# **Main Request for Funding Form**

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

Program or Project Title: Lake Zumbro Habitat Restoration Project

Funds Requested: \$3,000,000

Manager's Name: Terry Lee

Title: Olmsted County Water Coordinator

**Organization:** Lake Zumbro Improvement Association

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Organization Web Site: www.co.olmsted.mn.us

County Locations: ,

#### **Ecological Planning Regions:**

Southeast Forest

#### **Activity Type:**

Restore

#### **Priority Resources Addressed by Activity:**

Habitat

#### **Abstract**

Olmsted County is requesting \$3,000,000 in funding to be used for site acquisition/easement, and restoration of dredge sediment disposal site. This funding will enable the completion of restoring Lake Zumbro for Minnesota residence

# **Activity Detail**

## **Design and Scope of Work**

The Lake Zumbro Restoration Project will be completed within Public Waters so all restoration areas will continue to be accessible and extensively used by the public consistent with Article XI of the Minnesota Constitution and Minnesota Statutes and Laws, including restrictions on acquisition of lands in the public domain, as required by Minnesota Statutes 2010, Section 97A.056, Subdivision 9.

The project will be administered by the Olmsted County, and therefore will utilize the established state and county processes to ensure transparency and access to information about the project/program in all stages of project/program implementation.

The significance of the Lake Zumbro Restoration Project lies in the lake having the highest population-to-lake-area ratio in all of Greater Minnesota. There are no other lakes of comparable size, depth, and recreational opportunity within an hour's drive of the City of Rochester. The lake is located just 6 miles north of the Rochester (100,000-plus residents), and within 15 miles of 12 small cities. The Rochester area is one of the fasted growing areas of the state with a population increase of 17% within just the last decade. This recreational resource will help will help address the State's Conservation Plan goal of meeting critical demand for outdoor recreation opportunities while limiting the need to travel great distances. A related environmental benefit is the enhanced potential for increased hydropower production at the Lake Zumbro dam.

Lake Zumbro's shallow bays and headwater area have many of characteristics of degraded shallow lake habitat, and are subject to mixing from wind, surface use, and carp, resulting in near-constant turbid water. The State Conservation Plan habitat recommendation 4: Restore and protect shallow lakes (page 373): recommends accelerated efforts to restore and improve this type of habitat. The Lake Zumbro Restoration Project will sustain this fragile aquatic habitat for this and succeeding generations.

A performance measurement plan was included in the Lake Zumbro restoration preliminary engineering work completed by Barr Engineering Co. Inc. Olmsted County Environmental Resource Services will be responsible for measuring, evaluating and publicly reporting the outcomes over time.

The restoration project is based on the best available science and engineering relative to resource and habitat enhancement, restoration, and protection. A scientific study of the lake bathymetry was completed in 2005 to assess current and historic sedimentation rates and to identify areas most damaged and most threatened by sedimentation. A preliminary engineering study was completed by Barr Engineering Co. Inc. in 2010 to identify the most feasible approach to restoring aquatic habitat and recreational access in these areas.

This project grant request of \$3 million goes far beyond the specified minimum grant request of \$150,000.

There are no traditional funding sources for lake restoration projects; therefore, all of the funding for this project will only supplement (not replace) customary or usual funding sources.

It is anticipated that \$9 million is required to complete the Lake Zumbro Restoration Project. Of that, \$3 million is being requested from the LSOHC, \$3 million from the 2012 State Capital Investment Bill (already approved) and \$3 million in matching funds will be raised locally from public and private sources already identified. Local funding will be provided by the Rochester Public Utilities and the two-county Lake Zumbro Lake Improvement District.

We have identified the funding necessary to fully implement the project, and have a plan to sustain the resource outcomes specified, including a plan to finance the necessary activities.

Olmsted County has the authority needed to sustain and maintain the Lake Zumbro rehabilitation work. Additionally, the non-profit organization, Lake Zumbro Forever, Inc., was created to assist in the initial lake rehabilitation, and to provide an organization dedicated to funding the long term maintenance of the rehabilitation work. In addition to ongoing work to reduce sedimentation in the watershed upstream of Lake Zumbro, maintenance dredging would be done in 2032 to assure sustainability and long term value of the initial dredging investment.

The Turbidity TMDL Plan for the Zumbro River identifies the need to reduce sediment levels in the river by 80% to meet federal Clean Water Act requirements. This will be accomplished using precision conservation planning such as is underway at the Minnesota Department of Agriculture, Olmsted and Dodge Counties have already begun active enforcement of shoreland buffer setback requirements, and ongoing work by the Soil and Water Conservation Districts.

The preliminary engineering completed by Barr Engineering Co. Inc. includes features specifically designed for collecting sediment in areas that are easily accessible to minimize future maintenance costs. The Zumbro Watershed Partnership's targeting of conservation practices using LiDAR is expected to significantly improve the efficiency and effectiveness of soil and water conservation practices.

With maintenance and improvements in erosion and sedimentation control in the upstream watershed area, the Lake Zumbro rehabilitation project benefits for recreation and aquatic habitat improvements are projected to last at least 50 years.

The requested LSOHC grant funding, plus the State Capital Investment Bil (already approved), plus the local matching funds, eliminate any exposure for additional state funding for this project.

