments to the Estuary. The model identified conservation targets, stresses limiting those targets, and recommended actions to address the source of the stress. All project areas supported by Great Lakes Restoration Initiative funding also require the development of a Quality Assurance Project Plan to further ensure successful outcomes of the conservation actions.

Restoration Site Teams (RSTs) are developed for each implementation project to identify site-specific restoration targets and objectives. Natural resource managers, ecologists, biologists, and other partners associated with the estuary examine conceptual restoration project alternatives and assess and evaluate habitat benefits and trade-offs between conceptual designs using both qualitative and quantitative measures of habitat value. Site-specific habitat needs and opportunities are also evaluated in the context of Estuary-wide restoration objectives and planned or completed projects. Knowledge transfer from previously completed OHF-funded projects is facilitated in RSTs by engaging local resource experts on multiple SLRRI projects.

Scientists from University of Minnesota, National Oceanic and Atmospheric Administration, U.S. Environmental Protection Agency, U.S. Fish & Wildlife Service, MNDNR, and MPCA continue to monitor and evaluate the Estuary's fish and wildlife populations and habitat to prioritize restoration projects, model expected outcomes of restoration alternatives, and evaluate restoration outcomes.

Which two sections of the Minnesota Statewide Conservation and Preservation Plan are most applicable to this project?

H5 Restore land, wetlands and wetland-associated watersheds

H6 Protect and restore critical in-water habitat of lakes and streams

Which two other plans are addressed in this program?

Lower St. Louis River Habitat Plan

Minnesota's Wildlife Action Plan 2015-2025

Which LSOHC section priorities are addressed in this program?

Northern Forest

Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas

Outcomes

Programs in the northern forest region:

Healthy populations of endangered, threatened, and special concern species as well as more common species ~
Program monitoring conducted by others will evaluate the response of indicator species at project sites.

Does this program include leveraged funding?

Yes

Explain the leverage:

To date, the SLRRI program has secured \$20.5M in OHF funding and almost \$23M in non-OHF funds, a ratio of 53% in non-OHF funds.

MNDNR has secured \$500K from the St. Louis River Interlake/Duluth Tar NRDA settlement towards the construction of Kingsbury Creek restoration.

MNDNR has entered into a partnership agreement with the USACE that commits \$520,000 in federal funds for the design of the Mud Lake project. MNDNR is also working in partnership with the City of Duluth and GLRI/USEPA to align Federal and City contributions to the completion of the Mud Lake, Keene Creek, and Lower Knowlton Creek Projects.

MN Land Trust and the City of Duluth have received \$65k in federal funds for avian habitat restoration in forested areas of the Kingsbury Creek watershed.

The MNDNR and MN Land Trust have completed projects with many different agencies and organizations, who all share the goals of the SLRRI. The MPCA provides management support and technical expertise. The USEPA, NOAA, USFWS, USACE, and other federal and tribal agencies have provided funding, technical expertise, or in-kind services.

Per MS 97A.056, Subd. 24, Please explain whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.

Not applicable

Non-OHF Appropriations

Year	Source	Amount
2014	US Army Corps of Engineers Partnership - Chambers Grove Restoration	\$130,000
2017	Natural Resources Damages Assessment - Kingsbury Bay/Creek Restoration	\$1,275,000
2017	Great Lakes Restoration Initiative - Kingsbury Bay, Grassy Point, Perch Lake Restoration	\$440,000
2019	Great Lakes Restoration Initiative - Perch Lake Restoration	\$400,000
2020	Great Lakes Fish and Wildlife Restoration Act - Interstate Island Restoration	\$79,000

