Lessard-Sams Outdoor Heritage Council
Fiscal Year 2018 / ML 2017 Request for Funding

Date: June 15, 2016

Program or Project Title: St. Louis River Restoration Initiative - Phase IV (HRE03)

Funds Requested: $6,305,000

Manager's Name: John Lindgren
Organization: MN DNR
Address: 5351 North Shore Drive
City: Duluth, MN 55804
Office Number: (218)-302-3274
Mobile Number: (218)-428-6204
Email: john.lindgren@state.mn.us

County Locations: St. Louis

Regions in which work will take place:

- Northern Forest

Activity types:

- Restore

Priority resources addressed by activity:

- Habitat

Abstract:

MNDNR's St. Louis River Restoration Initiative (SLRRI) is partnered with the Great Lakes Restoration Initiative (GLRI). The SLRRI integrates with the Great Lakes Area of Concern Program to achieve habitat outcomes to establish the estuary as a premier fishing and outdoor recreation destination. The objective is to restore more than 1,700 acres of priority habitats to accelerate achievable and sustainable increases in fish and wildlife populations. In Phase 4, MNDNR will restore approximately 172 acres of aquatic habitat in direct partnership with Minnesota Land Trust. Upon completion, more than 480 acres will have been accomplished by the SLRRI.

Design and scope of work:

The 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. MNDNR has been actively involved in the assessment and planning for the restoration and recovery of the St. Louis River Estuary since the early 1980's. The SLRRI was established by MNDNR in 2010 to accelerate implementation of fish and wildlife habitat related objectives by combining the resources and efforts of the Great Lakes Water Quality Agreement, the Great Lakes Restoration Initiative and the Minnesota Land and Clean Water Legacy Act.

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 – (Completed in 2015) Removed logging waste from a bay to restore ecological function and provide habitat for smallmouth
bass, walleye and other aquatic species.
• Chambers Grove – (Completed in 2015) Removed sheet-pile and gabion baskets to restore shore line and create in-stream structures within a
critical spawning area for lake sturgeon, walleye and smallmouth bass.
• Wild Rice Restoration – (In Progress) MNDNR, MLT, Wisconsin DNR and tribal partners have restored 120 acres of rice in 2015 and plan to continue the project annually for 10 years in order to restore more than 250 acres.
• Interstate Island – (Completed in 2015) Restored critical common tern habitat on one of only two nesting colonies in Lake Superior.

• Knowlton Creek Watershed Restoration – (Being completed in 2016) Restoring 6,500 feet of cold water trout habitat and reducing sediment transport to the estuary.

In Phase 4 of the SLRRI, MNDNR continues the implementation of the Lower St. Louis River Habitat Plan and the St. Louis River Remedial Action Plan with the restoration of an additional 250 acres of aquatic and shoreline habitat. Restoration activities are scheduled to occur at projects in the St. Louis River Estuary including:
• Grassy Point – (Funding support critical for construction in late 2017) Removal of legacy wood waste and establishment of a sheltered bay important to gamefish and other fish and wildlife populations, with beneficial reuse material for restoration activities coming from Kingsbury Bay.
• Kingsbury Bay – (Funding support critical for construction in late 2017) Removal of deposited sediment to re-establish sheltered bay habitat important to gamefish and other fish and wildlife populations, with accompanying watershed work to add resiliency. Material beneficially reused at Grassy Point.
• Perch Lake – (Construction ready in 2018) Enhance hydraulic connectivity by reconnecting an isolated bay to the estuary and establish optimum bathymetry to support healthy fish and wildlife populations.

All restorations are within public waters of Minnesota. Construction of sheltered bay restorations in the Estuary includes removal of excessive deposits of sediment or legacy wood waste from the shoreline and river bed. Previous phases of the SLRRI have proven MNDNR's ability to accomplish restoration objectives in partnership with the MLT and the AOC group.

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

Describe how your program will advance the indicators identified in the plans selected:

The Lower St. Louis River Habitat Plan identifies Conservation Targets that need to be addressed to restore the estuary to a desired condition. Resource professionals that developed the Plan also identified project areas that needed to be restored in order to reach the Conservation Targets. The three project sites identified in this proposal, as well as, the projects previously funded are all identified in Plan. The current opportunity to leverage the GLRI presents an unparalleled opportunity to accomplish the objectives identified in the Lower St. Louis River Habitat Plan.

The MNDNR has partnered with the USFWS over the last 20 years to advance habitat restoration in the St. Louis River Estuary. Their participation and guidance has resulted in the inclusion of elements of the Strategic Habitat Conservation Model into the Remedial Action Plan process for the AOC and the estuary.

