

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2020 / ML 2019 Request for Funding

WRE 03



Date: May 31, 2018

Program or Project Title: Restoration of Non-Native Cattail Dominated Wetlands in Border Waters

Funds Requested: \$1,973,400

Manager's Name: Bryce Olson

Organization: Voyageurs National Park

Address: 360 Highway 11 E

City: International Falls, MN 56649

Office Number: 218-283-6694

Mobile Number: 219-324-2948

Email: bryce_olson@nps.gov

County Locations: St. Louis

Regions in which work will take place:

- Northern Forest

Activity types:

- Restore

Priority resources addressed by activity:

- Wetlands

Abstract:

Non-native cattails (*Typha* spp.) have invaded wetlands in the Border Waters near Voyageurs National Park, displacing native vegetation, reducing biodiversity, degrading fish/wildlife habitat, impairing recreational opportunities, and degrading cultural resources, especially wild rice (*Zizania palustris*). These lakes are designated "Outstanding Resource Value Waters" (Minn. R.7050.0180) where herbicide use is prohibited. Treatment methods include mechanical removal along with burning and other methods. We propose to remove cattails using these methods followed by reestablishment of native vegetation to restore wetland communities. This will restore fish and wildlife habitat, reduce damage from detaching floating mats, and improve recreational opportunities.

Design and scope of work:

Step 1 - Remove Non-native Cattail: In areas of dense invasion of floating mats, non-native hybrid cattails will be mechanically removed using plant mulching and harvesting barges. Cutting/harvesting barges are a quick and cost-effective method to completely remove aquatic vegetation where herbicide use is prohibited. Harvesting equipment cuts up and removes cattails, including the dense cattail mats that prevent other vegetation from growing. The equipment also collects the cattail biomass and stores it onboard until dumping in a designated location nearby. Any cattails not accessible by the harvesting equipment will be removed with hand tools designed for aquatic vegetation use. Burning will be used as a tool to reduce cattail biomass and stimulate native vegetation regrowth. We will conduct treatments over the course of multiple seasons to accommodate annual water level changes, weather delays, and availability of equipment. We are partnering/contracting with several tribal communities in Minnesota that have extensive experience in removal of cattails using harvesting equipment to restore wild rice communities and other native vegetation.

Step 2 - Restore Native Species: Following removal of cattail, we will use a combination of methods to reestablish native vegetation. Simply removing the cattail mats, even ones in place for many decades, will allow dormant seeds, including wild rice and other native aquatic plants, to germinate without any further effort. While viable seed banks exist, park staff will transplant plants from nearby sites and directly-sow seeds to jump start the re-establishment of a diverse community of native species.

The steps outlined above are part of our 10-year Wetland Restoration Plan initiated by Voyageurs National Park in 2016 to restore these non-native cattail invaded wetlands. Developing the most cost-effective techniques was the first phase of the project. Phase 2 can now be implemented by applying these techniques to the rest of the wetlands in the area. Outdoor Heritage Funds would be used to continue the most cost-effective cattail removal and wetland restoration techniques outlined in Steps 1-2. Completion of this proposed

project would restore cattail invaded wetlands to diverse wetland communities that will create and enhance fish and wildlife habitat and improve recreational and cultural opportunities for Minnesotans.

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

- H2 Protect critical shoreland of streams and lakes
- H5 Restore land, wetlands and wetland-associated watersheds

Which other plans are addressed in this proposal:

- Managing Minnesota's Shallow Lakes for Waterfowl and Wildlife
- Voyageurs National Park 10-year Wetland Restoration Plan

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

One of the primary objectives of Managing Minnesota's Shallow Lakes for Waterfowl and Wildlife Plan is to control invasive species such as non-native cattail and reseed with wild rice. Our proposed project would meet both of these objectives, and thus restore waterfowl and wildlife habitat.

