

2013 Aquatic Invasive Species Prevention Plan
Prepared by the
Coalition of Minnehaha Creek Waters

This plan was developed by the Coalition of Minnehaha Creek Waters (CMCW) for consideration and adoption by the Minnehaha Creek Watershed District to protect the waters of the District from the devastating long-term effects of current and future aquatic invasive species.

The CMCW is a new organization comprised of many of the lake and creek associations in the Minnehaha Creek watershed.



Executive Summary

Aquatic Invasive Species (AIS) will continue to infest lakes and waterways in the Minnehaha Creek Watershed District unless a different set of clear and decisive actions are taken to prevent their spread. The MN Department of Natural Resources' current path of improving public awareness, inspecting and decontaminating a small cross section of watercraft entering/leaving a lake, and enforcing current laws with fines and penalties has not worked.

Following the leads of other aggressive organizations, the Minnehaha Creek Watershed District (MCWD) envisions an approach where every watercraft entering an access point into public waters be inspected and deemed free of AIS. This document provides an overview of a plan to meet this MCWD vision.

This plan includes a mixture of dedicated inspection and decontamination stations (Insp/Decon) along with regional Insp/Decon stations. The regional Insp/Decon stations will be located in areas convenient to a logical group of lakes and are coupled with unattended control mechanisms. This dedicated and regional approach reduces the cost of inspection/decontamination at every access and increases the coverage dramatically while continuing to provide ready access to lakes and waterways.

The economics of using a regional inspection and decontamination approach is unquestionably compelling, as explained in the section below. Nonetheless, this is an expensive program with just over \$2.4 million required for year 1, including nearly \$1.75 million in one-time capital costs. For higher convenience to large numbers of boaters, we have included 4 dedicated inspection and decontamination facilities. Eliminating these dedicated facilities decreases the year 1 cost by over \$500,000, but results in a less palatable solution. Final design work should strive for fewer dedicated facilities to improve the economics.

Cost sharing must be designed so that the MCWD is not the sole contributor to fund this program. Every involved local government unit and lake association will benefit from this AIS prevention program and must be positioned to contribute funds on an annual basis. AIS will not wait for the cost sharing model to be defined, so it is our suggestion that the MCWD fund the year 1 costs. The cost sharing model work must start now to be in place for 2014.

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Compelling economics

Considering an “inspection only” process, the costs of using a regional (shared) inspection model are substantially less expensive than inspecting at each access. As an example, sharing a regional inspection station across 5 lake accesses over 3 years is 36% less costly when all major costs are considered. Over a 5 year horizon the savings increases to 53%.

Expanding this model to include decontamination, the 3-year cost savings are 60% less and 68% over 5 years. To bring reality to these savings percentages, inspecting and decontaminating at 5 landings would cost \$1,000,000 over 3 years, and it is reduced by \$600,000 to \$400,000 using a regional approach. The 5-year cost of inspecting and decontaminating at 5 landings is \$1,600,000, and it is reduced by \$1,080,000 over 5 years to \$520,000.

While there are other one-time and other operating costs, they are not significant as compared to the primary cost elements. In every way, the regional model presents a critical and compelling approach to get more value from every dollar spent in the effort to stop the spread of AIS.

Background

For many years, Aquatic Invasive Species (AIS) have been spreading into the lakes and waterways of the state of Minnesota. The impacts due to AIS are well documented as non-native species breed exponentially and can limit recreational activities and alter aquatic ecosystems by displacing native species. Annual costs for prevention and cleanup to lake users, riparian homeowners and the public add to the millions of dollars. This is true for Eurasian milfoil, zebra mussels, Asian carp and many other species that have been unintentionally introduced into our waterways.

Prevention methods have largely centered on educating the public on AIS and how to prevent their spread. Low levels of DNR-provided training at various lake access points combined with low levels of enforcement of laws by conservation officers and peace officials are also part of the strategy. These approaches to AIS prevention have been designed to minimally impact the boating public and to maintain the “free and unfettered access” to our public waters that has long been a mainstay of our Minnesota culture.

Unfortunately, these activities have apparently only served to slow the spread of AIS in the best case, but have not prevented the spread of AIS.

Current Status

Given that the MN DNR and the watershed districts raised the alarms to lake associations and other stakeholders around the state in 2009, 2010, and 2011, there was great anticipation that strong and swift action would be taken by the DNR and other local government units in 2012 to prevent the spread of AIS.

