

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2017 / ML 2016 Request for Funding



Date: June 04, 2015

Program or Project Title: St. Louis River Restoration Initiative Phase 3

Funds Requested: \$5,242,000

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County Locations: St. Louis

Regions in which work will take place:

- Northern Forest

Activity types:

- Restore

Priority resources addressed by activity:

- Habitat

Abstract:

Minnesota DNR implements sequenced aquatic habitat restoration projects in the St. Louis River Estuary, as envisioned by the Great Lakes Restoration Initiative (GLRI), and executed in collaboration with the St. Louis River Area of Concern (AOC) partnership.

Design and scope of work:

The Minnesota Department of Natural Resources (MNDNR) continues its collaboration with the Minnesota Pollution Control Agency (MPCA), Wisconsin Department of Natural Resources (WDNR), The Army Corps of Engineers (USACE), Minnesota Land Trust (MLT) and several other agencies to develop, construct and evaluate projects that will restore aquatic habitat in the Estuary. By constructing several habitat restoration projects, the outcome of the proposed work will restore the St. Louis River Estuary as one of Minnesota's and the Great Lakes' premier recreational fisheries and birding locations. Past support by the OHF has been applied to several projects critical to restoring the fish and wildlife habitat of the Estuary, including:

- Radio Tower Bay – Removed logging waste from a bay to restore ecological function and provide habitat for smallmouth bass, walleye and other aquatic species; to be completed July 1, 2015.
- Chambers Grove – Removed sheet-pile and gabion baskets to restore shoreline along critical spawning area to habitat suitable for spawning lake sturgeon, walleye and smallmouth bass; to be completed December 31, 2015.
- Wild Rice Restoration – MNDNR and partners restoring 150 acres of wild rice in 2015, to be completed December 2015.
- Knowlton Creek Stream Restoration – Restoring 7,000 feet of cold water trout habitat over two years; to be completed December 2017.
- Interstate Island – Enhance and restoring nesting habitat for common tern, one of only two nesting colonies in the Great Lakes; to be completed December 2015.

This proposal represents the third phase of work to complete the St. Louis River Restoration Initiative (SLRRI). This phase is focused primarily on the restoration of aquatic habitat in the industrialized portion of the Estuary as well as continued implementation of wild rice restoration in the upper portion of the Estuary. Specifically, this phase of the SLRRI restores approximately 375 acres of aquatic habitat within the proposed project sites. This will move the restoration partnership closer to the overall goal of 1,700 acres of aquatic habitat restored by 2020, by providing:

- Restoration of submerged aquatic vegetation beds to enhance and support healthy fish and wildlife populations within these industrially degraded sites and
- Restoration of conditions suitable for colonization of biologically diverse benthic macroinvertebrate populations, which are a critical food source for fish and wildlife utilizing the estuary.
- Increase and improve the riparian connectivity (softening of shorelines) at the project sites, which will increase and support fish and wildlife populations that depend on this critical habitat type and
- Restoration of wild rice beds that support migratory waterfowl populations, other fish and wildlife populations as well as the important cultural aspects of this resource.

Collectively, these projects address legacy impairments to the St. Louis River Estuary, identified in the Lower St. Louis River Habitat Plan, and targeted in the St. Louis River Estuary Area of Concern. Loss of fish and wildlife habitat is one of nine impairments to beneficial use of the estuary. Addressing the underlying sources of that impairment is now the work of several agencies, which together constitute the St. Louis River Area of Concern partnership. The habitat restoration work addressed by this proposal joins together the state's interest in restoring the unique aquatic habitat of the St. Louis River Estuary with the state's commitment to restore beneficial use of the St. Louis River. These twin objectives have inspired funding from multiple sources, which is necessary given the scale of these projects.

The AOC's Remedial Action Plan identifies projects that will be necessary to restore the fish and wildlife habitat of the estuary. The goal is to restore 1,700 acres of aquatic habitat, which is about half the amount that has been lost over the past 100 years. Typically, projects move through distinct stages: identification, scoping, design, environmental review, permitting, construction and long-term monitoring. All project design work has been and will continue to be completed with non-OHF funding.