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

Describe how your program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife as indicated in the LSOHC priorities:

Criteria #2-
MNDNR believes the restoration of more than 1,700 acres of habitat within the estuary that is impaired by legacy impacts will result in its becoming one of the top fishing destinations in Minnesota. This is based on the unparalleled variety of angling opportunities the estuary's diverse habitats provide. Few waters in Minnesota have the ability to host destination quality fishing for walleye, muskie, smallmouth bass, lake sturgeon and black crappie. Restorations and enhanced management of lower St. Louis River will increase the number, size and quality of SGCN and game fish species as well as improve angler and other recreational access.

In conjunction with the work described in this proposal, wild rice will also be restored to all three of the project sites as part of the previously OHF funded St. Louis River Wild Rice Restoration Program. This long-term program has the support of key Wisconsin and Tribal partners. The three project areas will establish physical conditions that will allow for restoration of approximately 50 acres of additional wild rice beds.

One of the primary outcomes of the work described in this proposal will be the establishment of healthy ecological functions along more than 10,000 feet of restored shorelines. These shorelines will provide critical habitat to support all the "indicator species" described in that section.

The Grassy Point and Kingsbury Bay project areas are currently heavily infested with the invasive species narrowleaf cattail and non-native phragmites. The outcome of the restoration work will be to greatly reduce or eliminate these species from the sites, which will allow for the establishment of healthy stands of native plants. Healthy restored aquatic habitat is also resilient to the colonization of other invasives such as ruffe, goby and zebra mussels

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

The 1980's were the turning point for the Estuary. As water quality improved, following construction of wastewater and sewage treatment plants, it became clear that the Estuary's fish and wildlife populations could recover if habitat conditions were restored. MNDNR worked with many local, state and federal resource experts and stakeholders to develop the Lower St. Louis River Habitat Plan, a comprehensive science based plan for protecting, restoring and managing fish and wildlife of the St. Louis River Estuary.

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 and model expected outcomes of restoration alternatives to assist in project design and implementation.

Specifically, 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. All project areas supported by the GLRI also require the development of a Quality Assurance Plan to measure the successful outcomes of the conservation actions.

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

Criteria #4-
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 extent in strategic locations to maximize benefits to populations.

As the Outdoor Heritage Fund's 2009 25-year frame work 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 of approximately 50%. Minnesota's legacy funds are an integral part of the overall strategy to restore the health of this unique resource.

Identify indicator species and associated quantities this habitat will typically support:

Criteria #5-
Adult gamefish
Walleye – 340 adults
Muskellunge – 34 adults
Northern Pike – 1,700 adults

Outcomes:

Programs in the northern forest region:

- Improved availability and improved condition of habitats that have experienced substantial decline

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

Criteria #7-
MDNR Duluth Area Fisheries manages the Lower St. Louis River through regular monitoring, assessment and regulation. They are partnered with the WDNR, the USEPA MED Lab, and NOAA's National Estuary Research Reserve in the effort to monitor and address issues associated with the long-term maintenance of habitat restoration outcomes in the estuary.

St. Louis River habitat restoration projects are designed to be maintained by the natural processes that define these systems. Barring catastrophic events, these projects would not require future adjustment, or clean-up. Restoration of submerged aquatic vegetation beds at locations such as Grassy Point, Kingsbury Bay and Perch Lake will consider the water depth, substrate type and wave energy environment required to maintain these systems. These three project sites are either currently defined as sheltered bays, or in the case of Grassy Point, protection from wave and current energies will be designed into the restoration.

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

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

Not Listed

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

Criteria #8-
The AOC partnership has established a deadline of 2020 to complete habitat restoration and work is on track to accomplish this goal. Federal financial support for meeting this goal is available with a requirement of securing at least 35% support from a non-federal source. Therefore, state funds provide this critical match. Specifically, the balance of the funding required to complete the Grassy/Kingsbury Project needs to be secured in order to encumber funds to a construction contract in the fall of 2017. If funding to complete this integrated project is not secured from the ML2017 cycle of the OHF, project completion will be delayed for a year. This would jeopardize meeting the deadline for delisting the AOC and jeopardize acquisition of future GLRI funding for habitat restoration.

