

Request for Funding

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

Program or Project Title: Minnehaha Creek Watershed District (MCWD) Aquatic Invasive Species (AIS) Management Program

Funds Requested: \$2,070,000

Manager's Name: Craig Dawson

Title: Director, Aquatic Invasive Species (AIS) Program

Organization: Minnehaha Creek Watershed District

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County Locations: No Counties Listed

Ecological Planning Regions:

- Metro / Urban

Activity Type:

- Enhance
- Ecosystem Integrity Protection

Priority Resources Addressed by Activity:

- Habitat

Abstract:

The MCWD is beginning implementation of its AIS Management Program. It stresses prevention and collaboration with public and private partners to protect the integrity of aquatic ecosystems. The funding requested would address start-up costs for prevention activities and infrastructures.

Design and Scope of Work:

The MCWD is finalizing adoption of its AIS Management Plan, a pioneering local-government plan for comprehensively addressing AIS within its 181 square-mile jurisdiction. This new program, undertaken with the encouragement of the cities within the District, was developed over a nine-month period by a diverse group of stakeholders serving on a Task Force. This group focused on what outcomes should result from the program, and the MCWD and collaborating organizations would later design the activities to accomplish them. The Board of Water and Soil Resources "believe this [Comprehensive Plan] amendment provides an excellent planning framework to guide District AIS activities and have no further comments."

The program's goal is "to prevent the introduction and spread of AIS and manage existing AIS within the watershed to a level that does not significantly harm or alter native ecosystems while still maintaining access to public waterbodies." One of the MCWD's missions is water quality, and it goes beyond the impact of land use activities. It includes the vital component of the integrity of aquatic environments themselves - the effects of

biological changes to the “natural” ecology of aquatic plants, animals, and microorganisms. These changes affect the recreation, aesthetic, and environmental quality and uses of waterbodies. For example, Eurasian watermilfoil alters the native aquatic plant community and changes the fish community. Curly-leaf pondweed dies off early, and adds nutrients for algae earlier in the summer as it decays. Zebra mussels, through their filter-feeding in water, remove the bottom of the aquatic food chain and have negative effects upward on fish and waterfowl.

These potential impacts of AIS are acute for the human environment within the watershed as well. There is a large resident population within and near to the District, and hundreds of thousands of visitors to such waters with metropolitan and state-wide significance as the Minneapolis Chain-of-Lakes, Minnehaha Creek and Falls, and Lake Minnetonka. For many residents, they only or mainly experience the quality of Minnesota’s great outdoors and waters through these water resources.

In a metropolitan and multi-jurisdictional context, the MCWD is one but a key player in AIS management. The Plan notes that no one organization has the capacity to address AIS. Intergovernmental cooperation, and the involvement of non-governmental organizations, business and residential groups and individuals, will be needed. The MCWD will perform activities where local governments and other organizations are willing to invest and work with the District to implement them. The MCWD will also be a willing partner in pilot programs that could lead to regional or state-wide implementation.

Important in any plan is the ability to get it started, and started well. The requested LHOSC funding focuses on accelerating progress on foundational activities needed for sound management, as well as successes that will enhance the commitment to AIS management throughout the District. With the understanding that LHOSC funds are available for three years after approval, the District proposes to fast-track the following activities with these funds:

1. Baseline Inventory of All Lakes --\$125,000: There are 129 lakes within the MCWD. Data on aquatic plants and animals in many of them are dated or nonexistent. The goal would be to perform inventories of each lake within the MCWD over three years. These inventories, organized on a consistent basis, would provide thorough baseline data for informed management decisions. The inventory process would also lead to detection of undocumented presence of AIS.

2. Containment and Monitoring of AIS Detected -- \$250,000: The accelerated inventory process would identify the extent to which AIS may be present in an extent small enough that it may be contained or removed. This figure assumes two to four lakes to be treated each of the three years. Waterbodies where containable populations of AIS are detected would need subsequent monitoring for the effect of management measures on AIS and other aquatic biota.