This work is foundational to restoring aquatic habitat in the St. Louis River Estuary. As a partner agency in the AOC, MNDNR leads habitat restoration activities. Habitat restoration will be advanced by these projects, but the work of providing ecologically healthy habitat for fish and wildlife species will continue beyond the completion of work associated with the AOC. This work serves the immediate needs of the AOC and lays the foundation for DNR's long-term management of fish and wildlife habitat in the estuary. Projects in this proposal include:

- **Wild Rice Restoration:** Wild Rice restoration is being completed in accordance with a plan published in 2014. The proposed work will be completed through a partnership with WDNR, MLT, Fond du Lac Resource Management and 1854 Treaty Authority. OHF 2012 funding will restore approximately 100 acres of rice beds. This proposal restores an additional 100 acres of rice restoration. Wild rice restoration on the Wisconsin side of the Estuary, which will contribute the overall Estuary goal, is being completed by MLT with funding from GLRI.
- **Kingsbury Bay:** This project removes sediment deposited in this sheltered bay, allowing for the reestablishment of native aquatic vegetation, including wild rice. The project will also establish optimum bathymetries in the bay to improve opportunities for recreational boaters and anglers.
- **Grassy Point:** This proposal describes the second phase of the Grassy Point Project. The scoping and design phases will be partially funded by 2014 OHF award. This proposal will partially fund final design, environmental review and permitting, and be construction ready by late 2016 or early 2017. Construction will restore the stream channel at the mouth of Keene Creek, a stream that contributed to the flooding in West Duluth in June 2012. The project will also remove lumber milling waste and abandoned infrastructure, restore productive sheltered bay habitat and establish optimum bathymetry for recreational boat and angler access.
- **40th Avenue West and 21st Avenue West:** These two projects will restore softened shorelines, sheltered bays and open water flats to native vegetation and establish optimum bathymetry for recreational boat and angler access.

Crops:

Will there be planting of corn or any crop on OHF land purchased or restored in this program - **No**

How does the request address MN habitats that have: historical value to fish and wildlife, wildlife species of greatest conservation need, MN County Biological Survey data, and/or rare, threatened and endangered species inventories:

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. 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.

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 at an approximately 35/65 ratio (65% non-OHF). Minnesota's legacy funds are an integral part of the overall strategy to restore the health of this unique resource.

What is the nature of urgency and why it is necessary to spend public money for this work as soon as possible:

The AOC partnership has worked established a deadline of 2020 to complete habitat restoration and work is on track to meet this deadline. To meet this deadline, federal support is available with a requirement of securing 35% construction support from a non-federal source. Therefore, state funds provide this critical match.

Describe the science based planning and evaluation model used:

The AOC partnership used a source-stressor model to identify impairments to the Estuary. The model identified conservation targets, stresses limiting those targets, and recommended actions to address the source of the stress. Partners also developed a Quality Assurance Plan to measure the successful outcomes of the conservation actions.

Which sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this project:

- H2 Protect critical shoreland of streams and lakes
- H6 Protect and restore critical in-water habitat of lakes and streams

Which other plans are addressed in this proposal:

- Lower St. Louis River Habitat Plan
- U.S. Fish and Wildlife Service Strategic Habitat Conservation Model

Which LSOHC section priorities are addressed in this proposal:

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

Relationship to other funds:

- Not Listed

How does this proposal accelerate or supplement your current efforts in this area:

This funding provides for construction of habitat restoration projects which, when complete, meets the 2020 schedule for the Remedial Action Plan of the St. Louis River Estuary Area of Concern. More importantly, these habitat restoration projects restore degraded habitat and provide an ecologically sustainable foundation for long-term fish and wildlife habitat. Federal funding has been secured for the design work and they are being completed for all the projects listed in this proposal. It is anticipated that federal funding will be secured for 65% of all construction costs, with OHF representing a required non-federal match. The acquisition of federal funding is currently being completed.

The 21st and 40th Avenue West Projects will utilize the resources of the USACE and its maintenance dredge program to provide material for completing some elements necessary for restoration. A state-federal partnership agreement provides accountability in decision-making and fund integrity. All partners have the resources and the expertise to complete tasks associated with the construction of the projects and participation of all partners will be necessary to complete the complex tasks associated with this work.