2020	USFWS Coastal Program Funds - Interstate Island Restoration	\$200,000
2018	National Fish & Wildlife Foundation Save Our Great Lakes - Grassy Point Revegetation	\$95,192
2018	Great Lakes Restoration Initiative FWS AOC - Grassy Point Revegetation	\$75,000
2018	USFWS Coastal Program Funds - Grassy Point Revegetation	\$94,500
2015	NOAA Restoration Partnership - Chambers Grove Restoration	\$400,000
2013	Natl Fish & Wildlife Foundation Sustain Our Great Lakes - Knowlton Creek Restoration	\$400,000
2014	US Army Corps of Engineers Partnership - Knowlton Creek Restoration	\$122,500
2014	MN Clean Water Fund - Knowlton Creek Restoration	\$227,500
2015	Great Lakes Restoration Initiative - Knowlton Creek Restoration	\$700,000
2011	Great Lakes Restoration Initiative - Radio Tower Bay Restoration Phase I	\$665,000
2013	Great Lakes Restoration Initiative - Radio Tower Bay Restoration Phase II	\$1,500,000
2020	NOAA Coastal Program Funds - Interstate Island Restoration	\$15,000

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended?

St. Louis River habitat restoration projects are designed to be maintained by the natural processes that define these systems. Barring catastrophic events, these projects will not require future adjustment, or clean-up.

MNDNR Duluth Area Fisheries manages the Lower St. Louis River through regular monitoring, assessment, and regulation. They partner with Wisconsin DNR, MN Pollution Control Agency, USEPA Great Lakes Toxicology and Ecology Lab, and NOAA's National Estuarine Research Reserve in the effort to monitor and address issues associated with the long-term maintenance of habitat restoration outcomes in the estuary.

Forest habitat restorations will be done on publically accessible lands owned by the City of Duluth. Priority is given to actions within designated Duluth Natural Areas. The City Natural Resources program will monitor and maintain restoration and enhancement projects to meet natural resources management plan objectives.

Healthy and robust native plant communities are resistant to invasion by exotic species. If invasive species successfully establish on a site they can disrupt the food web of the native community and result in reduced populations of desirable native species. Restoration of native plant communities will inhibit the establishment of invasives, and MNDNR is partnered with the other entities described above to control them.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
2022-25	GLRI (USEPA)	Post restoration monitoring (AOC sites only)	-	-
All years	Fish & Wildlife Game & Fish fund	Regular Surveys/monitoring	-	-
All years	WDNR, MPCA, USEPA, NOAA	Long-term monitoring at specific sites	-	-
All years	City of Duluth Natural Resource Program	Long-term monitoring of forested project sites	Forest treatment, Invasive species control as needed	-

Activity Details

Requirements

If funded, this program will meet all applicable criteria set forth in MS 97A.056?

Yes

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program?

Yes

Is the restoration and enhancement activity on permanently protected land per 97A.056, Subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 or on lands to be acquired in this program?

Yes

Where does the activity take place?

County/Municipal

Public Waters

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program, either by the proposer or the end owner of the property, outside of the initial restoration of the land?

No

Timeline

Activity Name	Estimated Completion Date
MLT Coastal Marsh Restorations	June 2025
MLT Northern Forest Restorations	June 2025
Project prioritization, integration, and development; site-specific coordination	June 2026
Kingsbury Creek – Reduce sedimentation, restore cold-water fisheries habitat and enhance recreational fishing	December 2022
Mud Lake – Enhance hydrologic connection, remove legacy wood waste and restore ecological functions	December 2023
Keene Creek – Reduce sedimentation, restore cold-water fisheries habitat and enhance recreational fishing	December 2022
Lower Knowlton Creek – Remove fish passage barrier and restore a natural stream channel	December 2023

Date of Final Report Submission: 11/01/2026

Availability of Appropriation: Subd. 7. Availability of Appropriation

Money appropriated in this section may not be spent on activities unless they are directly related to and necessary for a specific appropriation and are specified in the accomplishment plan approved by the Lessard-Sams Outdoor Heritage Council. Money appropriated in this section must not be spent on indirect costs or other institutional overhead charges that are not directly related to and necessary for a specific appropriation. For acquiring real property, the amounts in this section are available until June 30, 2025. Money for restoration or enhancement is available until June 30, 2026. Money for restoration and enhancement of land acquired with an appropriation in this article is available for four years after the acquisition date with a maximum end date of June 30, 2029. If a project receives at least 15 percent of its funding from federal funds, the time of the appropriation may be extended to equal the availability of federal funding to a maximum of six years if the federal funding was confirmed and included in the original approved draft accomplishment plan. Money appropriated for acquiring land in fee title may be used to restore, enhance, and provide for public use of the land acquired with the appropriation. Public-use facilities must have a minimal impact on habitat in acquired lands.