How does this proposal include leverage in funds or other effort to supplement any OHF appropriation:

Criteria #9-
MDNR has secured federal GLRI funds for past OHF supported projects at approximately a 50% rate. Additionally, the MNDNR is working to direct funding from other sources including the Superfund Natural Resources Damage Assessment Program to support the SLRRI. It is anticipated that MNDNR will secure from $3 million from the GLRI through USEPA to support construction cost at the Grassy/Kingsbury Project. Additionally, MNDNR will receive $500,000 from USACE for the design of the project. Negotiations are currently underway to veriy this arrangement.

Many different agencies and organizations share the goals of SLRRI. The MNDNR has participated in projects that will have completed approximately 300 acres of aquatic and wetland habitat restoration by the end of 2016. The MNDNR completes these projects with the assistance of multiple partners. Minnesota Pollution Control (MPCA) provides management support and technical expertise. The Environmental Protection Agency (USEPA), National Oceanic and Atmospheric Administration (NOAA), Fish & Wildlife Service (USFWS), Army Corps of Engineers (USACE) and other federal agencies have provided funding, technical expertise, or in-kind services.

Relationship to other funds:

- Clean Water Fund

Describe the relationship of the funds:

Support from the Clean Water Fund has been matched with a USACE Remedial Action Planning design program to produce designs for all three of the projects described in this proposal. The total amount of funds being applied from this source to design of the projects is $800,000. Of that, 35% is from the Clean Water Fund.

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

Not Listed

Activity Details

Requirements:

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)**

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 - **December 31, 2016**

Land Use:

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

Accomplishment Timeline

Activity	Approximate Date Completed
Grassy Point - Remove non-native wood waste and restore sheltered bay and stream channel	December 2019
Kingsbury Bay - Remove excess sediment deposited and restore sheltered bay	December 2019
Perch Lake - Enhance hydraulic connectivity to the estuary and establish desirable sheltered bay bathymetry	December 2019

Budget Spreadsheet

Total Amount of Request: $6,305,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	$190,000	$0	EPA-GLRI, EPA-GLRI	$190,000
Contracts	$6,000,000	$3,500,000	GLRI - USEPA - USACE	$9,500,000
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	$5,000	$0		$5,000
Professional Services	$25,000	$0		$25,000
Direct Support Services	$75,000	$0		$75,000
DNR Land Acquisition Costs	$0	$0		$0
Capital Equipment	$0	$0		$0
Other Equipment/Tools	$2,000	$0		$2,000
Supplies/Materials	$8,000	$0		$8,000
DNR IDP	$0	$0		$0
Total	$6,305,000	$3,500,000	-	$9,805,000

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
FAW AOC Coordinator	0.50	1.00	$80,000	$0	EPA-GLRI	$80,000
FAW OAS	0.75	1.00	$62,000	$0		$62,000
EWR Habitat Coordinator	0.50	1.00	$48,000	$0	EPA-GLRI	$48,000
Total	1.75	3.00	$190,000	$0	-	$190,000

Amount of Request:	$6,305,000
Amount of Leverage:	$3,500,000
Leverage as a percent of the Request:	55.51%
DSS + Personnel:	$265,000
As a % of the total request:	4.20%
Easement Stewardship:	$0
As a % of the Easement Acquisition:	-%

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

Used Direct & Necessary calculator provided.

Does the amount in the contract line include R/E work?

Yes
MNDNR is going to manage the contracting and construction of the Grassy/Kingsbury Project.
The Minnesota Land Trust is going to be directly appropriated a portion of the allocation to contract and construct the Perch Lake Project.

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:

NA

Describe and explain leverage source and confirmation of funds:

There is and anticipated leverage of approximately $3 million from GLRI for construction at Grassy/Kingsbury, which will be verified by

the end of 2016. An additional 500,000 will come from GLRI/USACE for design, which will be verified by July of 2016.

Does this proposal have the ability to be scalable? - Yes

Tell us how this project would be scaled and how administrative costs are affected, describe the "economy of scale" and how outputs would change with reduced funding, if applicable:

The AOC is scheduled to be delisted by 2020. Therefore, it is highly desirable to acquire the full proposed funding to encumber toward construction start dates of 2017 for the project sites. However, obtaining full funding for the Grassy/Kingsbury Project carries the highest degree of need.

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	172	172
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	172	172

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	$0	$0	$0	$6,305,000	$6,305,000
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	$6,305,000	$6,305,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	0	172	172
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	172	172

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	$6,305,000	$6,305,000
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	$6,305,000	$6,305,000

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	$0	$0	$0	$36,657
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	$36,657
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

0

I have read and understand Section 15 of the Constitution of the State of Minnesota, Minnesota Statute 97A.056, and the Call for Funding Request. I certify I am authorized to submit this proposal and to the best of my knowledge the information provided is true and accurate.