Describe the source and amount of non-OHF money spent for this work in the past:

Appropriation Year	Source	Amount
2010-2015	Federal dollars - GLRI	\$30,000,000.00
2010-2015	Federal dollars - USACE	\$10,000,000.00
2012-2015	Federal dollars - USFWS	\$1,500,000.00
2013-2015	Federal dollars - NOAA	\$2,555,000.00
2011-2015	Minnesota dollars - Clean Water Legacy	\$3,500,000.00
2011-2015	Private dollars - US. Steel/XIK Remediation/Slip 2	\$70,000,000.00

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

As a member of the St. Louis River Area of Concern, Minnesota DNR has the responsibility of assuring that aquatic habitat provides the ecological function that will sustain fish and wildlife populations of the Estuary. Project objectives are designed to enhance and sustain biological productivity of the Estuary. The Quality Assurance Program Plan will guide monitoring and evaluation of the work and document the progress toward the ecological targets. If targets are not being met by the proposed objectives, the partners will adjust. In addition to the Quality Assurance Program Plan the AOC partners have drafted a long-term monitoring plan to quantify post project impacts to fish and wildlife habitat and populations. This long-term monitoring effort will be funded through the GLRI. MNDNR's Divisions of Ecological & Water Resources and Fish & Wildlife will have long-term responsibility for overseeing the St. Louis River's aquatic habitat.

Explain the things you will do in the future to maintain project outcomes:

Year	Source of Funds	Step 1	Step 2	Step 3
2019-2025	Federal dollars - GLRI	Wild Rice project effectiveness monitoring	Kingsbury project effectiveness monitoring	St. Louis Bay projects effectiveness monitoring
2020-2025	State	Managing fish and wildlife habitat	Managing fish and wildlife habitat	Managing fish and wildlife habitat

Activity Details:

If funded, this proposal 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 activity on permanently protected land per 97A.056, subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 - **Yes (Public Waters)**

Accomplishment Timeline:

Activity	Approximate Date Completed
Wild rice restoration - Site conditioning, seed collection, seed planting, monitoring	October 2020
Kingsbury Bay - restore sheltered bay	December 2018
21st Ave W - restore sheltered bay	December 2017
Grassy Point - restore sheltered bay and stream channel	December 2019
40th Ave W - restore sheltered bay	December 2020

Federal Funding:

Do you anticipate federal funds as a match for this program - **Yes**

Are the funds confirmed - **No**

What is the approximate date you anticipate receiving confirmation of the federal funds - **September 30, 2015**

Outcomes:

Programs in the northern forest region:

- Improved aquatic habitat indicators *Restoration projects in the lower St. Louis River Estuary will restore the availability and condition of impaired aquatic habitats. This work will restore ecological resiliency and contribute to the overall goal of addressing the effects of loss of nearly two-thirds the pre-settlement wetlands of the estuary.*

Budget Spreadsheet

Total Amount of Request: \$5,242,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$650,000	\$430,000	Federal GLRI, Federal GLRI	\$1,080,000
Contracts	\$4,346,000	\$20,000,000	Federal GLRI	\$24,346,000
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$0	\$0		\$0
Easement Stewardship	\$0	\$0		\$0
Travel	\$12,000	\$15,000	Federal GLRI	\$27,000
Professional Services	\$25,000	\$25,000	Federal GLRI	\$50,000
Direct Support Services	\$184,000	\$0		\$184,000
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$19,000	\$5,000	Federal GLRI	\$24,000
Supplies/Materials	\$6,000	\$4,500	Federal GLRI	\$10,500
DNR IDP	\$0	\$0		\$0
Total	\$5,242,000	\$20,479,500	-	\$25,721,500

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
FAW Project Manager	0.50	4.00	\$215,000	\$215,000	Federal GLRI	\$430,000
EWR Project Manager	0.50	4.00	\$215,000	\$215,000	Federal GLRI	\$430,000
FAW OAS	0.75	4.00	\$220,000	\$0		\$220,000
Total	1.75	12.00	\$650,000	\$430,000	-	\$1,080,000

Amount of Request: \$5,242,000

Amount of Leverage: \$20,479,500

Leverage as a percent of the Request: 390.68%

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	375	375
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	0	0
Total	0	0	0	375	375

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$5,242,000	\$5,242,000
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$5,242,000	\$5,242,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	0	375	375
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	0	0	0	0	0	0
Total	0	0	0	0	375	375

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$0	\$0	\$0	\$0	\$5,242,000	\$5,242,000
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$0	\$5,242,000	\$5,242,000

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	\$0	\$0	\$0	\$13,979
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0

Table 6. Average Cost per Acre by Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	\$0	\$0	\$0	\$0	\$13,979
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$0

Target Lake/Stream/River Feet or Miles

1

Parcel List

Section 1 - Restore / Enhance Parcel List

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?
21st Ave W	04914204	85	\$1,200,000	Yes
40th Ave W	04914207	105	\$1,200,000	Yes
Grassy Point	04914217	20	\$1,200,000	Yes
Kingsbury	04914218	20	\$646,000	Yes
Wild Rice	04815208	100	\$100,000	Yes

Section 2 - Protect Parcel List

No parcels with an activity type protect.