Budget

Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan.

Grand Totals Across All Partnerships

Item	Funding Request	Leverage	Leverage Source	Total
Personnel	\$460,000	-	-	\$460,000
Contracts	\$1,301,400	\$1,085,000	GLRI, NRDA, GLRI	\$2,386,400
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	\$1,100	-	-	\$1,100
Professional Services	\$187,000	-	-	\$187,000
Direct Support Services	\$71,300	-	-	\$71,300
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$2,700	-	-	\$2,700
Supplies/Materials	\$500	-	-	\$500
DNR IDP	-	-	-	-
Grand Total	\$2,024,000	\$1,085,000	-	\$3,109,000

Partner: MN Land Trust

Totals

Item	Funding Request	Leverage	Leverage Source	Total
Personnel	\$110,000	-	-	\$110,000
Contracts	\$350,000	\$65,000	GLRI	\$415,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	\$100	-	-	\$100
Professional Services	\$7,000	-	-	\$7,000
Direct Support Services	\$29,700	-	-	\$29,700
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$2,700	-	-	\$2,700
Supplies/Materials	\$500	-	-	\$500
DNR IDP	-	-	-	-
Grand Total	\$500,000	\$65,000	-	\$565,000

Personnel

Position	Annual FTE	Years Working	Funding Request	Leverage	Leverage Source	Total
Restoration Staff	0.25	4.0	\$110,000	-	-	\$110,000

Partner: MN DNR

Totals

Item	Funding Request	Leverage	Leverage Source	Total
Personnel	\$350,000	-	-	\$350,000
Contracts	\$951,400	\$1,020,000	NRDA, GLRI	\$1,971,400
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	\$1,000	-	-	\$1,000
Professional Services	\$180,000	-	-	\$180,000
Direct Support Services	\$41,600	-	-	\$41,600
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	-	-	-	-
DNR IDP	-	-	-	-
Grand Total	\$1,524,000	\$1,020,000	-	\$2,544,000

Personnel

Position	Annual FTE	Years Working	Funding Request	Leverage	Leverage Source	Total
EWR Restoration Consultant	0.2	3.0	\$80,000	-	-	\$80,000
EWR AOC Coordinator	0.3	3.0	\$110,000	-	-	\$110,000
FAW OAS	0.7	3.0	\$160,000	-	-	\$160,000

Amount of Request: \$2,024,000

Amount of Leverage: \$1,085,000

Leverage as a percent of the Request: 53.61%

DSS + Personnel: \$531,300

As a % of the total request: 26.25%

Easement Stewardship: -

As a % of the Easement Acquisition: -

How will this program accommodate the reduced appropriation recommendation from the original proposed requested amount?

The Mud Lake and avian habitat restoration projects are prioritized and will receive most of the reduced appropriation. Remaining parcels (Kingsbury, Keene, and Lower Knowlton Creeks) remain on the list with a low (or \$0) estimated cost so staff time can be applied to advance them through the design process.

Describe and explain leverage source and confirmation of funds:

MNDNR secured \$500K from the St. Louis River Interlake/Duluth Tar NRDA settlement for Kingsbury Creek restoration and \$520k in federal GLRI funds for USACE design of the Mud Lake restoration.

MN Land Trust and the City of Duluth received \$65k in federal GLRI funds for avian forest habitat restoration.

Personnel

Has funding for these positions been requested in the past?

Yes

Contracts

What is included in the contracts line?

MNDNR budget: contracts for engineering and design, construction, and construction administration and quality control oversight

MLT budget: contracts for marine construction, forest treatment, tree planting and invasive species control.

Travel

Does the amount in the travel line include equipment/vehicle rental?