Voyageurs National Park and partners are currently implementing a 10-year Wetland Restoration Management Plan. While the initial stages to determine the most cost-effective cattail removal and wetland restoration techniques are funded, OHF funds would allow us to implement Phase 2 of the plan, that is to begin large-scale removal of non-native cattails to restore wetlands and associated fish and wildlife species.

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:

Invasive species are an ever-increasing problem, especially in critical habitats such as wetlands. The public and land management agencies are gradually becoming more aware of the severity of cattail invasions and the threat they pose to biodiversity, recreation, and cultural needs. Our proposed project will take place within a US National Park and two of Minnesota's most iconic lakes – Rainy and Kabetogama. The combined visibility of these areas will enhance our ability to increase awareness of the issue and detail real solutions to a sticky problem. More complete and cost-effective management strategies will allow broader control of non-native cattails as well as restoration of wetlands in the region. Adaptation of these techniques in areas outside of our project area will provide greater protection of critical habitats outside of initial proposed treatment areas. These areas provide critical habitat for fish, especially spawning areas for species such as northern pike. Many game species, such as aquatic furbearers and migratory waterfowl, rely on these habitats for critical stages of their life. Other wildlife species, especially those on Minnesota's list of Species with Greatest Conservation Need, depend on these habitats. There are also culturally significant species such as wild rice, which are in need of restoration. Several Native American communities in Minnesota have been working to restore wild rice elsewhere in the state. Our wetland restoration project will restore critical wetland habitats while simultaneously extending outreach and education of relevant issues to a variety of local and regional

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 project was designed using an Adaptive Management framework to improve management decisions. The basic premise of this approach is to “learn while doing”, where science-based information from CURRENT management is used to inform FUTURE management. In the first phase of the project, this management framework has allowed the development of the most cost-effective techniques while simultaneously restoring wetlands. It has now also allowed targeted restoration for future management in Phase 2 by focusing on restoring the most critical wetlands. This will reduce the detachment of potentially hazardous floating mats while also restoring fish and wildlife habitat in the most cost-effective way. While the MN County Biological Survey activities have yet to be completed in this area (this is the last part of the state to be surveyed), it is already known that many of the wetland habitats in the area are currently threatened by invasive cattails. Any rare species and habitats identified by the upcoming MN Biological Survey will add further urgency to our proposed restoration work.

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:

Over 50% of Minnesota's wetlands have been lost over the last 200 years. Of the remaining wetlands, most are under threat of invasive species including non-native cattails. Minnesota Pollution Control Agency identified non-native cattails and the single greatest negative impact on Minnesota wetlands (MPCA 2015). More than 43% of threatened or endangered species in Minnesota and elsewhere in the US depend on wetlands. It is therefore critical to restore remaining wetlands which have been degraded by invasive species. The proposed wetland project will result in a more natural and diverse community that will benefit a variety of both game and non-game species of fish and wildlife. One of the main target species for the proposed project is wild rice, a plant with high cultural and biological significance. In addition, wetlands will be restored to create diverse plant communities to create or enhance habitat for a variety of fish and wildlife species. Targeted bird species include yellow rail (*Coturnicops noveboracensis*), American bittern (*Botaurus lentiginosus*), least bittern (*Ixobrychus exilis*), Virginia rail (*Rallus limicola*), red-necked grebe (*Podiceps grisegena*), and black tern (*Chlidonias niger*), all of which are on Minnesota's list of Species in Greatest Conservation Need. Targeted mammal species include several important furbearer species, namely muskrats, river otter (*Lontra canadensis*), American beaver (*Castor canadensis*), and mink (*Neovision vison*). Important targeted fish species include northern pike (*Esox Lucius*), whose spawning areas are degraded by invasive non-native cattails. Several other species on Minnesota's list of Species in Greatest Conservation Need will also benefit from the proposed project, including: common snapping turtles (*Chelydra serpentine*), eastern red-backed salamanders (*Plethodon cinereus*), a variety of insects such as caddisflies, and various mollusk species.