However, despite the additional resources that were allocated to the MN DNR in 2011 and 2012, rates of compliance are deteriorating and more waters are being added to the infested waters list. The

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current MN DNR programs are not stopping the spread, and without more aggressive approaches, the likelihood that AIS spread can be prevented is extremely low.

New Minnesota AIS laws were enacted in 2012, with critical provisions effective as of July 1, 2012. Among other things, these new laws recognize that the MN DNR cannot meet the challenge of stopping the spread of AIS without enlisting the help of local government units (LGU's) and lake associations. The 2012 AIS legislation now allows a local government unit to establish inspection and decontamination capabilities with all the powers of the MN DNR AIS inspectors, including the ability to establish multi-lake inspection and decontamination stations. These provisions in the 2012 AIS legislation enable the approaches outlined in this plan.

Future State

The current laws and regulations enable the MCWD to provide a much stronger course of action than those currently in place. With the direct agreement and support of several key lake associations in the watershed, this plan has been developed to implement 100% inspections of all watercraft entering a waterway for AIS. Boats found to fail the inspection standards (provided by the DNR and enhanced by the MCWD) will be directed to be decontaminated before being allowed to enter the water.

This approach will inconvenience the boating public more than today, but has been designed to dramatically improve our results in preventing the spread of controllable AIS.

Success Statement

Success is achieved when the spread of Aquatic Invasive Species is stopped while maintaining free (but not unfettered) access to public lakes and waterways at the lowest possible cost.

Slowing the spread of AIS is not considered success.

Parameters to be optimized

These parameters will need to be optimized to provide a solution that best meets the needs of all stakeholders. These are:

1. AIS prevention for our lakes and waterways
2. Access to all public lakes and waterways as required by current law
3. Cost of prevention
4. Convenience to the boating public

Stakeholders

Stakeholders who will participate in developing, implementing and enjoying the benefits of the solution include:

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Municipalities	MN DNR	Park Users
Counties	Watershed riparian homeowners	Park and Recreation Departments
Watercraft Users	Anglers	Fishing businesses
Lake Associations	Creek Associations	Watershed Districts
Private marinas	Organizations with private access	Other local government entities

Proposed Solution

The key elements of our proposed solution include:

- 100% inbound watercraft inspection for AIS
- Dedicated and Regional AIS Inspection/Decontamination stations
- Unattended access controls at public access points
- Communications program

These elements are discussed in the paragraphs below.

100% inbound watercraft inspection for AIS

All watercraft intending to launch at a public access must pass the MN DNR's AIS inspection and a more aggressive set of inspection protocols to be adopted by the MCWD. This requirement will be the same for everyone from infrequent day users to riparian homeowners.

Dedicated Insp/Decon stations will be established at high volume accesses and participating private marinas, and in addition, cost-effective Insp/Decon stations will be established regionally to serve multiple accesses.

Special agreements must be executed with private accesses that prohibit their use for the express purpose of stopping the spread of AIS. Prohibiting launching from private accesses helps ensure that only watercraft that have passed the AIS inspection are allowed to enter our Minnesota waters.

Inspection records will be maintained to record key data about the watercraft, trailer, and operator, as well as the inspection location, date, time and the results of the inspection.

An access code that allows launching at any unattended access control point is provided to watercraft passing inspection. Watercraft that do not pass inspection are not provided with an access code.

The access code allows the watercraft to be launched and removed only once and will only be valid for use on a specific date. For the convenience of launching in the early morning hours, an inspection may be done after 6 pm on the evening prior to the intended launching on the following day.

Watercraft that do not pass inspection will be directed to the decontamination stations. Operators choosing not to be decontaminated will be issued a "Notice of Failed Inspection" and the MN DNR will be notified.

Dedicated and Regional AIS Inspection/Decontamination stations

Dedicated Insp/Decon stations will be used for select high volume public accesses and for participating private marinas. Automated control gates can be used at public accesses for unattended access when

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staff are not available, but are not likely to be needed at private marinas where other security mechanisms are already in place.

Regional AIS Insp/Decon stations will be used to achieve the significant cost savings versus having an Insp/Decon station at all other accesses. The Regional AIS Insp/Decon stations will issue access codes to watercraft that pass inspection. Watercraft inspected at a regional Insp/Decon station can gain access through any unattended access gate in the MCWD solution.