Parcel List

Explain the process used to select, rank and prioritize the parcels:

The SLRRI is a partner to the Great Lakes Restoration Initiative and the Area of Concern Process. As such, there is a Remedial Action Plan that identifies project 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. The MNDNR has already received funding for projects on the list and completed restoration at four of those projects. The Grassy and Kingsbury projects have already been funded from previous allocations, but this proposal represents the final phase of funding acquisition to support a project construction start time of late 2017. After completion of the AOC delisting process, additional work identified in the Lower St. Louis River Habitat Plan will need to be completed to achieve the full habitat restoration potential of the estuary. The AOC process is only intended to bring the estuary to a certain point, after which other federal funding sources than GLRI will need to be identified.

Section 1 - Restore / Enhance Parcel List

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?
Grassy Point	04914217	115	$3,500,000	Yes
Kingsbury Bay	04914218	44	$500,000	Yes
Perch Lake	04815209	13	$2,000,000	Yes

Section 2 - Protect Parcel List

No parcels with an activity type protect.

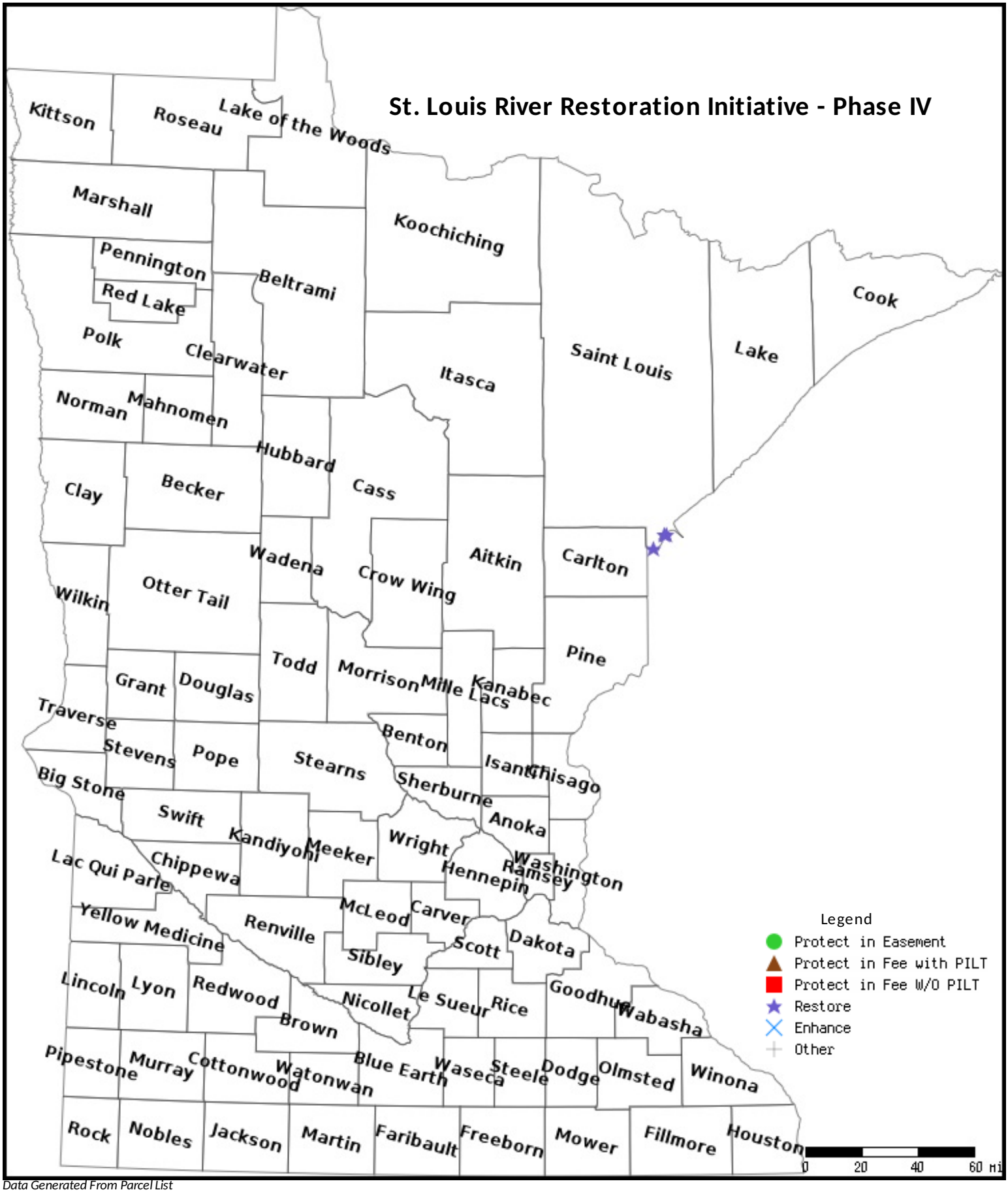
Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

