

Lessard-Sams Outdoor Heritage Council

Laws of Minnesota 2012 Accomplishment Plan

Date: 10/24/11

Program Title: Protect Aquatic Habitat from Asian Carp

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Funds Recommended: \$3,000,000

Legislative Citation: ML 2012, Ch. X, Art. X, Sec. X, Subd. 5 (h): *(to be completed when signed by Governor)*

Abstract:

Funding is needed to install and operate a deterrent barrier at the mouth of the St. Croix River to slow the movement of Asian carp.

Program Narrative

Design and Scope of Work

Asian carp are threatening Minnesota waters. Recent captures and eDNA evidence highlight the need to slow the movement of Asian carp into the Mississippi, Minnesota, St. Croix and other rivers in Minnesota to prevent damage to native fishes and ecosystems. Where Asian carp have established reproducing populations, they have impacted native species and caused safety concerns and impacted recreational activities.

Deterrent barriers that combine sound and bubbles have proven effective in laboratory and small-scale field studies in slowing the movement of Asian carp, and may be an important tool in slowing their spread in Minnesota to provide time while other long-term control methods are developed. These technologies were developed in the United Kingdom by a company called Fish Guidance Systems. OVIVO Corporation, who provided a proposal for a barrier at the mouth of the St. Croix River from which the cost estimate was based, offers these technologies in the United States. The systems utilize speakers that produce sound frequencies that are specific to Asian carp and are contained within a wall of bubbles formed by compressed air. Fish swim up to the sound and bubble curtain, but are deterred

because it is uncomfortable for them to pass. While there are few known vendors, a competitive bid process will be followed unless it is determined OVIVO is a sole source provider.

Most locations on the Mississippi are unsuitable for deterrent barriers due to the nature and extent of flooding that often overtops levees and requires the Corps of Engineers to pull the gates out of the water at most locks and dams. The mouth of the St. Croix River near Prescott is an exception as it remains a confined channel during flood events and is the only source of entry for Asian carp into the St. Croix River.

Deterrent barriers have not been tested on large river systems, and have not proven 100% effective in stopping Asian carp. A barrier at the mouth of the St. Croix River would be considered experimental, and the effectiveness of the barrier as well as impacts to native species would need to be evaluated. These evaluations would help determine if this technology is also suitable for other locations, such as tributary mouths. The barrier proposal for LSOHC funding would be for materials, installation and operation.

Planning

Preventing negative impacts from invasive species is a critical component of Minnesota's State Management Plan for Invasive Species. Specific to Asian carp, the plan identifies barriers as a tool for minimizing impacts. Minnesota's Asian Carp prevention plan, and a 2004 study evaluating alternatives to minimize the spread of Asian carp into Minnesota also identify deterrent barriers as a potential tool.

Many tools are needed to combat invasive species, and barriers are part of an overall strategy that includes education, prevention, control, and improved habitat for native species. Barriers could concentrate Asian carp and other invasive species to more effectively utilize attractants, toxicants, fish traps, and other tools designed to reduce or control populations.

The feasibility of a deterrent barrier at the mouth of the St. Croix River is being evaluated by a technical team with representatives from the University of MN, Corps of Engineers, US Fish and Wildlife Service, US Geological Survey, MN Dept. of Natural Resources, and WI Dept. of Natural Resources. This team is developing an Environmental Assessment that will guide decision makers in determining if a barrier should be constructed. If following the Environmental Assessment the decision is made not to pursue a barrier, all appropriated funds would be returned to the Outdoor Heritage Fund.

Relationship to Other Constitutional Funds

A 50% cost share is required by LSOHC and is being sought through a variety of partners including Wisconsin and the US Fish and Wildlife Service. LCCMR funding may be sought to assist with evaluation.

Relationship to Current Organizational Budget

Traditional sources of funding are not available to construct a deterrent barrier. Without Outdoor Heritage funding this project is not likely to be completed.

Sustainability and Maintenance

Intention would be to maintain and operate the barrier as long as necessary to minimize impacts from Asian carp.

Outcomes

Asian carp have less impact on native species and ecosystems. Fishing and boating will not be negatively affected.

Accomplishment Timeline

Activity	Milestone	Date completed
Evaluate feasibility of barrier	Feasibility report	11/1/12
Install barrier if feasible	Design and specifications by 3/1/13	Installation completed by 15/1/13

Table B-2. Other Outcome Table

(This table should be used instead of attachment B for activities that are not counted in acres, miles etc. If you use attachment B you can delete this table from the accomplishment plan.)

Goal 1	Activity – P/R/E	Measure	Impact	Ecological Type
Slow spread of Asian Carp into St. Croix River	Protect	Asian carp populations above and below the barrier	Asian carp populations remain low and native species are not being impacted by Asian carp. Native species are not negatively affected by the barrier.*	Aquatic habitat

*evaluating the impact on native species will require fish tagging and movement studies. There are currently no sources of funding for evaluation.

Attachments *(on spreadsheet workbook – 3 separate tabs):*

- A. Budget
- C. Parcel List

No Map is needed for the accomplishment plan

Attachment A. Budget Spreadsheet

Name of Proposal:	Protect Aquatic Habitat from Asian Carp
Legislative Citation:	
Date:	10/24/2011

[Link HERE to definitions of the budget items below.](#)

Total Amount of Request \$ 3,000,000 *From page 1 on the funding form.*

Personnel

Position breakdown here	FTE	Over # of years	LSOHC Request	Anticipated Cash		Total
				Leverage	Cash Leverage Source	
<i>Manager of Programs</i>					\$	-
<i>Admin Asst</i>					\$	-
<i>position 3</i>					\$	-
<i>position 4</i>					\$	-
<i>position 5</i>					\$	-
<i>position 6</i>					\$	-
<i>position 7</i>					\$	-
Total	0		\$ -	\$ -	\$ -	\$ -

Budget and Cash Leverage *(All your LSOHC Request Funds must be direct to and necessary for program outcomes.)*

Please describe how you intend to spend the requested funds.

Budget Item	LSOHC Request	Anticipated Cash		Total
		Leverage	Cash Leverage Source	
Personnel - auto entered from above	\$ -	\$ -	\$ -	\$ -
Contracts	\$ 2,962,200	\$ 6,000,000	<i>leverage will be sought</i>	\$ 8,962,200
Fee Acquisition w/ PILT (breakout in table 7)			\$	-
Fee Acquisition w/o PILT (breakout in table 7)			\$	-
Easement Acquisition			\$	-
Easement Stewardship			\$	-
Travel (in-state)			\$	-
Professional Services			\$	-
Direct Support Services	\$ 37,800		\$	37,800
DNR Land Acquisition Costs			\$	-
Other			\$	-
Capital Equipment <i>(auto entered from below)</i>			\$	-
Other Equipment/Tools			\$	-
Supplies/Materials			\$	-
	\$ 3,000,000	\$ 6,000,000	\$ -	\$ 9,000,000

Capital Equipment *(single items over \$10,000 - auto entered into table above)*

Item Name	LSOHC Request	Leverage
<i>Truck</i>		
<i>Item 2 enter here</i>		
<i>Item 3 enter here</i>		
<i>Item 4 enter here</i>		
<i>Item 5 enter here</i>		
<i>Item 6 enter here</i>		
<i>Item 7 enter here</i>		
<i>Item 8 enter here</i>		
Total	-	-

Attachment C. Parcel List

Name of Proposal: Protect Aquatic Habitat from Asian Carp
Legislative Citation: _____
Date: 10/24/2011

County	Township (25-258)	Range (01-51)	Direction most parcels are 2 with the exception of some areas of Cook County which is 1	Section (01 thru 36)	TRDS	# of acres	Budgetary Estimate (includes administrative, restoration or other related costs and do not include matching money contributed or earned by the transaction)	Description	Activity PF=Protect Fee PE=Protect Easement PO=Protect Other R=Restore E=Enhance	If Easement, what is the easement cost as a % of the fee acquisition?	Any existing protection? (yes/no)	Open to hunting and fishing? (yes/no)
Parcel Name												
St. Croix River at Prescott	Washington	26	20	2	9	262029	N/A	\$3,000,000	Install deterrent barrier	P	N	Y

Information provided will be used to map project locations. Incomplete or inaccurate information will result in that parcel or program not being mapped.