Electronic communication is required between the regional AIS Insp/Decon stations and the unattended access controls at the public access points to authorize access codes.

Staff at each AIS Insp/Decon stations will conduct the inspection and decontamination in compliance with the MN DNR AIS guidelines and the more aggressive protocols required by the MCWD.

Staff at each AIS Insp/Decon stations must be trained to manage conflict with watercraft operators who may be upset with the process or the resulting actions from their AIS inspection and decontamination.

Behavioral change management approaches will be in use at the Insp/Decon stations to help drive correct operator behaviors in a positive, reinforcing manner.

Regional and dedicated accesses will be open based on expected demand. One very low volume days, the open inspection stations can be throttled back to a minimum. That will affect the boater's convenience, but will help keep the operational costs low. Likewise, when expected demand is very high, all of the inspection stations can be operating. We should consider posting the inspection station operating hours schedules on the MCWD website.

Unattended access controls at public access points

Electronically controlled gates will be used at all public access points for unattended access control of watercraft that pass inspection. In this way, dedicated inspection sites that are not staffed and operating at any particular time can still be used for access.

These gates will be configured with keypads to accept the access codes for watercraft that have passed the AIS inspection. The gates will also be configured with Knox box or other approaches for public safety and maintenance needs.

These gates are commercial quality and must be professionally configured, installed and maintained. In addition, professional support must be arranged to ensure speedy repair of gates that are not operational.

Access codes will be distributed for watercraft that pass inspection at the Regional AIS Inspection/decontamination stations.

A central customer service center will be established to facilitate access issues that arise. A few of the expected issues include:

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- Lost access codes
- Access gates not responding to valid codes
- Access gates not operating

Communications program

Any new program that requires large numbers of people to change their behaviors and attitudes needs an effective communications program designed for this need. This AIS prevention plan requires those kinds of outcomes and thus needs an effective communications program. Change management experts working with communications experts have proven approaches that can be leveraged to achieve our objectives. Hennepin County's pilot program at the North Arm ramp at Lake Minnetonka is a great example of using behavior change management to achieve a better result in the fight against the spread of AIS. There are a number of steps required to create the effective plan and to execute it to achieve the results, but there are any number of people and organizations that will be able to help us make this happen.

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Assumptions

1. The scope of this plan includes the lakes within the Minnehaha Creek Watershed District.
2. Watercraft operators wishing to use a launch ramp must be inspected each day for access.
3. Decontamination is an integral part of this design.
4. This plan does not specifically include decontamination or watercraft operator contact at the public access for watercraft exiting the lake. Therefore, this design does not require personnel at every public access; dramatically reducing the operating cost.
5. Five (5) Regional AIS Insp/Decon stations will be required for more than 20 lakes in the Minnehaha Creek Watershed District with public accesses. This is based on an average of 6 public accesses per AIS Insp/Decon station. Early designs call for four Insp/Decon stations to ring Lake Minnetonka (NW, NE, SE and SW corners) and one more Insp/Decon stations to service the Minneapolis lakes.
6. Annual maintenance costs for the Regional AIS Insp/Decon stations is assumed to be \$5,000 per station.
7. The private marinas on Lake Minnetonka with the capability to launch watercraft are estimated at fifteen (15). These private marinas will have the option of paying for an inspector during all operating hours or complying with the “no launch” rules. These costs are not included, as they will be pass-through costs.
8. The count of electronic gates is assumed to be 30, based on a count of public accesses on the lakes in the MCWD (including 9 on Lake Minnetonka).
9. A cost of \$15/hour has been used for inspectors, and includes management oversight.
10. The one-time cost for electronic control gate(s) at each public access are assumed to be \$30,000, which includes professional installation, electric installation, telecommunications installation, and signage.
11. Annual gate maintenance and repair is assumed to be \$2,000.
12. Annual decontamination equipment maintenance and repair is assumed to be 10% of the initial acquisition cost
13. 70% of the gates will be installed for 2013, and 100% for 2014. The gate on Christmas Lake is already installed.
14. The first 4 Regional Inspection and decontamination stations will be operating for 2013, and the 5th station, if needed, will be operating in 2015.
15. Access code is good for one time access at any lake access except private marinas.
16. Dedicated inspection stations do not need the ability to issue access codes.
17. Private marinas will not have unattended access gates to validate the access codes. Private marinas may charge for on-premise inspection and decontamination.
18. Access codes expire within 2 hours of inspection (this shouldn't be a problem for the vast majority of boaters)
19. Access codes issued after 6 pm expire at 7 am the following morning (primarily for the convenience of early morning anglers).
20. Only one access code can be in effect for any watercraft at any time. This prevents a clean boat from being used to get multiple access codes to give to uninspected watercraft operators.

