Lessard-Sams Outdoor Heritage Council

AGENDA ITEM MEMO:

Agenda Item # 7

DATE: November 14, 2013

SUBJECT: Progression of HAIS-4 Evaluate Effectiveness of AIS Prevention Strategies

PRESENTING: Bill Becker

Background

At the Sept. 20, 2013 council meeting, Chair Hartwell put forth a white paper describing his view of the Council discussion of the aquatic invasive species (AIS) requests, current prevention efforts, reasonable actions and the proposals that were received by the council in its FY 15 Call for Funding Requests. The chair presented a strategy that combined a variety of elements – containment, inspection, decontamination, and partnership. Considering the position of the HAIS 04 program manager that appropriation to another more qualified grant administrator might be considered the whitepaper suggested a community foundation be the recipient of the funds to run a pilot program to address AIS issues. The council agreed and recommended funding a pilot program for \$3.65 million.

The Central Minnesota Initiative fund, in cooperation with the Minnehaha Creek Watershed District and the Minnesota COLA and the DNR, three entities which had also submitted proposals to combat AIS, open to develop an accomplishment plan and operate the grant program. The accomplishment plan's abstract call for a program that will "assess the effectiveness of a range of strategies to prevent introduction of Aquatic Invasive Species in uninfected or minimally impacted lakes in Minnesota through a range of inspection, education and outreach, enforcement, and/or other methods that can be administered locally."

Suggested Motion: Move to progress the draft accomplishment plan as presented

Suggested Procedure: Motion is placed before the council for discussion and amendments.

Attachment: HAIS-4 draft accomplishment plan

Lessard-Sams Outdoor Heritage Council Laws of Minnesota 2014 Accomplishment Plan

Date: November 04, 2013

Program or Project Title: Evaluate Effectiveness of AIS Prevention Strategies

Funds Recommended: \$ 3,650,000

Manager's Name: Don Hickman Title: Vice President for Community and Economic Development Organization: Initiative Foundation Street Address: 405 1st Street SE City: Little Falls, MN 56345 Telephone: 320-632-9255 E-Mail: dhickman@ifound.org Organization Web Site: www.ifound.org

Legislative Citation:

Appropriation Language:

County Locations: No Counties Listed

Ecological Planning Regions:

- Metro / Urban
- Northern Forest

Activity Type:

- Enhance
- Evaluate the effectiveness of aquatic invasive species prevention strategies

Priority Resources Addressed by Activity:

• Habitat

Abstract:

Assess the effectiveness of a range of strategies to prevent introduction of Aquatic Invasive Species in uninfected or minimally impacted lakes in Minnesota through a range of inspection, education and outreach, enforcement, and/or other methods that can be administered locally.

Design and Scope of Work:

Introduction

Nationally, introductions of Aquatic Invasive Species (AIS) have caused the decline of many plant and animal species. They have significant impacts on human activities; for example, in 2005 they cost the U.S. economy over \$120 billion (Flathead Basin [Montana] Aquatic Invasive Species Strategic Prevention Plan, 2010). As they are increasing in their occurrence and distribution, adverse impacts associated with AIS continue to rise. This scenario is playing itself out regionally and locally as well.

Minnesota Statutes, Chapter 84D.01, Subd. 9a defines "Invasive species" as a nonnative species that: (1) causes or may cause economic or environmental harm or harm to human health; or; (2) threatens or may threaten natural resources or the use of natural resources in the state. Many invasive species of concern have been identified that may likely be introduced and survive in Minnesota. Once introduced into new habitats where they have no natural controls or enemies, they disturb native species through competition, predation, displacement, hybridization, and spread of diseases and parasites, and in the process significantly reduce or remove native species from the local ecology. AlS can also adversely affect commercial, agricultural, recreational, and residential activities that depend on water resources.

Public awareness of the detrimental effects of the presence of AIS has led to support for more active coordinated involvement by all levels of government, lake shore owner organizations, the recreation industry, lake management service providers, fishermen, waterfowl hunters, and recreational boaters to manage this issue.