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

Wild rice is capable of producing up to 500 pounds of seed per acre in a good year. The 1825 acres of wetlands proposed to be restored contain approximately 400 acres of cattail to be treated. Assuming the majority of these areas are capable of supporting wild rice, this could potentially yield up to 200,000 pounds of wild rice seed in a good year. This seed is an important food source for wildlife as well as being culturally significant. While wild rice is a targeted species by this project, wetlands will be restored to a diversity of native plant species. This will create habitats to support a wide variety of fish and wildlife species including species of greatest conservation need. These restored wetlands will also serve as seed sources for other wetlands outside the project area extending the positive impacts of this wetland restoration project.

Outcomes:

Programs in the northern forest region:

- Improved aquatic habitat indicators *Post cattail treatment and restoration surveys of vegetation and wildlife will be compared to historic as well as pretreatment and restoration surveys to determine success of the project. Long-term monitoring of vegetation and indicator species will also determine the ultimate success of this wetland restoration project. All monitoring and evaluation of the project is funded by NPS and partners.*

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

All invasive species control and habitat restoration projects require ongoing maintenance. Voyageurs National Park has staff and equipment capable of sustaining the monitoring and maintenance required once the OHF funds have been expended. We are also incorporating much of the ongoing monitoring and maintenance into current and future programs already occurring at the park and surrounding areas. We are working closely with other agencies and partners to develop long-term management plans for the control of invasive cattails and protection of critical wetland habitats. One of our project's objectives is to also increase public and other stakeholder awareness and education on the issues with invasive species and critical habitats which should in turn bring in future funds for long-term wetland management.

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

Year	Source of Funds	Step 1	Step 2	Step 3
2018-2028	NPS	Determine long term efficacy of restoration	Removal of any reemerging cattail	Replant native vegetation as needed
2018-2028	NPS	Monitor long term impacts of restoration on wetlands	Monitor long term cattail impacts on restored wetlands	Monitor fish and wildlife in restored wetlands
2018-2028	NPS	Publish and present outcomes of project to educate and assist other wetland management plans	Continue partnerships to assist with cattail and wetland management	Develop effective cattail and wetland management strategies

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

Non-native cattail is an insidious invader that has rapidly invaded and degraded lakeshores in northern Minnesota. Immediate removal of cattails will slow its spread and reverse wetland loss. Further, a seedbank of viable natural plant species exists beneath the dense patches of cattails. While many species can remain buried for years, viability decreases over time; the sooner treatment occurs the better the natural regeneration of wild rice and other important species. Release of existing native plants is more cost-effective than purchasing seed or propagating plants in a nursery setting. Recent analysis of aerial imagery has revealed large sections of floating cattail mats detaching from bays and moving via by wind action. This creates new invasions and can cause navigational hazards. Immediate removal of these floating cattail mats before their detachment will eliminate navigational hazards, prevent property damage, and reduce the spread of invasive cattails to pristine wetlands.

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

We currently have funding (\$300,000) from the Initiative Foundation to continue restoration efforts already underway and finalize the development of the most cost-effective treatment techniques. Additional funding (\$150,000) from NPS is allocated to supplement these restoration efforts and monitor their effectiveness. These funds are currently secured. A proposal has been submitted to solicit additional funds from National Park Service partners. With the evaluation of cattail removal and wetland restoration techniques funded, Outdoor Heritage Fund appropriations would allow expansion and implementation of these methods to start restoring wetlands at a larger scale.

Relationship to other funds:

- Initiative Foundation using funds from the Outdoor Heritage Fund

Describe the relationship of the funds:

The Initiative Foundation received funds from the Outdoor Heritage Fund in 2014 to prevent the introduction or spread of invasive species into Minnesota waters and to assess the effectiveness of these strategies. The first phase of this project was partly funded by the Initiative Foundation to carry out this goal with non-native cattails in the region. With the help of NPS and other funds, this grant kick-started the development of non-native cattail prevention strategies as Phase 1 of the overall project.