The project will use native plant materials where opportunities exist to restore or enhance aquatic and shoreland vegetation.

#### **Planning**

#### **MN State-wide Conservation Plan Priorities**

H4 Restore and protect shallow lakes

#### **Plans Addressed**

- A Vision for Wildlife and Its Use -- Goals and Outcomes 2006-2012
- Grassland Bird Conservation Area
- Long Range Plan for Fisheries Management
- Long Range Plan for Muskellunge and Large Northern Pike Management Through 2020
- Long Range Plan for the Wild Turkey
- · Managing Minnesota's Shallow Lakes for Waterfowl and Wildlife
- Minnesota DNR Nongame Wildlife Plans
- Minnesota Sustainability Framework
- Mississippi River Headwaters Comprehensive Plan
- Outdoor Heritage Fund: A 25 Year Framework
- State Comprehensive Outdoor Recreation Plan
- Strategic Plan for Coldwater Resources Management in Southeastern Minnesota

#### **LSOHC Statewide Priorities**

- Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections
- Produce multiple enduring conservation benefits
- Are able to leverage effort and/or other funds to supplement any OHF appropriation

- Allow public access. This comes into play when all other things about the request are approximately equal
- Provide Minnesotans with greater public access to outdoor environments with hunting, fishing and other outdoor recreation opportunities
- Ensures activities for "protecting, restoring and enhancing" are coordinated among agencies, non profits and others while doing this important work

#### **LSOHC Southeast Forest Section Priorities**

 Protect, enhance, and restore habitat for fish, game, and nongame wildlife in rivers, cold-water streams, and associated upland habitat

### **Relationship to Other Constitutional Funds**

none

#### **Accelerates or Supplements Current Efforts**

The 2012 Minnesota Capital Investment Bill provides \$3 million (already approved), plus \$3 million in matching funds from Rochester Public Utilities, Lake Improvement District self tax asssement will provide funding for Dreging Lake Zumbro. Dredging would be undertaken to restore 120 acres of the lake for environmental and recreational use. Preliminary engineering and design work for the dredging and dredge spoil management has been completed by Barr Engineering, Inc. Proposed dredge prisms have been eveloped in consultation with the Minnesota Department of Natural Resources (DNR). Lessard-Sams Outdoor Heritage funds will be used for site aquisition/easement and restoration of dredged sediment on disposal site. Project objectives include: restoring aquatic habitat, improving water quality, increasing public access, expanding recreational opportunities for boating, fishing, and swimming, and enhancing hydropower production.

# **Sustainability and Maintenance**

Many of the reaches of the Zumbro River upstream are impaired for turbidity and the Minnesota Pollution Control Agency is developing a Total Maximum Daily Load (TMDL) Implementation Plan for those reaches. Preliminary discussions with the MPCA staff suggest that the Implementation Plan will include work to reduce upland erosion as well as stabilizing stream banks. Additionally, the Zumbro Watershed Partnership has developed a Watershed Management Plan that includes multiple action items focused on establishing stream buffers and encouraging upland erosion control. The Partnership has in the past utilized state grant funds for these purposes and is expected to actively pursue Clean Water Legacy funding for that purpose. The primary organization that will be responsible for funding maintenance of the lake restoration is the 501c3 organization, Lake Zumbro Forever, Inc. However, the Olmsted County and the Lake Improvement District may also participate in funding future maintenance.

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

# **Accomplishment Timeline**

Activity	Approximate Date Completed
Final Engineering Design	October, 2013
Dredging	December, 2014
Sediment De-Watering	December, 2015

## **Outcomes**

# Programs in southeast forest region

- Improved aquatic habitat indicators
- Rivers, streams, and surrounding vegetation provide corridors of habitat

# **Budget Spreadsheet**

Total Amount of Request: \$3,000,000

# Budget and Cash Leverage

Budget Name	LSOHC Request	<b>Anticipated Cash Leverage</b>	Cash Leverage Source	Total
Personnel	\$0	\$0	-	\$0
Contracts	\$0	\$0	-	\$0
Fee Acquisition w/ PILT	\$0	\$0	-	\$0
Fee Acquisition w/o PILT	\$0	\$0	-	\$0
Easement Acquisition	\$2,200,000	\$0	-	\$2,200,000
Easement Stewardship	\$0	\$0	-	\$0
Travel (in-state)	\$0	\$0	-	\$0
Professional Services	\$800,000	\$0	-	\$800,000
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	\$3,000,000	\$0	-	\$3,000,000

# Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
Total	0	-	\$0	\$0	-	\$0

# Capital Equipment

Item Na	me	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
	Total	\$0	\$0	-	\$0

# **Output Tables**

Table 1. Acres by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	120	120
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	120	120

Table 2. Total Requested Funding by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$3,000,000	\$3,000,000
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
Tota	\$0	\$0	\$0	\$3,000,000	\$3,000,000

Table 3. Acres within each Ecological Section

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	120	0	0	120
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	120	0	0	120

Table 4. Total Requested Funding within each Ecological Section

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$0	\$0	\$3,000,000	\$0	\$0	\$3,000,000
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	\$3,000,000	\$0	\$0	\$3,000,000

# Table 5. Target Lake/Stream/River Miles

5 miles

# **Parcel List**

A grant process will determine parcels at a later date