The (Mostly) Human Environment - Vectors and Pathways

What is common among all AIS is that they have been introduced to North America by human activity, but can secondarily happen "naturally" by other animals and transport in water. Vectors and pathways of primary concern include:

- Transient users of water resources (e.g., recreational activities, such as boating and fishing)
- Activities affecting water resources (e.g., commercial, natural resource management, or construction activities)
- Natural and man-made conveyance of waters
- Owners of riparian lands
- Watercraft and trailers
- Docks, lifts, and other such equipment
- Boat accesses (i.e., activities of users of public, private, and commercial launches)
- Bait harvesters and bait users
- Aquarium and land-/aquascaping (release of plants and animals into waters)
- Diving equipment
- Construction/resource management equipment (e.g., barges, plant harvesters, waders, boots)
- Storm water drainage systems (including outlet streams and pipes)
- Float planes
- Tributary waters
- Nature and wildlife (i.e., non-human transport)

Project Purpose

This project will assess the effectiveness of a range of strategies to prevent the introduction of Aquatic Invasive Species (AIS) in uninfested lakes or to prevent the introduction of additional AIS in previously impacted lakes in Minnesota. More specifically, the project will examine the most innovative, legal, effective, and financially sustainable methods of preventing the spread of AIS of concern through a range of education and outreach, inspection and decontamination, enforcement, and/or other methods that can be administered locally. This purpose will be realized under the following four goals:

Goal 1—AIS Data Collection and Planning—

While it is recognized that finding rare occurrences of AIS in lakes is a daunting challenge, successful pilot projects will be required to have some existing baseline monitoring completed on their lakes. Each project will create an AIS prevention plan using a standard format, or provide an existing plan, including a dynamic, regularly updated AIS database, to be used as a long-term program guidance document.

Goal 2—Prevention--This goal strives to keep pilot project lakes free of new AIS. Consequently, the primary emphasis of this project, and in the use of State and local resources, is on prevention activities which may include but are not limited to:

• Extensive public information campaigns using social marketing principles;

• Reports on the reactions and attitudes of lake residents, lake service providers, business owners, and nonriparian citizens to aggressive, targeted approaches to minimize human-assisted AIS migration on pilot project lakes. Reports will also summarize any unintended consequences or strategies that failed to achieve their intended goals. These results will be important in designing future AIS prevention and management efforts.

- Identification of the pathways (vectors) of introduction;
- Management of public lake access;
- Inspection and decontamination of watercraft and other equipment;
- Adaptive management to allow strategies to be modified or replaced during the active project;
- Marshaling of additional manpower, equipment, and funding to extend and expand the prevention effort;
- Aggressive enforcement of existing AIS laws;

Goal 3- Containment-- While prevention is the over-arching goal, there is the reality that AIS may exist, be introduced, or spread in pilot project lakes. Therefore, a companion goal of this project is to:

Keep waters already infested with invasive specie(s) from having any new AIS introduced;

• Focus on rapid response and removal;

• Use some combination of information, education, inspection, and decontamination to limit the spread of established invasive species to and from pilot projects lakes;

Goal 4—AIS Management Results Reporting—Establish a rigorous reporting and results program for each pilot project to monitor and report interim progress as well as overall successes and failures. Reports may include but are not limited to:

• The effectiveness of public education and outreach efforts and changes in citizen attitude toward and support for AIS prevention efforts;

• The reactions and cooperation of recreational boaters, lake service providers and other lake users in actual AIS prevention;

- The degree of interaction and cooperation between local organizations and local governments;
- Risk management and cost/benefit analyses;

• The support of state and local enforcement officials, and other local organizations for extended AIS prevention/control efforts;

• The ability of the project to attract local or other outside matching resources to expand and extend the AIS prevention/control effort;

• Discovery of or changes in AIS presence, or changes in a pilot project lake's AIS Infestation Probability Matrix (see Activity detail)

• Recommendations for additional State and local legislation for AIS prevention and regulation.

Planning:

MN State-wide Conservation Plan Priorities:

- H2 Protect critical shoreland of streams and lakes
- 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
- Ducks Unlimited Living Lakes Initiative
- 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
- Midwest Glacial Lakes Partnership
- Minnesota DNR Strategic Conservation Agenda
- National Fish Habitat Action Plan
- 100th Meridian Initiative

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
- Attempts to ensure conservation benefits are broadly distributed across the LSOHC 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

LSOHC Northern Forest Section Priorities:

• Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas

Relationship to Other Constitutional Funds:

• No Relationships Listed

Accelerates or Supplements Current Efforts:

Pilot project grant recipients would be required to provide local cash or qualifying in-kind match for state funding to supplement efforts during the first three active years of the project and the two years of follow-up monitoring (and any ongoing implementation).

Grass-roots efforts are pushing LUG's to help stop the spread of AIS and more comprehensive, cooperative AIS programs are being demanded. AIS statutes now make it possible for LUG's, Tribal governments, and 501c3 nonprofit organizations to participate in AIS prevention and control. Local volunteer efforts are expected to continue as long as cooperative progress is made toward more complete and cost-effective solutions.

DNR looks to local government, Tribal governments, and 501c3 nonprofit organizations to help protect our public waters. This request is not a substitution for other State resources.

Sustainability and Maintenance:

The AIS Prevention Plans developed through this process will provide local focus and direction for ongoing AIS programs. Local governments, Tribal governments and 501c3 nonprofit organizations will need to provide or secure additional funds for long-term AIS prevention.

It is assumed that support and funding will continue for efforts that are identified as successful and cost-effective. Conversely, funding and other resources can avoid being wasted on strategies that are found to be unsuccessful. The final pilot projects reports and survey results will likely provide important guidance on AIS issues that could lead to meaningful changes in existing programs and future AIS management approaches.

Permanent Protection:

Is the activity on permanently protected land and/or public waters per MS 103G.005, Subd. 15? - No

No Protected Lands/Waters Listed

Other Activity:

Evaluate the effectiveness of aquatic invasive species prevention strategies

Grant activities

The Initiative Foundation will develop this project as an initiative under its Healthy Lakes and Rivers Partnership (HLRP) program. The project will include the following broad program components:

• Convene a Review Committee including expert representation from AIS science; education; evaluation; DNR Divisions of Ecological Services and Water Resources, Fisheries, and Enforcement; University of Minnesota; local

unit of government; Tribal governments; lake property owner organizations; and the recreation and resort industry. The Council will help design criteria and protocols for the program, and assist in initial planning for public outreach. This Committee will also help the Foundation develop eligible lake criteria, determine species prevention priorities, establish the evaluation program, and review and score applications. To the degree possible, the Foundation has strong interest in coordinating with the existing AIS Advisory Council which DNR has already created, and which has substantial expertise in these areas. A secondary advantage of this collaboration is to minimize redundancy with existing programs and add value to the work already completed by DNR.

• Develop an AIS Infestation Probability Matrix Scoring System based on data from lakes with known infestations to help evaluate and prioritize lake protection efforts. The matrix score will be used as a tool to help Local Units of Government, Tribal Governments, or 501c3 nonprofit organizations determine priorities for potential prevention/control efforts. It will also assist in the project evaluation function in conjunction with survey result analysis and follow up monitoring to evaluate the effectiveness of pilot project efforts.

• Issue a Request for Proposals from potential program partners, seeking "inquiry" level of explanation of their strategies and potential implementation partners. Prospective applicants will be asked to provide general lake data (physical area, depth, recreational use intensity, etc), any available AIS survey data, and a summary of local AIS education, monitoring, and prevention/control efforts to date.

• Invite full proposals from Local Units of Government, Tribal Governments, or 501c3 nonprofit organizations in the form of an AIS prevention management plan, outlining AIS status in the lake watershed, prevention/control strategy, timeline, budget, and management structure or responsibility (See required full proposal information below). We anticipate supporting individual lake projects, or umbrella projects involving several lakes provided they are managed by a single local entity/partnership, well-coordinated, and able to demonstrate measurable results.

- Continue to support implementation activities through contracts for service with program partners.
- Contract with a third party organization to standardize surveys and reporting, and assure consistency.

• Over the last two years of the program, observe self-supported implementation efforts begun in first three years of program and continue to evaluate success of strategies.

Application Process

With input from the Advisory Council, the Foundation will:

- Develop a Request for Proposal/Program Manual incorporating LSOHC priorities;
- Solicit inquiry level applications;
- Work with selected applicants to submit full scorable proposals;
- Oversee grant selection;
- Adopt an AIS prevention/control plan template;
- Prepare and execute grant documents;
- Review expenditure documentation, ensuring financial integrity, and makes payments;
- Monitor pilot project progress—successes and failures;
- Oversee ongoing evaluation, monitoring, and quality control;
- Assist recipients with closing out agreements;
- Prepare required reports

Foundation staff and Advisory Council will evaluate and score applications based on criteria listed below. A final score will be given to all applications. Foundation staff will work with grantees to complete financial reviews, grant agreements, and other paperwork. Work may not begin until the grant is executed. The Foundation may choose to make additional awards under this announcement, consistent with LSOHC policy and guidance, if additional funding becomes available or if a grantee cannot complete a project as planned.

Required Full Proposal Information

In the preparation of full proposals, successful applicants will be asked to submit information including but not limited to:

- Sponsoring organization name and status—governmental unit, 501C3 nonprofit, etc.;
- Proposed lake watershed targeted for prevention—provide maps, available data;
- AIS of focus—multiple species approaches get priority;
- Baseline AIS monitoring/surveys conducted to date—some existing monitoring effort required
- Physical characteristics of the lake watershed;

- Adjacent or upstream infested waters;
- Potential downstream impacts;
- Recreational and commercial use information—provide available data;
- Strategy to manage lake access;
- Participating LUG, Tribal, and other local organization sponsors, and the nature and extent of their participation;
- Specified Enforcement Mechanism—DNR CO's, Sheriff's Dept., Tribal CO's?;
- Support by local residents--lake association, resorts, water-related businesses, lake service providers;
- Support by LUG's—Counties, Cities, SWCD, WD, Townships;
- Support by DNR and other State agencies;
- Support by Tribal or Federal governments, if applicable;
- Prevention strategy elements and timelines—who, what, when, where?
- Conflict resolution strategy--between partners and affiliated organizations, with the general public;
- Available local match—cash and/or qualifying in-kind, and sources of match;
- Commitment and mechanism to continue the prevention strategy beyond the grant period;
- Long term monitoring strategy;
- Budget—personnel, contracted services, equipment, maintenance, insurance, etc.

Application Evaluation Criteria

- Lake watershed characteristics;
- Adjacent or upstream infestations;
- Potential downstream impacts;
- Local support—government, recreation industry, recreational users, lake service providers, lake residents;
- Existing baseline AIS survey
- AIS Infestation Probability Matrix score;
- Multiple AIS prevention benefits;
- Other habitat benefits;
- Consistency with current AIS best management practices;
- Degree of collaboration between local organizations to prevent AIS spread;
- Budget/ cost effectiveness;

• Project matching funding strategy—degree to which the application accesses non-State matching funds, other resources, and volunteer labor and equipment to expand and extend the project;

- Management of public access for recreation, hunting, and fishing;
- Applicants' capacity to successfully complete, sustain the goals of the project.

Project Reviews and Reporting

Grantees submit quarterly reports on forms provided by the Foundation staff, based on LSOHC report forms, with final reporting to LSOHC the responsibility of the Initiative Foundation.

Reports will account for the use of grant/match funds, and outcomes in terms of numbers and types of AIS information and education materials produced and distributed, numbers of surveys conducted, numbers of accesses managed, numbers of inspections performed and species found, number of decontaminations conducted, enforcement actions required, effective conflict resolution techniques employed, and AIS monitoring updates. A final report is required by all grantees 30 days after project completion. Foundation staff will submit accomplishment reports to LSOHC as required and post reports on the Foundation's website and other websites as may be determined useful.

Grantee Payment

Grantees and contractors are paid on reimbursement or "for services rendered" basis, meaning payment is made to the grantee after work has been performed or materials purchased, but before the vendor is paid by the grantee. Grantees provide proof that work is completed or a purchase made to receive payment. Proof that the vendor was paid must be submitted to the Foundation staff before additional grant payments are made.

Reasonable amounts may be advanced to projects to accommodate cash flow needs, match federal share, or for acquisitions following the procedures and standards within the Initiative Foundation's standard operating practices or negotiated as part of a grant agreement. Advances must be specified in final grant agreement. Partial payments are allowed.

The Initiative Foundation reserves the right to terminate a pilot project before its completion date if, in the opinion of the Foundation staff and the Advisory Council, a good faith effort is not being made to fulfill the contractual obligations of the project according to the approved work plan.

DNR Technical Support

The DNR Divisions of Ecological Services and Water Resources, Fisheries, and Enforcement will provide ongoing technical guidance for AIS prevention and control.

Accomplishment Timeline

Activity	Approximate Date Completed		
Assemble and Convene Advisory Council	July/August 2014		
Advisory Council finalizes AIS Prevention Pilot Program criteria and priorities	August/September 2014		
Deadline for Inquiry Level Applications	October/November 2014		
Review of Inquiry Level Applicationsselection of full proposal applicants	November 2014		
Deadline for Full AIS Prevention Proposals	December 2014		
Scoring and selection of successful full proposal applicants	January 2015		
AIS Prevention Project activity begins	February 2015		
Formal AIS Prevention Project activity commences	February 2015 to end of grant		
Follow up monitoring and final reporting completed	Annually, with conclusion in June 2019		

Outcomes

Programs in the northern forest region:

• Improved aquatic habitat indicators Demonstrated changes in lake user behavior; decrease in Infestation Probability Matrix Score; changes in observed AIS populations; local adoption of AIS prevention/control programs.

Programs in metropolitan urbanizing region:

• Improved aquatic habitat indicators Demonstrated changes in lake user behavior; decrease in Infestation Probability Matrix Score; changes in observed AIS populations; local adoption of AIS prevention/control programs.

Budget Spreadsheet

Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan

Total Amount of Request: \$ 3650000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$232,000	\$0		\$232,000
Contracts	\$3,128,000	\$3,128,000	Private Source	\$6,256,000
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	\$50,000	\$0		\$50,000
Professional Services	\$30,000	\$0	Private Source	\$30,000
Direct Support Services	\$0	\$0		\$0
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$10,000	\$0		\$10,000
Supplies/Materials	\$200,000	\$400,000	Private Source	\$600,000
DNR IDP	\$0	\$0		\$0
Total	\$3,650,000	\$3,528,000		\$7,178,000

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Project Manager (D. Hickman, VP Community and Economic Development)	0.20					\$107,000
Project Coordinator (J. Sumption, Consultant)	0.50	5.00	\$125,000	\$0		\$125,000
Total	0.70	10.00	\$232,000	\$0		\$232,000

Output Tables

Table 1. Acres by Resource Type

Туре	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	1,000	1,000
Total	0	0	0	1,000	1,000

Table 2. Total Requested Funding by Resource Type

Туре	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	\$3,650,000	\$3,650,000
Total	\$0	\$0	\$0	\$3,650,000	\$3,650,000

Table 3. Acres within each Ecological Section

Туре	Metro Urban	Forest Prairie	SE Forest	Prairie	N 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	500	0	0	0	500	1,000
Total	500	0	0	0	500	1,000

Table 4. Total Requested Funding within each Ecological Section

Туре	Metro Urban	Forest Prairie	SE Forest	Prairie	N 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	\$1,825,000	\$0	\$0	\$0	\$1,825,000	\$3,650,000
Total	\$1,825,000	\$0	\$0	\$0	\$1,825,000	\$3,650,000

Table 5. Target Lake/Stream/River Miles

0 miles

Parcel List

For restoration and enhancement programs ONLY: Managers may add, delete, and substitute projects on this parcel list based upon need, readiness, cost, opportunity, and/or urgency so long as the substitute parcel/project forwards the constitutional objectives of this program in the Project Scope table of this accomplishment plan. The final accomplishment plan report will include the final 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.