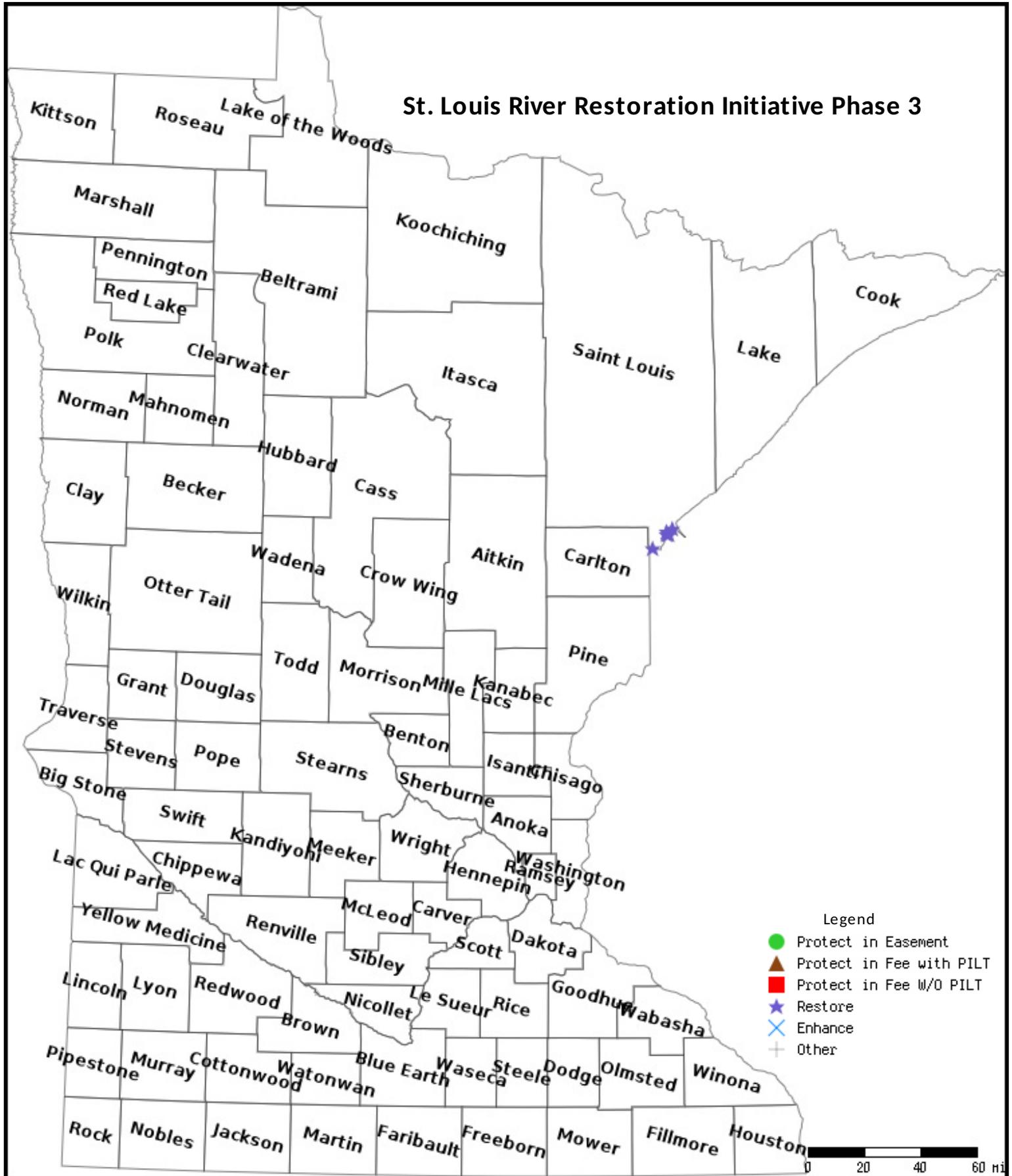
Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map



Data Generated From Parcel List

Restoration sites identified within the St. Louis River Estuary (Area of Concern). The specific sites described in this proposal are Kingsbury Bay, Grassy Point, 40th Avenue West and 21st Avenue West. No OHF funding is being applied to remediation sites in the estuary.