No

Explain the amount in the travel line outside of traditional travel costs of mileage, food, and lodging

n/a

I understand and agree that lodging, meals, and mileage must comply with the current MMB Commissioner Plan:

Yes

Direct Support Services

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program?

MNDNR Process: Used Direct and Necessary calculator provided by DNR OHF staff.

MLT Process: In a process that was approved by the DNR on March 17, 2017, we determined our direct support services rate to be 27%. The rate represents the relationship of indirect costs to direct costs and is fully explained in materials submitted to the DNR. The calculations are based on the most recent audited financial statements that were available at the time. We will apply the approved rate to personnel expenses funded by the grant.

Other Equipment/Tools

Give examples of the types of Equipment and Tools that will be purchased?

Boat rental, drone rental, GPS rental, camera or other AV equipment rental, or other specialized equipment.

Federal Funds

Do you anticipate federal funds as a match for this program?

Yes

Are the funds confirmed?

Yes

Is Confirmation Document attached?

[Yes](#)

Cash : \$585,000

Output Tables**Acres by Resource Type (Table 1)**

Type	Wetland	Prairie	Forest	Habitat	Total Acres
Restore	-	-	100	55	155
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-
Total	-	-	100	55	155

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	\$100,000	\$1,924,000	\$2,024,000
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-
Total	-	-	\$100,000	\$1,924,000	\$2,024,000

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	-	-	-	-	155	155
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	-	-	-	-	-
Total	-	-	-	-	155	155

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	-	\$2,024,000	\$2,024,000
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	-	-	-	-	-
Total	-	-	-	-	\$2,024,000	\$2,024,000

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	\$1,000	\$34,981
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	-	-	-	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	-	\$13,058
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-

Target Lake/Stream/River Feet or Miles

5000

Parcels

Parcel Information

Sign-up Criteria?

No

Explain the process used to identify, prioritize, and select the parcels on your list:

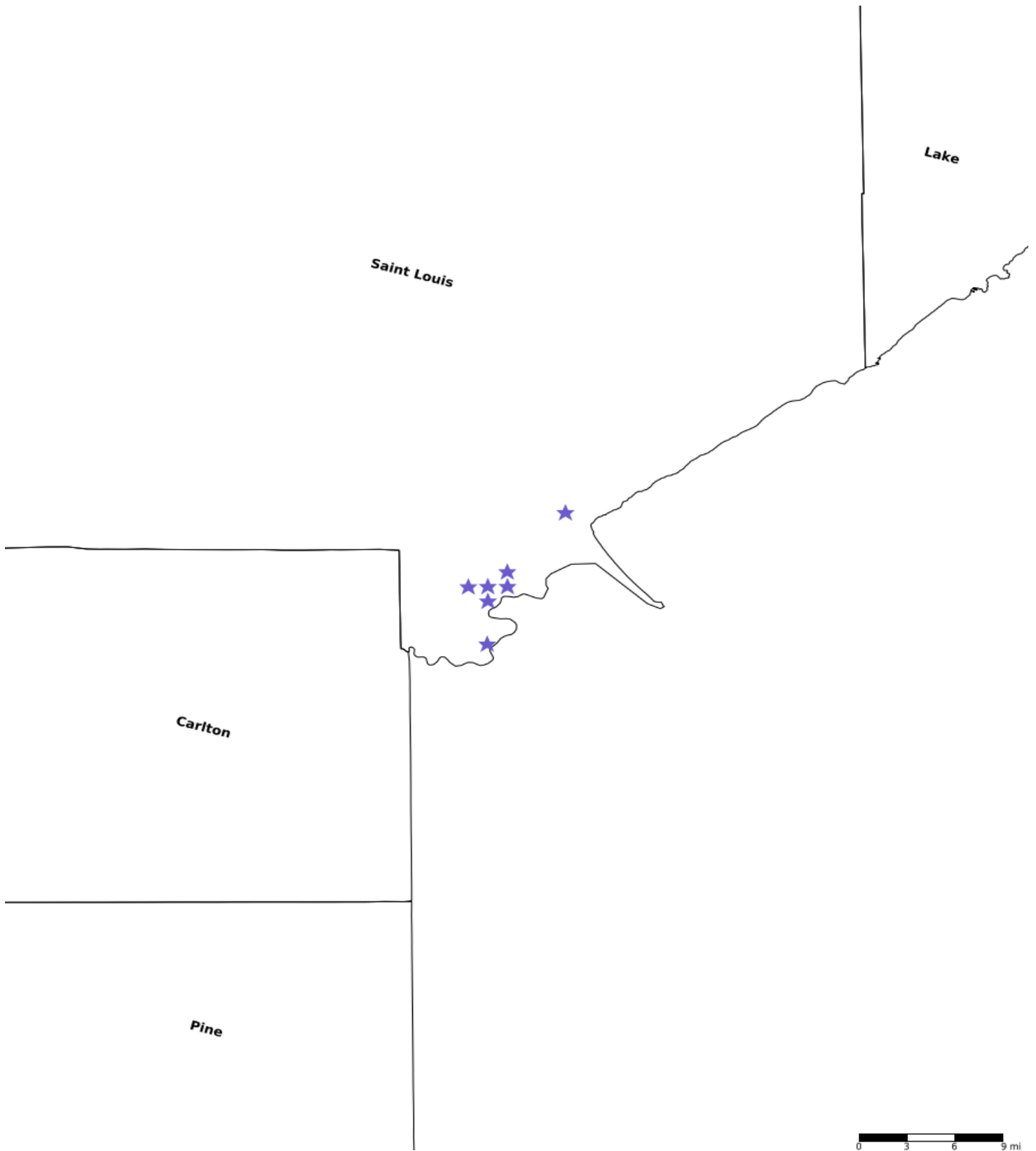
The SLRRI is a partner to the Great Lakes Restoration Initiative (GLRI) and the Area of Concern (AOC) Process. As such, there is a Remedial Action Plan that identifies projects that need to be completed in order to delist the AOC. The list of actions was developed by a broad group of partner agencies and groups. The MNDNR was identified as the Agency Lead on several of the projects on the action item list, and has prioritized these projects for funding in previous proposals. Mud Lake is MNDNR's final AOC project that is not fully funded; therefore, funding Mud Lake construction is prioritized in order to complete construction projects by 2024 and delist the AOC by the goal date of 2025.

Apart from the AOC delisting process, additional work identified in the Lower St. Louis River Habitat Plan and the Lake Superior Lakewide Action and Management Plan will need to be completed to achieve the full habitat restoration potential of the estuary and surrounding watersheds. Continued progress on non-AOC projects may be re-scaled, but remains critical to demonstrate to our Partners, including the federal GLRI, that the state is committed to continued success in the estuary.

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection	Description
Coastal marsh avian habitat restoration - various parcels in Duluth (centroid)	St. Louis	04915213	25	\$250,000	Yes	Control invasive species, plant native species, improve marsh structure
Forest avian habitat restoration - various parcels in Duluth (centroid)	St. Louis	05014221	100	\$100,000	Yes	Control invasive species, plant native species, Improve forest structure
Keene Creek Channel	St. Louis	04915212	0	\$50,000	Yes	Reduce sedimentation, restore cold-water fisheries habitat and enhance recreational fishing
Kingsbury Creek Channel Restoration	St. Louis	04915214	0	\$0	Yes	Reduce sedimentation, restore cold-water fisheries habitat and enhance recreational fishing
Lower Knowlton Creek	St. Louis	04915223	0	\$0	Yes	Remove fish passage barrier and restore a natural stream channel
Mud Lake (5,000 ft river shoreline)	St. Louis	04815202	30	\$0	Yes	Enhance hydrologic connection, remove legacy wood waste and restore ecological functions
Perch Lake	St. Louis	04915215	7	\$1,051,400	Yes	Increase hydrologic connection, restore ecological function of coastal marsh and open water habitats.

Parcel Map



- Protect in Easement
- ▲ Protect in Fee with PILT
- Protect in Fee W/O PILT
- ★ Restore
- ✕ Enhance
- ⊕ Other