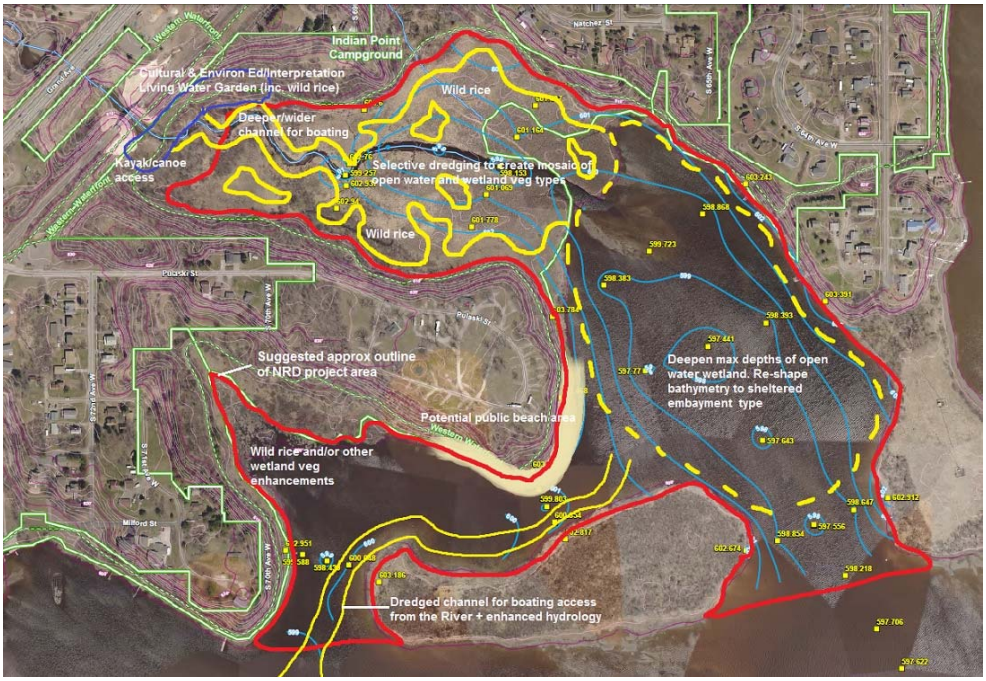
Parcel Map



Data Generated From Parcel List


GRASSY POINT
SHELTERED BAY
concept design
main power/
light co.
npr railroad
sheltered
bay
c. reiss
coal co.
xlk corp.
estuary
flat
VEGETATION ZONES
photo location index
1 wetland
2 shallows/
deep
marsh
3 open water
4 estuary flats
SUBMERGENT VEGETATION:
FLOATING VEGETATION:
OTHER:
TERRESTRIAL VEGETATION:
LimnoTech


Photo Credit: Minnesota's Lake Superior Coastal Program


Indian Point Campground
Cultural & Environ Ed/Interpretation Living Water Garden (inc. wild rice)
Wild rice
Deeper/wider channel for boating
Kayak/canoe access
Selective dredging to create mosaic of open water and wetland veg types
Wild rice
Suggested approx outline of NRD project area
Deepen max depths of open water wetland. Re-shape bathymetry to sheltered embayment type
Potential public beach area
Wild rice and/or other wetland veg enhancements
Dredged channel for boating access from the River + enhanced hydrology

Mr. John Lindgren
Minnesota Department of Natural Resources
St. Louis River AOC Program Coordinator.

The Lake Superior Chapter of Muskies Inc. has been active and supportive of the restoration of the St. Louis River. When Radio Tower Bay restoration was started we spoke on the benefits of the restoration and how it will improve fishing in the estuary. When MOHA came to town we spoke in favor of all the restoration projects on the St. Louis River. Our organization believes that anything done to improve the AOC is beneficial to the fishing community.

The restoration of shallow bay habitat is very important for biological productivity and increased fish production. The additional 250 acres of estuary that will be remediated is especially important to Muskie fishermen as there are only about 100 Muskie Lakes in Minnesota and as the sport continues to rapidly grow any new water is appreciated and needed.