3. 4 Central Facilities for AIS Watercraft Inspection and Boat Cleaning/Decontamination -- \$1,220,000: Early assessments by MCWD staff suggest that four locations in or proximate to the District would provide the facilities necessary and convenient for residents to have their watercraft inspected and, if necessary, cleaned. The cost estimate provides for at least a mobile decontamination unit at each site, and staffing and operating costs for the boating season. Preferred locations for these sites would be on properties owned by local units of government (e.g., counties, park districts). Watercraft passing inspection and/or having been cleaned would receive a proof-of-inspection that would be recognized at a public access staffed with a watercraft inspector. This system would be an adaptation of the Lake Tahoe model for the metropolitan area.

4. Boat Access Design Improvements -- \$300,000: The MCWD would coordinate improvements to ten public accesses over three years based on the model developed by Hennepin County for its access at North Arm on Lake Minnetonka. The model uses social marketing principles for improvements to guide and assist boaters to inspect and clean their boats properly.

5. Carp Management, Painter Creek Subwatershed -- \$100,000 : Common carp are prevalent within the MCWD, and are known to cause poor water and habitat quality. The Painter Creek subwatershed includes portions of Medina, Maple Plain, Independence, and Minnetrista, and it is known to have carp present. A diagnostic study of this subwatershed will be performed, the results of which will indicate what further research or measures should be implemented.

6. Public Outreach and Education -- \$75,000: The District would develop additional public information to reach the many residents throughout the District, and provide communications tools for its local many governments.

The MCWD's AIS Department consists of two positions. The requested funding of \$2,070,000 for these essential initial management activities would propel the implementation of the District's AIS Management Plan beyond the resources otherwise foreseeable.

Planning

MN State-wide Conservation Plan Priorities:

- H4 Restore and protect shallow lakes
- H6 Protect and restore critical in-water habitat of lakes and streams

Plans Addressed:

- A Vision for Wildlife and Its Use -- Goals and Outcomes 2006-2012
- Minnesota DNR Strategic Conservation Agenda
- National Fish Habitat Action 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
- 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:

The MCWD is finalizing an amendment to its Comprehensive Water Resources Management Plan to implement an Aquatic Invasive Species Management Program. The Program is designed to address all types of AIS. It emphasizes prevention, using public information and physical measures to prevent the introduction or spread of AIS by human activity. It calls for research and science-based approaches to lead to decisions for effective, high-value measures to manage AIS. Importantly, the Program also relies on collaboration with governmental, non-governmental and private organizations in the funding and implementation of these activities. For example, there are 34 local governments within the District.

The MCWD has recently undertaken some critical stop-gap measures for AIS management while the AIS Management Program was being developed. The Program envisions these activities would be continued and expanded, likely on a gradual basis due to funding restraints on the District as well as its partners. LSOHC funding would provide the one-time resources needed for a robust and comprehensive initiation of the rest of the activities identified in the AIS management plan. These funds would be used by the MCWD and would be more readily available for use by its partners within the District.

Sustainability and Maintenance:

MCWD activities will be designed for it and collaborating organizations to plan for commitments to continue them. As some measures are one-time projects (particularly research), sustainability of funding and effort should not be an issue. Other requested funding will provide a one-time financial boost to start long-term activities that are consistent with the MCWD's AIS Management Program, and to which the District is committed to follow. The District has the statutory authority to levy for funds necessary to accomplish activities that are in its Comprehensive Plan. In terms of activities that involve partners, the MCWD will not have control over the actions they may take to continue their participation (e.g., financially), but it will work with them to maintain services. The District has a philosophy of sustainability in all of its endeavors, including financial components. LSOHC funding would be viewed as one-time revenue for the activities undertaken, so as not to lead to a false sense of dependence on these moneys.

Permanent Protection:

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

Other Activity:

Ecosystem Integrity Protection

Most of the activities in the request will take place in public waters within the watershed, and the rest will affect how people use public waters.