Per MS 97A.056, Subd. 24, Any state agency or organization requesting a direct appropriation from the OHF must inform the LSOHC at the time of the request for funding is made, 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

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

Appropriation Year	Source	Amount
2016	NPS	240,000
2017	Initiative Foundation	500,000

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 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 - **Yes (Public Waters, US National Park)**

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

Are the funds confirmed - **Yes**

[Documentation](#)

What are the types of funds?
In-Kind Match - \$963200

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
Remove Invasive Cattails	2023
Reestablish native vegetation where cattails were removed	2023
Maintain restored wetlands with mechanical techniques	2023
Monitor effectiveness of cattail removal and reestablishment of native vegetation	2023
Report results and recommend most cost effective cattail and wetland management strategies	2027

Budget Spreadsheet

Total Amount of Request: \$1,973,400

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$939,000	\$370,500	NPS, NPS, NPS, NPS, NPS	\$1,309,500
Contracts	\$750,000	\$0		\$750,000
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	\$25,000	\$45,000	NPS	\$70,000
Professional Services	\$0	\$0		\$0
Direct Support Services	\$179,400	\$89,700	NPS	\$269,100
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$350,000	NPS	\$350,000
Other Equipment/Tools	\$30,000	\$58,000	NPS	\$88,000
Supplies/Materials	\$50,000	\$50,000	NPS	\$100,000
DNR IDP	\$0	\$0		\$0
Total	\$1,973,400	\$963,200		\$2,936,600

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Biologist Program Manager	1.00	5.00	\$442,000	\$0		\$442,000
Biological Science Technician - Term	1.00	5.00	\$315,000	\$0		\$315,000
Biological Science Technician - Seasonal	0.50	5.00	\$91,000	\$91,000	NPS	\$182,000
Biological Science Technician - Seasonal	0.50	5.00	\$91,000	\$91,000	NPS	\$182,000
Project Administrator	0.01	5.00	\$0	\$10,000	NPS	\$10,000
Project Supervisor	0.10	5.00	\$0	\$56,000	NPS	\$56,000
Restoration Ecologist	0.25	5.00	\$0	\$122,500	NPS	\$122,500
Total	3.36	35.00	\$939,000	\$370,500		\$1,309,500

Capital Equipment

Item Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Facilities, boats, vehicles, vegetation harvester	\$0	\$350,000	NPS	\$350,000
Total	\$0	\$350,000		\$350,000

Amount of Request: \$1,973,400
 Amount of Leverage: \$963,200
 Leverage as a percent of the Request: 48.81%
 DSS + Personnel: \$1,118,400
 As a % of the total request: 56.67%
 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:

Requested 10% of grand total for Direct Support Services, 100% of which is direct to this program. Anticipated leverage of 5% of grand total as in-kind support direct to this program

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

The amount in the contract line is \$750k for contracting large harvesting equipment for cattail removal.

***The requested funding for personnel includes three technicians and a project manager. The technicians will be on the ground

doing removal of cattail with aquatic vegetation harvester and hand held tools in areas inaccessible by the machines. The technicians will also be doing seed collection, seed and plant preparation, planting and spreading seed, implementing prescribed burns, and other field assistance. The project manager is taking care of project administrative needs, directing and coordinating field staff and contracted operations, and assisting with field work. All positions are necessary to appropriately implement this project and are supported by over \$370k in NPS staffing leverage

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

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

Automobile lease for the project to travel to and from project sites and haul equipment and tools. Requesting one vehicle for the term of the project and leveraged with two additional vehicles funded by NPS.

Describe and explain leverage source and confirmation of funds:

Current in-hand leverage funds are through the NPS and other federal agencies. We also have in-kind support from multiple partners and agencies to implement and monitor this project.

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 ratio of administrative costs versus acres of wetlands restored would be disproportionate (i.e. less cost effective/efficient) due to relatively fixed administrative and personnel costs. Therefore, if funds are reduced, administrative costs will go down slightly but number of acres restored will be dramatically reduced.

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	1,825	0	0	0	1,825
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	1,825	0	0	0	1,825

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$1,973,400	\$0	\$0	\$0	\$1,973,400
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	\$1,973,400	\$0	\$0	\$0	\$1,973,400

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	0	1,825	1,825
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	1,825	1,825

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	\$1,973,400	\$1,973,400
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	\$1,973,400	\$1,973,400

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	\$1,081	\$0	\$0	\$0
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	\$1,081
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:

Parcels for treatment and restoration were first identified by the presence of invasive cattails of significant quantity to warrant restoration. Parcels were prioritized by the presence of floating cattail mats which have the potential to detach causing navigational hazards and property damage. Parcels with archeological and cultural sites were avoided to protect those resources. The remaining parcels after this process are prioritized by ease of access and cost-effectiveness of restoration.

Section 1 - Restore / Enhance Parcel List

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?
Blunt Island	06920228	2	\$1,900	Yes
Central Cranberry East	07121233	9	\$9,500	Yes
Central Cranberry West	07021205	269	\$291,300	Yes
Central Irwin Bay	06921235	138	\$148,900	Yes
Central Lost Bay	07121236	78	\$84,200	Yes
East Channel	07121225	2	\$2,500	Yes
East Cranberry Bay	07021204	2	\$1,900	Yes
East Deer Point Island	06920230	19	\$20,400	Yes
East Irwin Bay	06921236	83	\$90,000	Yes
East Lost Bay	07120231	10	\$10,300	Yes
East Moose Bay	07021228	7	\$7,600	Yes
East Ranta Bay	07021231	14	\$15,600	Yes
East Tom Cod Bay	06922201	113	\$122,500	Yes
Mud Bay	06920229	19	\$20,100	Yes
North Blind Ash Bay	06920226	18	\$19,100	Yes
North Cranberry Bay	07121232	123	\$132,800	Yes
North Daley Bay	06920231	4	\$3,900	Yes
North Moose Bay	07021221	10	\$11,200	Yes
North Ranta Bay	07022225	10	\$11,100	Yes
NW Cranberry Bay	07121231	1	\$1,000	Yes
NW Tom Cod Bay	06922202	37	\$39,900	Yes
SE Alder Bay	07021203	38	\$41,100	Yes
SE Cranberry Bay	07021208	34	\$36,700	Yes
SE Sphunge Island	06921226	80	\$86,600	Yes
SE Tom Cod Bay	06922212	104	\$112,300	Yes
South Blind Ash Bay	06920235	2	\$2,600	Yes
South Daley Bay	06920232	118	\$127,700	Yes
South Gold Portage	07021230	9	\$10,100	Yes
South Moose Bay	07021229	0	\$0	Yes
South Ranta Bay	07022236	79	\$85,500	Yes
SW Cranberry Bay	07021206	2	\$2,000	Yes
SW Cranberry Bay	07021207	15	\$15,800	Yes
SW Sphunge Island	06921227	29	\$31,700	Yes
SW Tom Cod Bay	06922211	160	\$172,600	Yes
West Alder Bay	07121234	106	\$114,800	Yes
West Deer Point Island	06921225	21	\$23,000	Yes
West Gold Portage	07021219	0	\$0	Yes
West Irwin Bay	06921234	34	\$37,100	Yes
West Lost Bay	07121235	24	\$25,500	Yes
West Moose Bay	07021220	2	\$2,400	Yes

Section 2 - Protect Parcel List

No parcels with an activity type protect.

Section 2a - Protect Parcel with Bldgs

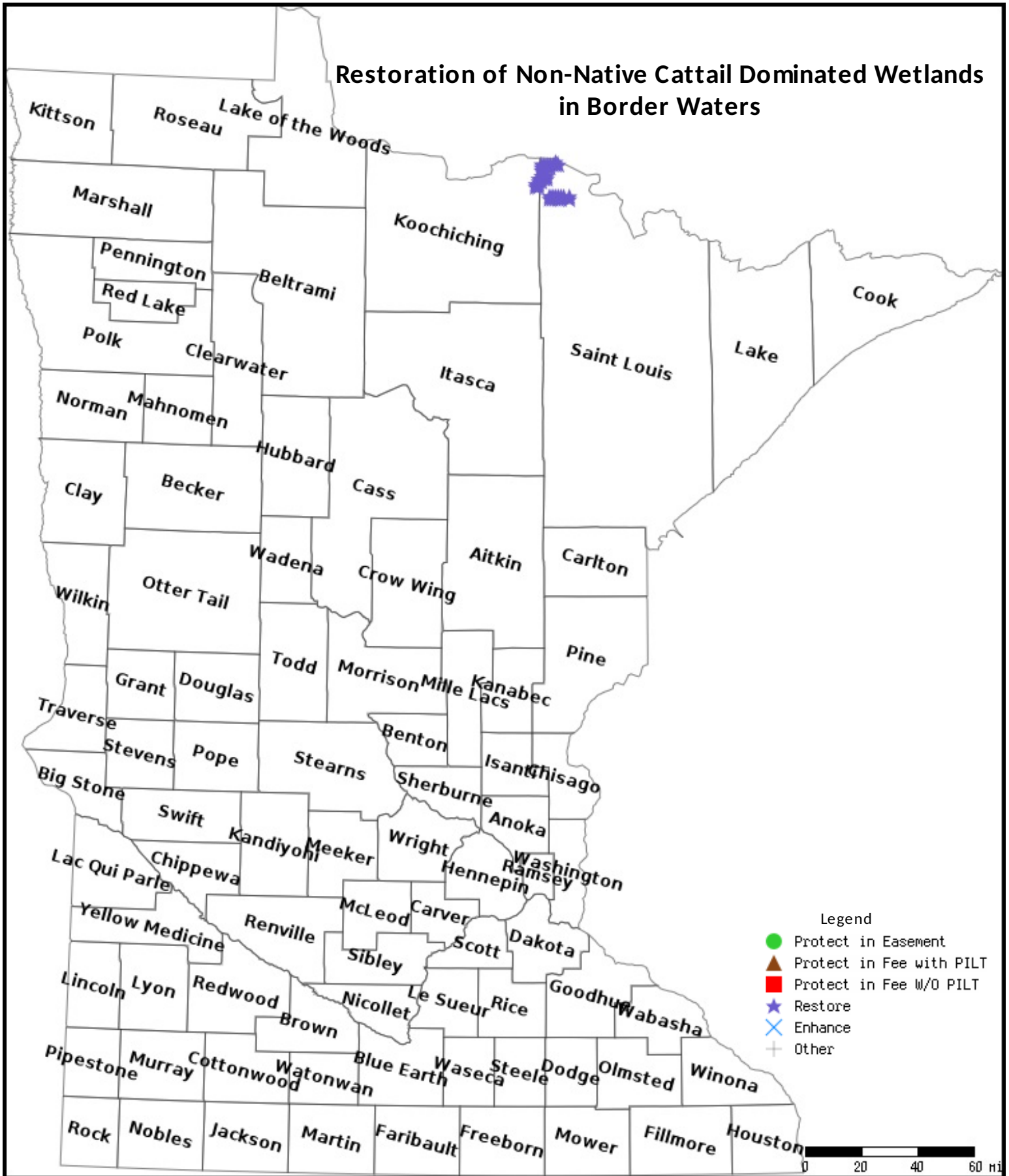
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map

Restoration of Non-Native Cattail Dominated Wetlands in Border Waters

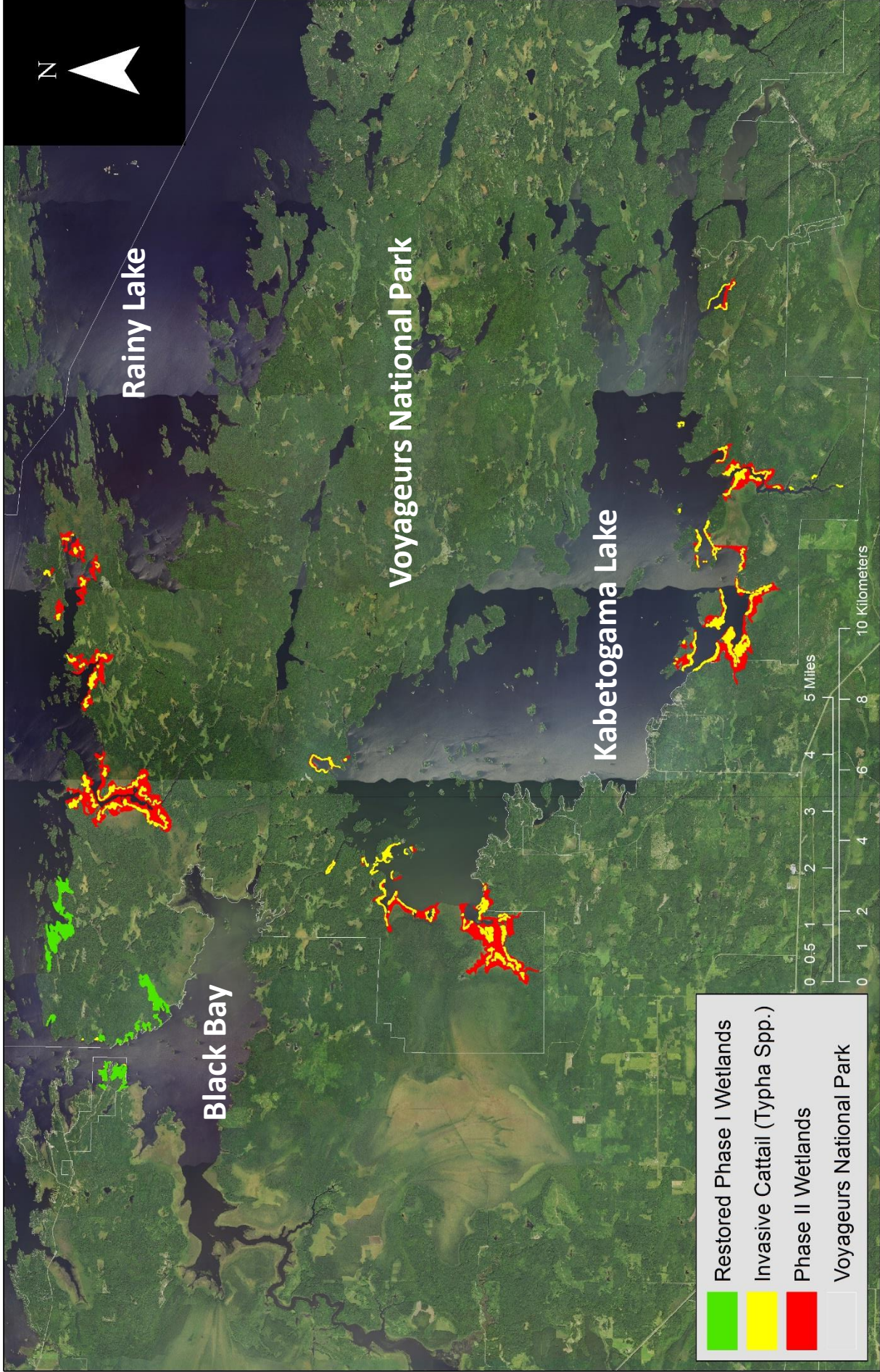


Data Generated From Parcel List

Restoration of Non-native Cattail Dominated Wetlands in Border Waters

Non-native cattails (*Typha* spp.) have invaded wetlands in the border waters in and adjacent to Voyageurs National Park, displacing native vegetation, reducing biodiversity, degrading fish/wildlife habitat, impairing recreational opportunities, and degrading cultural resources, especially wild rice (*Zizania palustris*).