We strongly support Grassy Point and Kingsbury Bay and Creek as well as East Mud Lake and Perch Lake. When remediation is complete on these projects fish production will increase as well as improving wildlife habitat. Everyone wins when the river is restored.

Thank You for the opportunity to comment
Keith Okeson

President Lake Superior Chapter of Muskie Inc.

Izaak Walton League of America
W. J. McCabe Chapter

John Lindgren
Minnesota Department of Natural Resources
St. Louis River AOC Program Coordinator
5351 North Shore Drive
Duluth, MN 55804

May 17, 2016

Dear Mr. Lindgren,

The W. J. McCabe (Duluth) Chapter of the Izaak Walton League is a non-profit, local conservation group that is affiliated with the national Izaak Walton League of America. Our chapter has long been an advocate for and worked toward the improvement of the water quality, fish and wildlife habitat, and recreation values of Lake Superior, the Duluth Harbor, and the St. Louis River.

I am writing to add our organization's strong support for the project proposal that the Minnesota Department of Natural Resources (DNR) is currently submitting for the Outdoor Heritage Fund (OHF) to implement the St. Louis River Restoration Phase 4 (ML2017 LSOHC Request).

We are very happy with the progress that has been made recently to remove polluted sediments and wood waste, and to restore fish and wildlife habitats in the St. Louis River estuary from OHF projects in the estuary. This next proposed project to restore another 250 acres of habitat at several different sites will go a long ways toward completing restoration goals in the estuary.

We greatly appreciate the work that the MNDNR AOC program and your partners are doing with support of the LSOHC and others to return to health the St. Louis River estuary. This is one of the most important shallow water and wetland complexes on the Great Lakes, and deserves the attention it is finally receiving after so many years of abuse and neglect by Minnesota!

Thank you for the opportunity to comment on this OHF proposal. Please contact me at 218-879-3186 or rcstaffon@msn.com if you need further information or other support for this effort.

Sincerely,

Rich Staffon, President
W. J. McCabe Chapter

W J. McCabe Chapter
Izaak Walton League of America
PO Box 3063 Duluth, MN 55803
218-879-3186

President;
Dave Nelson
tpwaduluth@hotmail.com

Vice President;
Kelly O'Toole
info@alluminumcabinet.com

Secretary;
Charlie Nelson
nelfive@cpinternet.com

Treasurer;
Todd Maas
Maast@ci.superior.wi.us

Membership Committee chair
Mike Nagle
mwnagle@yahoo.com

Tournament committee chair
Troy Skorich
skoricht@charter.net

Marketing committee chair
Todd Maas
Maast@ci.superior.wi.us

Web Master
Dave Nelson
twpwaduluth@hotmail.com

Dear
Mr. John Lindgren
Minnesota Department of Natural Resources
St. Louis AOC Program Coordinator

The Board of Directors of Twin ports walleye Association together with our 300 members would like to express our support in favor of the St. Louis River Restoration Initiative Phase 4 – Implementation .

The TPWA is very pleased with the ongoing restoration efforts in the estuary and believe these efforts are having a positive effect on the water quality and the biological productivity of the fish and wildlife. The Outdoor Heritage Funds will make great strides in completing the Grassy Point, Kingsbury Bay, Kingsbury Creek, East Mud Lake and Perch Lake projects!

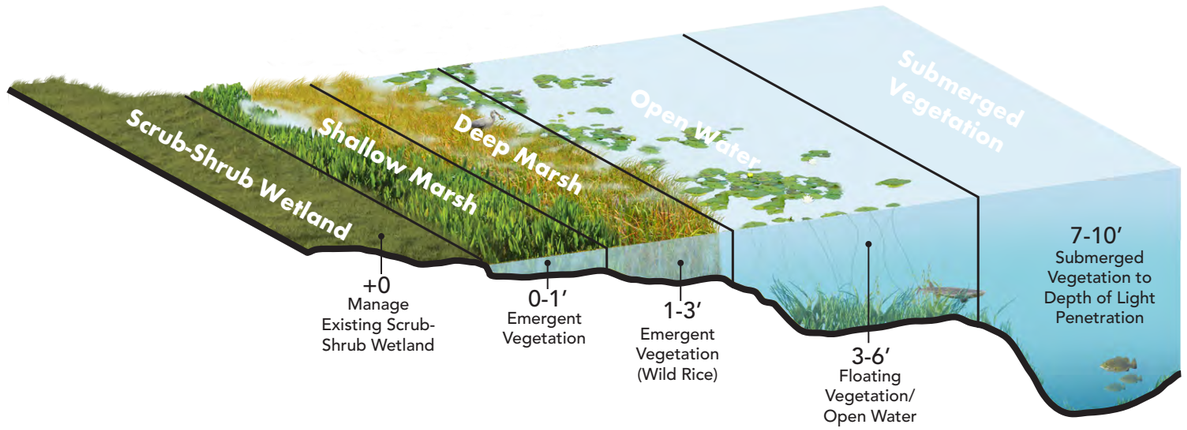
The mission of the Twin Ports Walleye Association is in alignment with what these projects represent. Please take every action to protect this priceless resource that our organization and many others like it, have been utilizing for many years.

