

Long-Term Funding Needs for Aquatic Invasive Species Programs

**Submitted to:
Environment and Natural Resources Committees
of the Minnesota House and Senate**

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Introduction

The 2011 Minnesota legislature passed legislation (Laws of Minnesota 2011, Chapter 107, Section 106) that states:

“By January 15, 2012, the commissioner of natural resources shall report to the house of representatives and senate committees with jurisdiction over environment and natural resources policy and finance on the long-term funding needed to implement and enforce Minnesota Statutes, chapter 84D, including recommendations on the appropriate amount of the watercraft surcharge.”

This report summarizes funding requirements needed to sustain the current level of effort for aquatic invasive species (AIS) prevention, management, and enforcement as well as funding required to significantly increase prevention strategies. The report does not cover the growing need to fund prevention efforts for Asian carp. Boaters are not a vector for the spread of Asian carp; therefore, the watercraft license surcharge is not a suitable source of revenue for this issue.

Background

The spread of AIS is one of the top conservation challenges facing Minnesota today. AIS prevention and management is funded primarily with General Fund and the Invasive Species Account (ISA). General Fund support for this program was increased during the FY 2008-2009 biennium, but has subsequently declined because of the General Fund deficit.

Most of the revenue for the ISA comes from a \$5 surcharge on watercraft licenses and a \$2 surcharge on non-resident fishing licenses. These two sources generate approximately \$1,600,000/year. In addition, there is an annual transfer of \$750,000 from the Water Recreation Account (WRA) to the ISA. The current annual appropriation from the ISA is \$2,742,000. With all three sources of revenue, there is still a structural deficit that will cause the fund balance to go negative in the future.

The FY 2012-2013 budget also provided one-time funding from the Environmental and Natural Resource Trust Fund (\$5,690,000) and Heritage Enhancement Account (\$2,000,000) to increase AIS prevention and management efforts. Demands for prevention and management programs continue to increase and a long-term, dedicated funding source is needed to address the economic and environmental impacts caused by AIS.

The total budget for AIS is \$7.2 million in FY12 and 8.6 million in FY13. More than half (\$4.5 million) of the FY13 budget is from one-time appropriations (Table 1).

Table 1. Aquatic invasive species appropriations for fiscal years 2012-2013.

Fund	FY12	FY13	Comments
Invasive Species Account	\$ 2,742,000	\$ 2,742,000	\$5 surcharge on boat licenses; \$2 surcharge on non-resident fishing licenses; \$750,000 transfer from WRA
General Fund	\$ 1,318,000	\$ 1,318,000	
Heritage Enhancement	\$ 1,000,000	\$ 1,000,000	One-time funding for biennium
Env. and Nat. Res. Trust Fund	\$ 2,177,000	\$ 3,513,000	One-time funding for biennium
Total	\$ 7,237,000	\$ 8,573,000	

The increased funding in the fiscal year 2012-2013 biennium is accelerating actions to prevent and manage invasive species infestations. Planned program expenditures for fiscal year 2013 are detailed in table 2.

Table 2. Planned program expenditures for aquatic invasive species in fiscal year 2013.

Aquatic Invasive Species FY13 Work activities	FUND				Totals
	ISA	GF	HE	ENRTF	
Enforcement		\$ 918,000	\$ 600,000	\$ 200,000	\$ 1,718,000
Inspection Program			\$ 400,000	\$ 1,800,000	\$ 2,200,000
Inspection equipment				\$ 300,000	\$ 300,000
Public Awareness and Prevent Grants				\$ 300,000	\$ 300,000
AIS Management (grants primarily)	\$ 726,000	\$ 400,000		\$ 100,000	\$ 1,226,000
Statwide Coordination & Field Operations	\$ 1,956,000			\$ 33,000	\$ 1,989,000
Asian Carp Coord., Planning & Monitoring	\$ 60,000			\$ 80,000	\$ 140,000
Lake Service Provider Training				\$ 50,000	\$ 50,000
Implementation of BMPs for water accesses				\$ 500,000	\$ 500,000
Zebra mussel research				\$ 150,000	\$ 150,000
TOTAL	\$ 2,742,000	\$ 1,318,000	\$ 1,000,000	\$ 3,513,000	\$ 8,573,000
					Grand Total

Funding Needed to Maintain Current Program Levels

The amount of annual revenue from the watercraft surcharge and non-resident fishing license surcharge needed to maintain AIS programs at current levels (\$8.6 million/year) is provided in three scenarios below:

- 1) \$6,450,000/year if General Fund and the WRA transfer are maintained;
- 2) \$7,750,000/year if General Fund is eliminated and the WRA transfer is maintained; and
- 3) \$8,600,000/year is needed if General Fund and the WRA transfer are eliminated.

The watercraft license surcharge is currently \$5, or \$1.66/year since boat licenses are good for three years. Table 3 describes three potential options for increasing the watercraft license surcharge to generate approximately the \$8,600,000 (takes into account \$400,000 non-resident fishing license surcharge revenues) needed under the third scenario listed above. This would result in watercraft owners paying about \$10/year on average rather than \$1.66/year.

Table 3. Potential watercraft license surcharge* scenarios that would raise \$8.6 M in revenues annually (current watercraft license surcharge fee is \$5).

Watercraft Type	Scenario 1	Scenario 2	Scenario 3
Canoes	\$ 10	\$ 15	\$ 20
Boats 17 ft and under	\$ 33	\$ 32	\$ 30
All other watercraft	\$ 43	\$ 42	\$ 41

*Surcharge is part of the boat license fee and the boat license is good for three years. Calculations take into account \$400,000 generated from non-resident fishing licenses.

Options for Expanding Statewide Prevention Programs

The DNR hired a consulting firm to analyze and report on costs and other requirements for several statewide mandatory inspection/prevention options. To date, there has been a great deal of discussion about different strategies Minnesota should adopt for a more comprehensive statewide prevention program, but no clear understanding of the costs and infrastructure

requirements to implement these various strategies or how good a fit they are for Minnesota. This report has not been finalized, but preliminary information is available and has been used for the following summary of some the strategies that were evaluated. All of the cost estimates (Table 4) should be considered preliminary at this time. Once the report is finalized, the department anticipates having a more thorough discussion with the legislature and stakeholders about choosing the best statewide prevention strategy for Minnesota.

Red Lake/Blue Lake

This concept uses color coded tags that indicate if a watercraft is being used on zebra mussel infested waters (red tag) or waters that are not infested with zebra mussels (blue tag). Watercraft with red tags would be required to be inspected and receive a blue tag prior to launching on a water body that is not infested with zebra mussels. Watercraft with blue tags would be required to be inspected and receive a red tag prior to launching on a water body infested with zebra mussels. This strategy would utilize centralized inspection stations rather than inspection stations at public water accesses or along roads. Annual cost is estimated at \$22 - \$28 million.

This strategy has some distinct advantages over the other options including:

- 1) It is more efficient than requiring inspections prior to every trip before launching on all waters or after every trip when leaving zebra mussel infested waters, because no inspection is required if a person boats on only “red” or “blue” lakes;
- 2) It affects all watercraft users and covers people using private and public access and out-of-state boaters equally well;
- 3) Citizens would choose the time and location for inspections and are not subject to waiting in line at accesses or being pulled over on the highway; and
- 4) Tags would be highly visible making it easy for the public to help with enforcement.

The major drawback of this strategy is that it only works well for one species, which in this case would be zebra mussels. The system would quickly become too complex and cumbersome if there was a different color tag for each combination of AIS. On the other hand, if red tags were allowed on all infested waters it would allow boaters to travel freely between waters with zebra mussels to waters that have only Eurasian watermilfoil or spiny water fleas.

Required Inspections Before Launching (all waters)

This strategy requires a mandatory inspection prior to launching a watercraft on any water body (uninfested and infested waters). It would be prohibitively expensive and impractical to employ this strategy at each of the state’s public and private accesses (about 3,800 total accesses). Utilizing centralized inspection stations would make this strategy more feasible, but costs are still relatively high, estimated at \$44 to \$59 million/year (Table 4). Some people have proposed using radio frequency identification technology and automatic gates at public water accesses to facilitate this approach, i.e., a code would be obtained after passing an inspection that would allow entry through the gate. This would increase start-up costs in year one (Table 4) and it is unclear how this could be applied to private accesses, especially where someone accesses through a private lake lot. Some other means of verifying that an inspection has been passed may be more workable (e.g., a visible tag that could be placed on the watercraft). This strategy does have a major advantage over the red lake/blue lake option in that it would address all AIS.

Required Inspections When Leaving Zebra Mussel Infested Waters

This concept requires mandatory inspections for all watercraft leaving infested waters and would require inspectors to be stationed at all public and private accesses on zebra mussel infested waters. Estimated annual cost is \$65 to \$71 million/year. Focusing on zebra mussel infested

waters significantly reduces the cost compared to requiring inspections at all public and private water accesses before launching; however, this option is more expensive than using centralized stations to require inspections before launching on all waters because it requires stationing someone at every public (210) and private water access on zebra mussel infested waters. As with the red lake/blue lake strategy, this option only addresses zebra mussels and not other AIS. A less expensive variation on this strategy would be to have “containment zones” around high-use zebra mussel waters (estimated at \$10 million/year; Table 4). This option focuses on high-use areas and would utilize centralized inspection stations. One of the biggest challenges with this option is making sure that inspection stations are located to intercept most or all water users without causing traffic congestion and undue waiting periods during peak use periods.

Self Inspection/Certification

This concept would have individuals inspect their own watercraft after completing AIS training and testing requirements. This could be a mandatory requirement as a condition of operating a watercraft or pulling a trailer with a watercraft. It could also be incorporated as an option to allow people to bypass inspection requirements in one of the other prevention strategies. In general, this is a lower cost alternative (Table 4), but relying on individuals to do their own inspection would likely increase the chance of spreading AIS compared to other options.

Enforcement

The costs of the various options may not adequately reflect increased enforcement needs to ensure that the strategies are as effective as possible. Recommended enforcement increases will be identified as the department refines the cost estimates and continues evaluating these options.

Privatization Opportunities

The centralized inspection stations required for any of these options could be privatized. There are a number of considerations that will need to be addressed in any privatizing strategy. First, inspection station infrastructure would need to be available across the entire state or other defined geographical area depending on the strategy used. These stations would need to be open to the public during weekend and evening hours during the prime boating season. There would be a great deal of seasonal and geographical variability in the number of people using these inspection stations. Further, it could be problematic to use existing businesses for inspection stations, because they would not necessarily be set up or staffed to handle the number of boaters that could come through at peak times. Given these considerations, the state may need to consider making an initial investment in setting up inspection stations and contracting with a private vendor to run them, as opposed to using or retrofitting existing private businesses.

If the private sector performed inspections, DNR would maintain authority and oversight for enforcement, training, licensing, developing inspection and decontamination procedures, and other administrative roles. It is unclear how privatizing might affect the overall costs of the various options. State program costs for administration and oversight of private sector inspectors are estimated to range from \$3,000,000 to \$7,000,000 per year, but boaters would be required to pay a market-based fee to the private vendor(s) doing the inspections.

Table 4. Preliminary costs associated with implementing various aquatic invasive species prevention options and the amount of additional watercraft surcharge needed per watercraft to fund each concept.

Concept	Description	Cost Per Year	Add'l surcharge* needed (avg. per boat)
Red Lake/Blue Lake	Required inspection before launch when moving from a zebra mussel infested lake (Red) to lakes not infested with zebra mussels (Blue) and vice versa. A tagging system would be used to mark boats red or blue.	\$22, 000,000- \$28,000,000	\$90
Required inspection before launch	Required inspection before launch, inspectors at all public and private accesses during open water season and daylight hours.	\$550,000,000- \$600,000,000	\$2300
Required inspection before launch @ Centralized Stations	Required inspection before launch. Inspections and decontamination conducted at centralized locations in each MN county.	\$44,000,000 - \$59,000,000	\$200
Required inspection before launch @ Centralized Stations; with high tech monitoring at accesses	Same as above, and provide an active monitoring system at each public and private access. Using radio frequency identification (RFID) and remote controlled and/or automatic gates to gain or deny access for each boating launch.	\$145,000,000 (year 1) 54,000,000 (year 2)	\$500
Required inspections when leaving Zebra Mussel Infested Waters	Require inspections when leaving zebra mussel infested waters at public and private accesses. Inspectors stationed at all accesses on zebra mussel infested waters.	\$65,000,000- \$71,000,000	\$270
Containment Zones	Require inspections of all boats leaving "containment zones" at centralized inspection stations located with the zone (areas designated around high use zebra mussel infested waters) regions).	\$10,000,000	\$40
Self Inspection/ Certification	MN DNR trains citizen inspectors to self -inspect boats and ensure decontamination.	\$8,000,000- \$11,000,000	\$40

*Surcharge is part of the boat license fee and the boat license is good for three years.

Summary

The department feels that, at a minimum, the watercraft license and non-resident fishing license surcharges need to be increased enough to maintain current AIS program levels. This would require raising fees to increase annual revenues from \$1.6 million/year to \$8.6 million/year, if the current General Fund appropriation and WRA transfer are eliminated. Once the report on statewide prevention options is finalized, the department anticipates having a more thorough discussion with the legislature and stakeholders about choosing the best statewide prevention strategy for Minnesota. It is likely that these discussions will lead to requests for additional AIS program funding.

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