Rainy Lake

Voyageurs National Park

Kabetogama Lake

Black Bay

Restored Phase I Wetlands

Invasive Cattail (*Typha* Spp.)

Phase II Wetlands

Voyageurs National Park

0 0.5 1 2 3 4 5 Miles

0 1 2 4 6 8 10 Kilometers



Rainy Lake Sportfishing Club
P.O. Box 888
International Falls, MN 56649

August 19, 2016

Lessard-Sams Outdoor Heritage Council
95 State Office Building
St Paul, Minnesota 55155

Dear Council Members;

The Rainy Lake Sportfishing Club supports the effort of Voyageur's National Park to restore natural cat tails and eliminate the invasive cat tails that have invaded the park.

The Rainy Lake Sportfishing is made of individual members dedicated to restoring, maintaining and enhancing the fisheries both in and out of Voyageurs National Park. The invasive cat tails on Rainy Lake threaten the natural conditions on the Lake. The invasive cat tails have destroyed the natural spawning grounds for the Northern Pike. In addition they have destroyed the natural wild rice stands. Both of these are important to natural communities in and around the Park.

We recommend the proposal from Voyageurs National Park to remove these invasive cat tails.

Sincerely,

Eric Norstad, President
Rainy Lake Sportfishing Club



June 2, 2016

Rainy Lake Property Owners Association
PO Box 484
Ranier, MN 56668

Dear Board of Managers:

Please accept this letter of support for the grant application to the Outdoor Heritage Fund titled "Restoration of Invasive Cattail Dominated Wetlands in Voyageurs National Park" submitted by Voyageurs National Park. We are hopeful this project will bring increased attention and efforts to an issue that threatens the natural, cultural, and recreational opportunities to our treasured lakes and natural areas. Many of our members also live on shallow bays outside the park these bays are infested as well.

As an organization with the mission "to promote, represent, and protect property and riparian rights on the shore of Rainy Lake and the upper Rainy River", The Rainy Lake Property Owners Association sees the benefit of evaluating invasive cattail removal and wetland restoration techniques in the area. We therefore, wish to offer our full support for this proposal and the work outlined within than can potentially identify a long-term and cost-effective means of controlling invasive cattails in lake environments in the Border Lakes region.

Sincerely,

Steven Lindberg, Vice President
Representing, Rainy Lake Property Owners Association



VOYAGEURS
NATIONAL PARK
ASSOCIATION

May 23, 2016

Lessard-Sams Outdoor Heritage Council
95 State Office Building
St. Paul, MN 55155

Dear Council Members:

Voyageurs National Park Association fully supports Voyageurs National Park's Lessard-Sams Outdoor Heritage Fund proposal for "Restoring Wetland Biodiversity at Voyageurs National Park."

Voyageurs National Park Association serves as the nonprofit partner of the park. For over 50 years, our mission has been to protect and promote the natural, recreational and historic resources of Voyageurs. Under this mission, we are committed to helping the National Park Service restore wetland biodiversity and remove non-native invasive species over the next several years through partnership, financial and volunteer support.

Voyageurs National Park supports approximately 20,000 to 27,000 acres of wetlands. Many of these wetlands have been invaded by non-native hybrid cattails. What were once small, localized populations have increased dramatically. It is a serious threat to the ecological integrity of wetlands that is altering the dynamics of aquatic ecosystems and limiting use of waterways for recreation. Invasive cattails are having a devastating effect on wild rice. Wild rice is not only important for wildlife but plays a central role in the life of American Indian and First Nations communities in our area.

We fully support the efforts of Voyageurs National Park to restore the ecological integrity of wetlands in our state's only national park, an important piece of Minnesota's outdoor heritage.

Sincerely,

Christina Hausman
Executive Director

Protecting and promoting the natural, recreational and historic resources of Voyageurs National Park.

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