Respectfully;

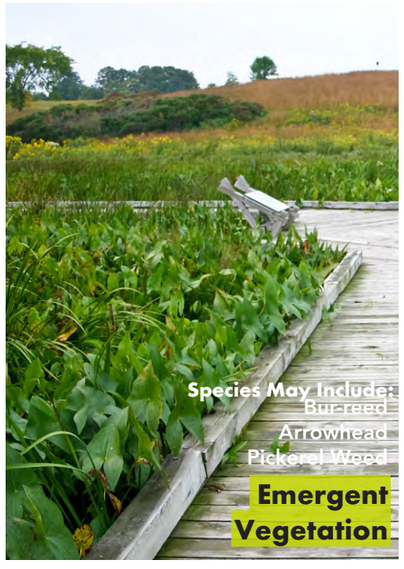
David S. Nelson

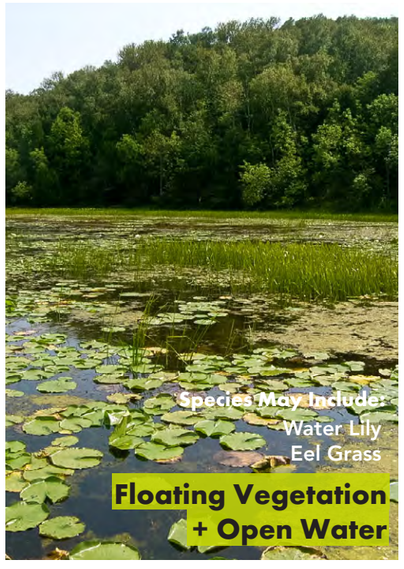
President- Twin Ports Walleye Association
www.twinportswalleye.com

Habitat Types to Be Restored in Kingsbury Bay



Vegetation Types





Dredging Plan

Volume =290,000 CY

Approximate quantity volume to be dredged based of preliminary design

290,000 CY ≈17,059 Dump Truck Loads

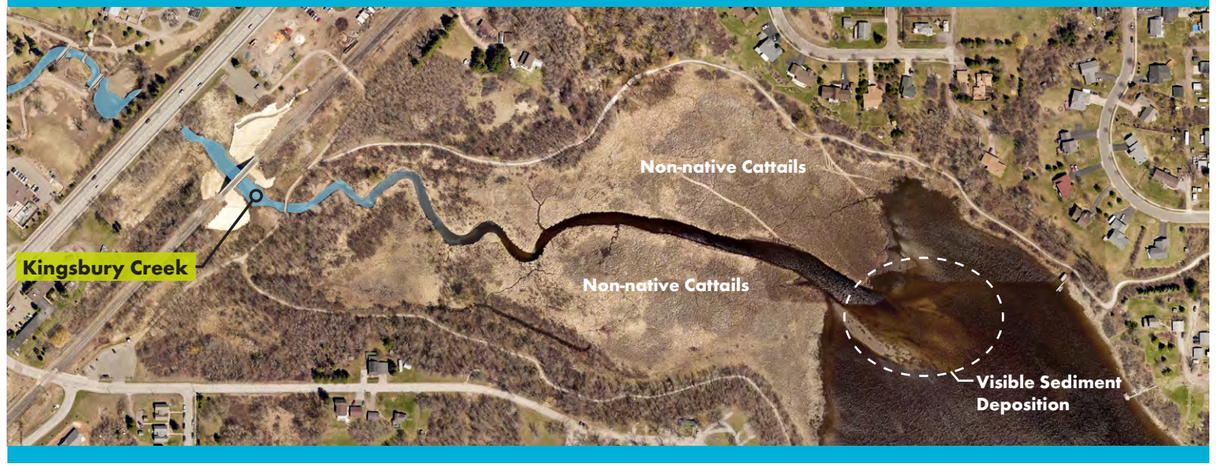
Number of truck loads based on end dump truck capacity approximated to be 17 CY