Accomplishment Timeline

Activity	Approximate Date Completed
Baseline Inventory of All Lakes	June 30, 2017
Containment and Monitoring of AIS Detected	June 30, 2017
Central Facilities for AIS Watercraft Inspection and Boat Cleaning/Decontamination	June 30, 2017
Boat Access Design Improvements	June 30, 2017
Carp Management, Painter Creek Subwatershed	June 30, 2017
Public Outreach and Education	June 30, 2017

Outcomes

Programs in metropolitan urbanizing region:

- Improved aquatic habitat indicators *Grade quality of aquatic habitat per MCWD and DNR protocols, assess reasons for improvement or decline as related to LSOHC grant proposal activities.*
- Protected habitats will hold wetlands and shallow lakes open to public recreation and hunting *Identify the number of wetlands and shallow lakes closed; determine if closure is consistent with MCWD AIS Management Program and approved by DNR.*

Budget Spreadsheet

Total Amount of Request: \$2,070,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$810,000	\$0		\$810,000
Contracts	\$250,000	\$0		\$250,000
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	\$380,000	\$0		\$380,000
Other Equipment/Tools	\$15,000	\$0		\$15,000
Supplies/Materials	\$615,000	\$0		\$615,000
DNR IDP	\$0	\$0		\$0
Total	\$2,070,000	\$0	-	\$2,070,000

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Water Quality Technicians and Interns	2.00	3.00	\$210,000	\$0		\$210,000
AIS Watercraft Inspectors (Level 2)	4.00	3.00	\$600,000	\$0		\$600,000
Total	6.00	6.00	\$810,000	\$0	-	\$810,000

Capital Equipment

Item Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Cleaning/Decontamination Units	\$80,000	\$0		\$80,000
Boat Access Design Improvements	\$300,000	\$0		\$300,000
Total	\$380,000	\$0	-	\$380,000

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	21,853	21,853
Total	0	0	0	21,853	21,853

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	\$2,070,000	\$2,070,000
Total	\$0	\$0	\$0	\$2,070,000	\$2,070,000

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	21,853	0	0	0	0	21,853
Total	21,853	0	0	0	0	21,853

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	\$2,070,000	\$0	\$0	\$0	\$0	\$2,070,000
Total	\$2,070,000	\$0	\$0	\$0	\$0	\$2,070,000

Table 5. Target Lake/Stream/River Miles

46 miles

Parcel List

Section 1 - Restore / Enhance Parcel List

No parcels with an activity type restore or enhance.

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.

Minnehaha Creek Watershed District
Lessard-Sams Outdoor Heritage Council
Fiscal Year 2015 / ML 2014 Proposal

Attachment for Activity Detail -- Planning section

The Planning Section asks how the activities in the application:

- Apply to Minnesota State-wide Conservation Plan Priorities, and
- Address other Plans

More explanatory details follow:

MN State-wide Conservation Plan Priorities

- H4 Restore and protect shallow lakes
E.g., Install fish barriers for carp; water control structures for fish kill and to rejuvenate aquatic plants [i.e., enhance native vegetation].

Plans Addressed

- A Vision for Wildlife and Its Use – Goals and Outcomes 2006-2012
Wildlife Resource Goals:
 - 1) Minnesota will have high quality and abundant hunting, trapping, and wildlife recreation opportunities.
 - 2) Minnesota will have healthy and productive wildlife populations and habitats managed on a sustainable basis.
 - 3) Minnesota will be a leader in resource stewardship and effective partnerships with citizens to manage wildlife resources.

- Minnesota DNR Strategic Conservation Agenda

Goal #2: Waters and Watersheds

Minnesota's water resources and watersheds will be conserved and enhanced

Performance Indicator – Aquatic Invasive Species

Number of waterbodies infested with Eurasian watermilfoil and zebra mussels

Target: limit the spread to not more than 10 waterbodies per year and to waters not connected with previous infestations,

Number of watercraft users contacted about AIS

Target: maintain or increase AIS enforcement and education.

- National Fish Habitat Action Plan

Goal: Protect and maintain healthy aquatic systems

Objective: Protect all healthy and intact fish habitats by 2015

Attributes: Action oriented; science based; build on existing collaborative efforts