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21. This is a 1-factor identification system... “something you have”... an access code. A better solution would incorporate RFIDs tag on the boat to ensure that the boat inspected is the boat that gains access.
22. \$15/hr. inspector costs per hour in 2013 includes the management labor as well. This rate will increase by 3% annually
23. The on-going program management labor will increase at 3% annually
24. Inspectors will have 8 hours of initial training and 2 - 2 hour refresher sessions during the season.
25. The call center services will be procured by leveraging some existing 24x7 call center. The volume of call expected is not high and the incremental work to an existing call center will be minor.

Players and actions required

Minnesota Department of Natural Resources (MN DNR)

By state statute, the MN Department of Natural Resources is responsible for the public waters throughout the state of Minnesota. The DNR has the authority to authorize local government units to perform AIS inspections and decontamination at individual ramps and in multi-lake scenarios. Plans such as this must be submitted and approved by the DNR.

The MN DNR operates several public boat accesses on Lake Minnetonka (i.e. Gray's Bay on Lake Minnetonka). In addition, the DNR has a number of access agreements with the governmental organizations that operate boat accesses on land that the LGU's own (i.e. the City of Shorewood for the boat access at Christmas Lake).

For this program to move forward, the DNR needs to:

1. Authorize the MCWD as the LGU operating dedicated and multi-lake inspection and decontamination facilities in conjunction with the approval of this plan.
2. Certify and train the MCWD staff at the dedicated and regional AIS Insp/Decon stations as "Authorized – Level 2 AIS inspectors" as defined in the June 27, 2011 draft.

Minnehaha Creek Watershed District (MCWD)

The Minnehaha Creek Watershed District is the regional governmental unit responsible for managing and protecting the water resources of the Minnehaha Creek watershed, located in the area including and immediately west of Minneapolis, Minnesota. The District was established in 1967 under the Minnesota Watershed District Act, which recognizes that hydrologic boundaries rarely match political boundaries. The 1955 act established watershed districts to integrate water management efforts between city, county and state agencies.

The District covers approximately 181 square miles that ultimately drain into the Minnehaha Creek (which then enters the Mississippi River). The watershed includes natural treasures such as Minnehaha Creek, Lake Minnetonka, The Minneapolis Chain of Lakes and Minnehaha Falls. There are eight major creeks, 129 lakes and thousands of wetlands within the MCWD. The MCWD also includes all or part of 27 cities and two townships in Hennepin and Carver Counties.

The MCWD represents one of the most popular recreational lakes in the Metropolitan area, Lake Minnetonka. Lake Minnetonka is now listed as a zebra mussel-infested lake, while many of the surrounding lakes within the MCWD are still listed as being free of zebra mussels. MCWD is a leading advocate for acting now on a solution to prevent the further spread of zebra mussels and to prevent the infestation by other AIS.

For this program to move forward, the Minnehaha Creek Watershed District needs to:

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1. Plan for sufficient funding for the 2013 boating season. Cost sharing with other organizations benefitting from this program will need to be defined for the 2014 boating season.
2. Pass resolutions to enable all elements of this program. Work must begin now for this program to be operational for the 2013 boating season.
3. Establish the regional AIS Insp/Decon stations, including the trained staff and management.
4. Establish unattended access controls at public landings on MCWD lakes
5. Establish pricing for on-site AIS inspectors for use at launch private marinas and other private landings.
6. Coordinate these recommendations with the work of the MCWD AIS Task Force, so as not to delay the implementation of the program.
7. Hire the leaders to implement and operate the program

Municipalities with public accesses

There are many cities and towns in the MCWD that own the land and operate public boat accesses.

Each of these municipalities will need to pass resolutions to allow the MCWD to implement this plan to accomplish the goal of 100% inbound inspection. As an example, the City of Shorewood owns and operates the public launch ramp on Christmas Lake. Shorewood, a leader in AIS prevention activities, passed a resolution in 2011 that enabled an unattended access gate to be installed, and another resolution to allow the MCWD to provide AIS inspectors at the public access for the 2012 boating season.

In addition, the municipalities must be prepared to participate in a cost-sharing model for 2014 and beyond.

Carver County and Hennepin County

Carver County and Hennepin County own land and operate public boat accesses on lakes in the MCWD.

For this program to move forward, the Counties will need to pass resolutions to allow the MCWD to implement this plan to accomplish the goal of 100% inbound inspection. In addition, the counties must be prepared to participate in a cost-sharing model for 2014 and beyond.

Three Rivers Park District (TRPD)

The Three Rivers Park District owns land and operates public boat accesses on lakes in the MCWD. The TRPD's charge is to acquire, develop and maintain large park reserves and regional parks and trails for the citizens of suburban Hennepin County, the metro area, and the State.

For this program to move forward, the TRPD will need to pass resolutions to allow the MCWD to implement this plan, working with the TRPD, to accomplish the goal of 100% inbound inspection. In addition, the TRPD must be prepared to participate in a cost-sharing model for 2014 and beyond.

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Minneapolis Park and Recreation Board (MPRB)

The Minneapolis Park and Recreation Board is responsible for 17 lakes and ponds in Minneapolis with nearly 1,500 acres of lakes. The MPRB's mission is to permanently preserve, protect, maintain, improve, and enhance its natural resources, parkland, and recreational opportunities for current and future generations.

In 2012, the MPRB took very aggressive steps to protect their lakes from further infestations of AIS.

For this program to move forward, the MPRB will need to pass resolutions to allow the MCWD to implement this plan, working with the MPRB, to accomplish the goal of 100% inbound inspection. In addition, the MPRB must be prepared to participate in a cost-sharing model for 2014 and beyond.

Private Marinas

There are a variety of private marinas that have launch facilities for their customers. These accesses must be controlled if the spread of AIS is to be prevented.

For this program to move forward, these private marinas may choose to pay the MCWD for AIS inspectors, or they may develop other more creative arrangements as are done in Lake Tahoe. Nonetheless, every private marina must have a controlled access.

Coalition of Minnehaha Creek Waters (CMCW)

The newly formed coalition of associations, representing most of the major waters in the Minnehaha Creek Watershed, has endorsed this plan and urges its rapid implementation to stop the spread of AIS. This coalition is comprised of associations of every size from the very large Lake Minnetonka Association to the very small Mooney Lake Association. By forming the coalition, these associations intend to have a larger voice in influencing AIS prevention and other actions. Homeowners in waters represented by the CMCW fund the majority of the AIS prevention costs as well as the majority of the ongoing costs to keep the invasives in check so that everyone can enjoy the waters. In addition, these associations volunteer significant amounts of time to help protect these waters. The CMCW believes that this plan will provide substantially more value for every homeowner dollar and every hour than is currently experienced.

The CMCW has no specific actions required to make this program successful, although they will need to help convince lawmakers as well as the stakeholders on the need to support and approve this program for 2013 and beyond.

Lake Minnetonka Conservation District (LMCD)

The Lake Minnetonka Conservation District is regional government agency established to protect and preserve Lake Minnetonka. The LMCD currently operates AIS inspections at a number of landings on

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Lake Minnetonka, however the LMCD has not established a 100% inbound inspection requirement, nor do they have decontamination facilities.

For this program to move forward, the LMCD may need to pass resolutions to allow the MCWD to implement this plan to accomplish the goal of 100% inbound inspection. In addition, the LMCD should be prepared to participate in a cost-sharing model for 2014 and beyond.

Christmas Lake Homeowners Association (CLHA)

The Christmas Lake Homeowner's Association is comprised of lakeshore homeowners that work to grow an engaged community around lake activities and to preserve the quality of the lake resource for the future. The CLHA owns an AIS decontamination unit that will be turned over to the MCWD for use in this plan.

Associations of Minnehaha Creek Waters

The individual associations of the CMCW expect to fund some portion of this plan in a cost-sharing model for 2014 and beyond. That funding could potentially include the unattended access controls or the ongoing operational costs of AIS prevention.

In addition, the associations will need to ensure that all private landings on their lakes are identified to the MCWD so that the accesses can be controlled.

Private Lake Associations

There are a variety of private lake associations that maintain accesses for the convenience of their members and guests. These accesses must be controlled if the spread of AIS is to be prevented. These private associations have a variety of options from installing access control gates, to paying the MCWD for AIS inspectors, to shutting off the access. Arrangements must be made with every private lake association to have controlled accesses.

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Costs

The costs have been broken out by year into one-time and operating costs and have been depicted over a 5-year horizon. A phased deployment begins in 2013 to cover all in scope waters in the Minnehaha Creek Watershed District area.

The Inspection labor costs are calculated based on the Inspection station mix shown in the Operational Scheduled below. It represents a best guess of the amount of capacity to have operating across the dedicated and regional inspections stations based on the season. At any given time, the operational capacity of inspections stations in use will be determined based on estimated demand. As time goes on, the ability to estimate demand will get more accurate.

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		2013	2014	2015	2016	2017	5 yr total	Notes
Operating costs								
Inspection labor for Dedicated AIS inspection sites		414,206	426,632	439,431	452,614	466,192	2,199,074	See labor cost buildup tab
Inspection labor for Regional AIS inspection sites		469,131	483,205	622,127	640,791	660,014	2,875,269	See labor cost buildup tab
Inspector training for Dedicated AIS inspection sites	12 hours per inspector	5,040	5,191	5,347	5,507	5,673	26,758	See labor cost buildup tab
Inspector training for Regional AIS inspection sites	12 hours per inspector	5,760	5,933	7,638	7,868	8,104	35,303	See labor cost buildup tab
Gate maintenance and repair	\$2,000	42,000	60,000	60,000	60,000	60,000	282,000	See assumptions
Call center costs		15,000	15,450	15,914	16,391	16,883	79,637	Ballpark estimate
Educational handouts	For regional insp stations	8,000	10,000	10,000	10,000	10,000	48,000	Ballpark estimate
Communications	Heavy in 1st 2 years	20,000	10,000	5,000	5,000	5,000	45,000	Ballpark estimate
Regional AIS insp. station maintenance	\$5,000	20,000	20,000	25,000	25,000	25,000	115,000	See assumptions
Maintenance for Dedicated site decontamination equipment	10%	8,000	8,000	8,000	8,000	8,000	40,000	See assumptions
Maintenance for Regional site decontamination equipment	10%	8,000	8,000	8,000	8,000	8,000	40,000	See assumptions
Program management		100,000	103,000	106,090	109,273	112,551	530,914	This is a new F/T employee
Total operating costs		1,115,137	1,155,411	1,312,547	1,348,443	1,385,416	6,316,955	
One-time costs								
Acquire land for Regional AIS inspection stations	\$50,000	200,000	0	50,000	0	0	250,000	See deployment plan
Establish Regional AIS inspection stations	\$30,000	120,000	0	30,000	0	0	150,000	See deployment plan
Install gates	\$30,000	600,000	270,000	0	0	0	870,000	See deployment plan
Implement access code management solution	\$20,000	20,000					20,000	Ballpark estimate
Acquire decontamination equipment for Dedicated sites	\$20,000	80,000	0	0	0	0	80,000	See deployment plan
Acquire decontamination equipment for Regional sites	\$20,000	80,000	0	20,000	0	0	100,000	See deployment plan
Implement communications program		50,000					50,000	Ballpark estimate
Program Manager		150,000	25,000	50,000			225,000	Ballpark estimate
Total one-time costs		1,300,000	295,000	150,000	0	0	1,745,000	
Total costs		2,415,137	1,450,411	1,462,547	1,348,443	1,385,416	8,061,955	

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Operational schedules

Inspection station mix

Season	Timeframe		Days	Weeks	Hours of inspection		Dedicated stations (4 total)		Regional stations (5 total)		
	Start date	End date			Start	End	Weekdays(M-F)	Weekends (S-S)	Weekdays(M-F)	Weekends (S-S)	
Spring	4/15/12	5/31/12	47	6.7	500	2000	4		2	2	5
Summer	6/1/12	9/10/12	102	14.6	500	2200		4	4	5	5
Fall	9/11/12	10/31/12	51	7.3	500	2000			2	2	5
Winter	11/1/12	4/14/13	165	23.6	0	0					
			365	52.1							

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Phased deployment plans

		2013	2014	2015	2016	2017
Gates	Deployment	70%	100%	100%	100%	100%
	New gates	20	9	0	0	0
	Total gates	21	30	30	30	30
Dedicated Insp. Stations	Deployment	100%	100%	100%	100%	100%
	New dedicated insp. stations	0	0	0	0	0
	Total dedicated insp. stations	4	4	4	4	4
Regional Insp Stations	Deployment	80%	80%	100%	100%	100%
	New regional insp. stations	4	0	1	0	0
	Total regional insp. stations	4	4	5	5	5

End state	
Gates	30
Dedicated IS	4
Regional IS	5

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Alternatives considered

Alternative	AIS Prevention Level	Access to public waters	Relative Cost	Convenience
Do nothing	Very low	High	None	Unimpeded
Education and awareness	Low	High	Low	Unimpeded
Spot inspection and decontamination	Low to moderate	High	Moderate	Mostly unimpeded, minor impact if inspected
Inspect all watercraft at all accesses	High	High	Prohibitive	Minor impact
Inspect all watercraft at a combination of dedicated and regional inspection sites	High	High	Moderate to high with high initial capital cost	Minor to moderate impact
Inspect all watercraft at regional inspection sites	High	High	Moderate with high initial capital cost	Moderate impact

Based on the analysis summarized in the table above, this plan incorporates regional inspection sites with dedicated sites to improve the convenience factor. This alternative provides the highest level of AIS protection and access, an acceptable level of inconvenience, but at a higher cost than with a “regional only” inspection model.

Risks to success

There are a variety of risks to the success of the plan. Some are behavioral, some are inherent in the design of the watercraft, and some are related to the choices of our governmental leaders. It is assumed that most of our efforts will be focused on managing the risks associated with the behaviors of our watercraft operators.

Behavioral change

This is the most serious of our risks. We must be successful in changing the culture from “unfettered access” to “inspected access to control AIS” (not just the current threat of zebra mussels). Failure to change the culture may result in intentional destruction of property including the electronic gates, the Insp/Decon stations, and our Minnesota waters. This change must be done with the leadership of the state, county and local governments, the sporting lobbies, and the numerous associations of lakes and rivers.

DNR not granting the required authority and participating

The DNR must use their current authority to extend the power to require inspections and to deny access for offending watercraft to the inspectors at the regional AIS Insp/Decon stations. Failure to extend these powers will not allow this plan to have the teeth that it needs to stop the spread of AIS.

As the DNR today provides a variety of AIS inspection and decontamination services to the area lakes, we would not expect them to abdicate their responsibility and involvement. Instead, we expect and want them to join in and actively support this effort towards their legislative directive of “preventing and curbing the spread of AIS”.

Non-participation of critical LGU’s and organizations

There is a critical set of LGU’s and organizations that must endorse this plan, prepare for an appropriate level of cost sharing, and take the actions required to enable the MCWD to undertake this large venture. Any group that chooses not to participate increases the risk that AIS will spread further. In that way, some organizations are more important than others towards our stated intention of stopping the spread of AIS.

Inspection/decontamination integrity

The Insp/Decon process must be comprehensive, rigorous, and consistent. The Insp/Decon is the control point in stopping the spread of AIS. Educating the public can be supplemental to the Insp/Decon process, but it cannot be the focus. Failure to do the full Insp/Decon compromises our ability to stop the spread of AIS. Our inspectors can’t be “Minnesota nice”. They must do their jobs to protect our waters. The inspectors cannot be bullied into passing watercraft. They must do their jobs to protect our waters.

Malfunctioning gate(s)

The gates need to operate consistently or they stand a high chance of being vandalized. If a gate is not working, there must be a quick and easy way to affect the repairs. A broken or vandalized gate allowing unfettered access compromises that water body. We expect that the local lake associations will help

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monitor the public landing to ensure the gates are operational and doing the job of controlling access to inspected watercraft.

Wakeboard boats

Wakeboard boats by design do not have the ability to drain all of their ballast system water, thus providing an easy way for veligers to be transported to another lake. We will remediate this risk using today's DNR procedures of requiring decontaminating the remaining ballast water.