Project Partners

City of Duluth, U.S. Fish and Wildlife Service, Fond Du Lac Band of Lake Superior Chippewa, Minnesota Pollution Control Agency, 1854 Treaty Authority, Natural Resources Research Institute, Lake Superior National Estuarine Research Reserve, Minnesota Land Trust, Environmental Protection Agency Water Lab, U.S. Army Corps of Engineers

Prepared by Barr Engineering Company

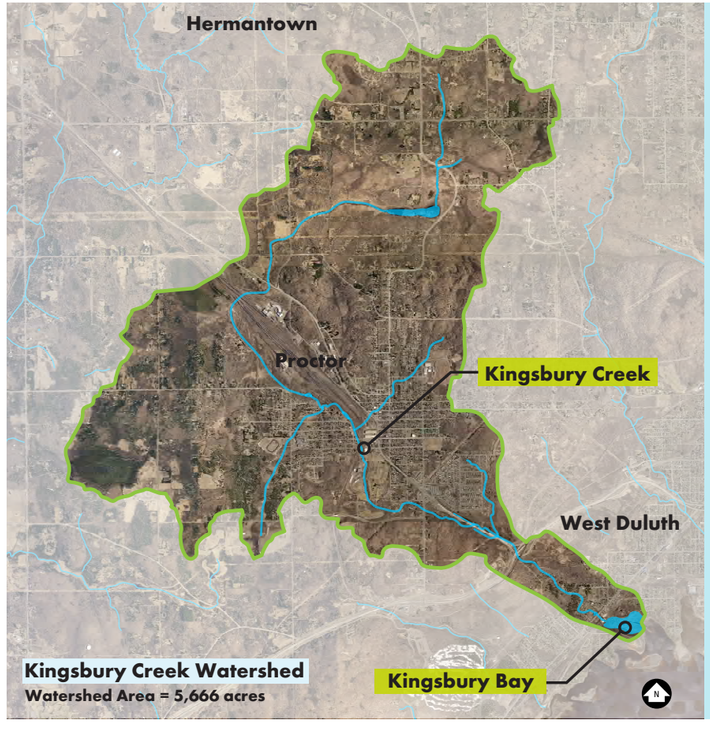
Kingsbury Bay Conceptual Restoration Design



Over the past century significant amounts of sediment has washed into Kingsbury Bay from its watershed. This has eliminated fish and wildlife habitat. **As part of the larger St. Louis River estuary goals, Kingsbury Bay will be dredged to restore lost habitat.**

Primary Restoration Goals

- Develop and protect open water habitat
- Create access and recreational opportunities to the bay
- Create opportunities for wild rice regeneration
- Protect what has been restored by reducing sediment washing into the bay from Kingsbury Creek



In conjunction with this project it will be imperative to stabilize sources of sediment from the watershed.

The sediment that is being deposited into Kingsbury Bay washes in from the Kingsbury Creek Watershed. Increased erosion began at the time of European settlement when forest clear-cutting opened the ground to the erosive force of precipitation and resulted in soil being washed into the creek. Today, the increase of impervious surfaces, including roads, buildings and parking lots, has resulted in larger volumes of stormwater being drained to the creek as overland flow. This stormwater carries sediment eroded from construction sites and other disturbed ground surfaces. The increased volume of water also erodes the creek channel resulting in deeper cutting of the banks and deposition in the bay.

Kingsbury Bay Concept Plan

Water Access
- Swimming Beach
- Vegetated Shoreline (non-woody)
- Kayak and Canoe Launch Access
- Fishing Pier

Nature Experience
- Boardwalk Trail
- Kiosks
- Water Garden

Scrub-Shrub Wetland
- 0-1′ Depth
- Tag Alder
- Broadleaf Cattails
- Willows

Emergent Wetland
- 1-3′ Depth
- Wild Rice
- Arrowhead

Partial Open Water
- 3-4′ Depth
- Floating Aquatic Plants
- Potamogeton (pondweed)

Open Water
- 5-6′ Depth
- Fishing
- Power Boat Access

Deep Water
- 10′ Depth
- Fish Overwintering Habitat

Legend
- Park Land Boundary
- Proposed Trails
- Existing Trails
- Boardwalk
- Water Access
- 0-1′ Scrub-Shrub Wetland
- 1-3′ Emergent Wetland
- 1-3′ Wild Rice
- 3-4′ Partial Open Water
- 5-6′ Open Water
- 10″ Deep Water

N

0 150 300
Feet

AOC Wide Projects: