

Request for Funding

Lessard-Sams Outdoor Heritage Council Fiscal Year 2015 / ML 2014

Program or Project Title: Lake Independence Fish Habitat Improvement Project

Funds Requested: \$510,000

Manager's Name: John Barten

Title:

Organization: Three Rivers Park District

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Organization Web Site:

County Locations: No Counties Listed

Ecological Planning Regions:

- Metro / Urban

Activity Type:

- Enhance

Priority Resources Addressed by Activity:

- Habitat

Abstract:

Improve the game fish habitat and water quality of Lake Independence by reducing phosphorus loading from the watershed and from internal recycling, and controlling invasive species (carp).

Design and Scope of Work:

Spurzem and Half Moon lakes are located within Baker Park Reserve in Hennepin County. Both lakes are located within the Pioneer Sarah Creek watershed and are tributary to Lake Independence. Lake Independence is listed by the MPCA as an impaired waterbody. The approved TMDL for the lake requires a 337 pound reduction in phosphorus loading from the Spurzem and Half Moon drainage. These two lakes contain high levels of phosphorus, which flow into Lake Independence with the discharge water. This flow significantly contributes to the phosphorus load in Lake Independence. This project will conduct alum treatments in Spurzem and Half Moon lakes, reducing the amount of phosphorus that reaches Lake Independence. In addition, alum will be applied to the sediments in a bay of Lake Independence immediately downstream of a large feedlot. The project will also complete a carp assessment in the Lake Independence drainage area, and implement carp control measures. This will result in improved water quality and enhanced habitat for game fish including muskies, walleye and northern pike in this

819 acre lake.

Planning

MN State-wide Conservation Plan Priorities:

- H4 Restore and protect shallow lakes
- H5 Restore land, wetlands and wetland-associated watersheds
- H6 Protect and restore critical in-water habitat of lakes and streams

Plans Addressed:

- Long Range Plan for Fisheries Management
- Long Range Plan for Muskellunge and Large Northern Pike Management Through 2020
- Managing Minnesota's Shallow Lakes for Waterfowl and Wildlife
- Minnesota Sustainability Framework
- State Comprehensive Outdoor Recreation Plan

LSOHC Statewide Priorities:

- Address Minnesota landscapes that have historical value to fish and wildlife, wildlife species of greatest conservation need, Minnesota County Biological Survey data, and rare, threatened and endangered species inventories in land and water decisions, as well as long-term or permanent solutions to aquatic invasive species
- Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections
- Ensures activities for "protecting, restoring and enhancing" are coordinated among agencies, non profits and others while doing this important work; provides the most cost-effective use of financial resources; and where possible takes into consideration the value of local outreach, education, and community engagement to sustain project outcomes
- Leverage effort and/or other funds to supplement any OHF appropriation
- Produce multiple enduring conservation benefits
- Restore or enhance habitat on permanently protected land
- Use a science-based strategic planning and evaluation model to guide protection, restoration and enhancement, similar to the United States Fish and Wildlife Service's Strategic Habitat Conservation model

LSOHC Metro Urban Section Priorities:

- Protect, enhance, and restore riparian and littoral habitats on lakes to benefit game and nongame fish species

Relationship to Other Constitutional Funds:

- No Relationships Listed

Accelerates or Supplements Current Efforts:

Award of the funds requested for improvement of Lake Independence will supplement and accelerate efforts by the Pioneer Sarah Creek Watershed Management Commission, the cities of Medina and Independence, and Three Rivers Park District to improve water quality and aquatic habitat in Lake Independence. Previous initiatives included shoreline stabilization, watershed erosion control, ongoing street sweeping projects, rain garden construction, and Eurasian Water Milfoil control. The MNDNR is working to improve the lake as a muskie fishery through stocking and special regulations. Three Rivers Park District recently naturalized over 500 feet of shoreline to improve panfish spawning opportunities. The project will also supplement efforts by a citizen's group - the Lake Independence Citizen's Association - to reduce manure runoff from a livestock producer immediately adjacent to the lake.

Sustainability and Maintenance:

Three Rivers Park District has invested millions of dollars in recreational facilities in Baker Park Reserve adjacent to Lake Independence (campground, fishing piers, boat launch, picnic areas) and is committed to improving and maintaining the aquatic habitat and water quality of the lake. It is anticipated that carp and Eurasian water milfoil control will be ongoing activities. Park District staff will complete annual surveys to determine the nuisance level of these species and then implement necessary control activities. The Park District will continue current water quality monitoring activities in Lake Independence to measure the phosphorus adsorption effectiveness of the alum. If necessary, the Park District will add additional alum to minimize downstream nutrient movement. The cost of the proposed monitoring activities is estimated at \$8,000 annually, with funding from the Park District operating budget. Funding for the additional carp control, EWM control and enhancement of the alum blanket is estimated at \$20,000 annually, with funding from the Asset Management Budget. The Board of Commissions annually commits \$500,000 to natural resource management activities. The Park District will also continue to work with the Pioneer-Sarah Creek watershed to reduce nutrient loading from the watershed outside of park property.

Permanent Protection:

Is the activity on permanently protected land and/or public waters per MS 103G.005, Subd. 15? - Yes
(County/Municipal, Public Waters)

Accomplishment Timeline

Activity	Approximate Date Completed
Alum application to Spurzem, Independence and Half Moon Lakes	12/15/2016
Carp population assessment	12/15/2016
Carp Population control	6/30/2019
Eurasian water milfoil control	6/30/2019

Outcomes

Programs in metropolitan urbanizing region:

- Improved aquatic habitat indicators *Through bi-weekly chemical, physical, and biological monitoring implemented by the Park District and watershed commission, fish population surveys by MDNR*

Budget Spreadsheet

Total Amount of Request: \$510,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$0	\$0		\$0
Contracts	\$510,000	\$20,000		\$530,000
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	\$0	\$0		\$0
Professional Services	\$0	\$0		\$0
Direct Support Services	\$0	\$0		\$0
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$0	\$0		\$0
DNR IDP	\$0	\$0		\$0
Total	\$510,000	\$20,000	-	\$530,000

Output Tables

Table 1. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	0	0
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	1,077	1,077
Total	0	0	0	1,077	1,077

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$0	\$0
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	\$510,000	\$510,000
Total	\$0	\$0	\$0	\$510,000	\$510,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	0	0	0
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	1,077	0	0	0	0	1,077
Total	1,077	0	0	0	0	1,077

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	\$0	\$0
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	\$510,000	\$0	\$0	\$0	\$0	\$510,000
Total	\$510,000	\$0	\$0	\$0	\$0	\$510,000

Table 5. Target Lake/Stream/River Miles

10 miles

Parcel List

Section 1 - Restore / Enhance Parcel List

Hennepin

Name	TRDS	Acres	Est Cost	Existing Protection?
Lake Independence	11824212	1,077	\$580,000	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.