

Community Engagement
A Suggested AIS Planning Guide – 2018

to

Protect Local Lakes and Waterways from
Aquatic Invasive Species (AIS)



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About this Document

This document was prepared for the Riding Mountain UNESCO World Biosphere Reserve by Daryl Kines and Dr. Jim Irwin. The Province of Manitoba (Department of Sustainable Development) has reviewed this document for accuracy. This review does not constitute an endorsement by the Province and the authors understand that all community activities must be in accordance with Manitoba Legislation.

An electronic version of this document available at:

<http://rmb.ca/spreadthewordnotthemussels> or

<https://www.friendsofsandylake.com/documents>

This document is intended to assist you (stakeholders of a waterway) with protecting your waters and community by:

1. Explaining the basic facts about AIS and the threat they pose to your waters and community.
2. Bringing you up-to-date regarding what the Province of Manitoba is doing to protect you from an AIS invasion.
3. Pointing out the additional measures you can put in place to protect your waters and community.
4. Assisting you with planning if you choose to implement additional protective measures by:
 - a. Doing an AIS Risk Assessment and
 - b. Providing a list of AIS awareness resources.

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If you have valuable lakes and waterways, you and your community may want to develop a plan to protect them.

Basic Facts about AIS:

1. Waterway invasion by Aquatic Invasive Species can be ecologically destructive, economically devastating and can last indefinitely.
2. Aquatic Invasive Species present new, unique threats that require awareness, recognition of how serious an invasion can be and take action to protect communities that are dependent on their waters.
3. Aquatic Invasive Species are spread by human activity.
4. If watercraft or other water-related equipment with AIS are put in a lake or waterway, an invasion will almost certainly occur. An invasion can be caused by a single contaminated object and additionally, everything downstream will also be invaded.
5. Effective AIS prevention is possible.
6. Dealing with an AIS invasion after the fact is complicated, and expensive.
7. AIS prevention will cost less than living with the problem.
8. The Province of Manitoba's AIS program is focused on reducing the risk of AIS being transported from waterways that are already invaded. This is being done by educating the public and inspecting/decontaminating watercraft. There are currently 6 inspection/decontamination stations operated by the Province. They are strategically located on some major highways to intercept watercraft leaving an invaded area and heading towards waterways that have not been invaded. Unfortunately, some major highways do not have an inspection/decontamination station and the stations that are in place are not always open. Consequently some watercraft coming from invaded waters and travelling to western Manitoba are not being inspected.
9. Since the Province of Manitoba's AIS program only reduces the risk of an invasion, communities should determine:
 - a. The importance of their waters,
 - b. The level of risk they are willing to tolerate and
 - c. If additional protective measures need to be put in place.This will require the local community to work with their Municipality and the Province in order to implement some of the measures.
10. There are a number of additional protective measures that each community can put in place to further reduce the risk.
11. If you wait until the Province of Manitoba announce your waterway has been invaded, it will be too late!

What is the threat?

The threat to your waterway is that water or AIS hitch hikers are transferred from invaded waters to your waters. This movement is caused by human activities and can be prevented. The following table lists items that can be responsible for moving AIS from one body of water to another.

Trailered watercraft (motorboat, personal watercraft, sailboat etc.)
<ul style="list-style-type: none"> • AIS hitch hikers on or inside the boat, on the trailer, tow vehicle, anchors, ropes, etc • Watercraft related gear such as: damp life jackets, clothing, fishing gear, etc • Water trapped: <ul style="list-style-type: none"> ○ Inside the boat, especially, if the drain plugs are not removed ○ In the cooling system of the engine ○ In live wells
Car top and inflatable watercraft (Kayaks, Canoes, Paddle boats, paddle boards, sail boards etc.)
<ul style="list-style-type: none"> • AIS hitch hikers on or inside the boat • Damp gear such as ropes, paddles, life jackets, fishing gear, etc. • Water trapped inside car top boat
Damp water toys (water skis, knee boards, tubes and other inflatables, etc.)
<ul style="list-style-type: none"> • Pockets of water trapped in tubes or other inflatable toys
Construction Equipment that is in contact with a waterbody.
Float planes, water bombers
Boat lifts or docks that are relocated

AIS Protective Measures

Province of Manitoba AIS Protective Measures

The Province of Manitoba has implemented the following measures to reduce the threat of AIS invading waterways that are free of AIS:

1. Passed Legislation and Regulations (The Water Protection Act – W65)
2. Monitoring of key waterways within Manitoba that have not been invaded.
3. Provided signs for some waterways that have not been invaded.
4. Setup AIS Inspection/Decontamination Stations at strategic locations to intercept and decontaminate boats that are travelling from control zones (AIS invaded waterways) to areas that have not been invaded.
5. Created the StopAIS and Stop the Spread websites to disseminate information about AIS
6. Created, printed and distributed documents about AIS
7. Created and delivered AIS Awareness presentations

Possible Community Protective Measures

Each community can initiate additional protective measures to reduce the threat of an AIS invasion. These measures would be determined by each community and could include:

1. Educating the local population about the threat, effects of an AIS invasion, and the role the individual must play in order to reduce the risk of being invaded. This would include information to educate property owners and their visitors so that they are protecting the waterway. This could be done by:

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- a. Distributing printed AIS awareness materials using a variety of methods such as direct mailings, post box stuffing, posters on public billboards or business premises etc.
 - b. Organizing AIS Awareness presentations in the community.
 - c. Distributing literature door-to-door and talking with residents one-on-one about the AIS threat.
2. Erecting informative signage at public boat launch locations to assist visitors that want to launch a trailered watercraft.
 3. Inspecting watercraft prior to launch. This can be done by setting up a volunteer AIS Inspection Station at a key location such as a main boat launch.
 4. Various levels of restricting access to launching a trailered watercraft so that all watercraft are inspected before being allowed to launch.
 5. Preventing boats from launching until after they have been inspected by installing lockable barriers.
 6. Setting up a local decontamination station in a strategic location, if the provincial stations are too far away. Ideally it should be located within a reasonable driving distance of your waters.

Increasingly Protective Measures

The following table lists protective measures in an increasingly restrictive order starting with doing nothing and progress to the extreme level, where the waterway cannot be used by anyone.

Increasingly Protective Measures	Description
1.	Do nothing.
2.	Rely on what the Province of Manitoba is able to do.
3.	Educate people in your area by distributing AIS information supplied by the Province of Manitoba.
4.	Install signage supplied by the Province of Manitoba at boat launches and beaches. Note: Only your Municipality can do this.
5.	Organize an AIS Awareness session in your community and ask the RMBR to deliver a Zebra Mussel Awareness presentation in your community.
6.	Prepare and distribute AIS awareness literature that targets cottage owners, campground owners and business owners in the area.
7.	Distribute targeted AIS literature door-to-door and talk with residents one-on-one about the AIS threat and an individual’s responsibility.
8.	Encourage individuals to discuss the AIS threat with friends, neighbours, family and anyone who will listen in order to increase awareness.
9.	<p>Have volunteers, from your area attend a “Local AIS Inspector training” session given by the Province of Manitoba. (Note: This would be subject to availability.)</p> <p>Once you have trained “Local AIS Inspectors”, conduct inspections of watercraft before they launch into your waterway. (Note: “Local AIS Inspectors” do not have the authority to force a boat owner to have his/her watercraft inspected.)</p> <p>If the watercraft owner allowed their watercraft to be inspected, the “Local AIS Inspector” would determine if the watercraft should be decontaminated or allowed to launch by:</p> <ol style="list-style-type: none"> 1. Going through a series of questions with the boat owner and

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	<p>2. Inspecting the watercraft, trailer and vehicle.</p> <p>Note: Inspecting watercraft will reduce the risk of a person unknowingly launching a contaminated boat, the Local AIS Inspector would not have the authority to prevent the watercraft from being launched into the waterbody.</p>
10.	<p>Communicate with all lakefront property owners that are able to launch trailered watercraft from their beach and encourage them to only allow watercraft that have been inspected to launch at their beach.</p>
11.	<p>Install signs at public boat launching sites in order to direct trailered watercraft traffic to the Local AIS Inspection Stations.</p>
12.	<p>Install barriers at all public boat launch points where there is no Local AIS Inspection Station to physically prevent trailered watercraft from launching.</p> <p>Note: Only your Municipality can do this.</p>
13.	<p>Install gates that are lockable at the launch points where local AIS Inspector Stations are located.</p> <p>Note: Only your Municipality can do this. This would give the Local AIS Inspector a means of preventing a watercraft from being launched if it needs to be decontaminated.</p>
14.	<p>Setup and operate an AIS Decontamination Station if necessary.</p> <p>Note: If an AIS Decontamination Station is too far from your Local AIS Inspection Station, there is a risk that a watercraft that prevented from launching may launch elsewhere without being decontaminated.</p>
15.	<p>Work with your Municipality to protect your waterway by setting up a “Special Services Rate” to pay for the operation of a Local AIS Inspection Station and if necessary, an AIS Decontamination Station.</p> <p>Note: The Municipality of St. Clements is in the process of doing this to protect Gull Lake.</p>
16.	<p>Physically restrict access to your public boat launches.</p> <p>Note: Gull Lake on highway 59 near Grand Beach is doing this in conjunction with the Municipality of St. Clements and Alexander. Watercraft are allowed to launch by the Local AIS Inspector acting under the authority of their Municipality.</p>

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Risk Assessment

A risk assessment in this case is:

1. An examination of the importance of the waters you are trying to protect
2. Identifying the risk factors that could cause a harmful AIS invasion of your waters
3. Evaluating the results to determine actions that should be implemented.
4. Preparing an AIS Risk Register to communicate the risks to others.

Importance of Recreational Waters

It is important to consider the economic and ecological components that contribute to the importance of your recreational waters.

An AIS invasion, such as Zebra Mussels, will change everything. Business that depends upon a healthy waterway will suffer if not disappear. Recreational participation and tourism will diminish and possibly vanish. Jobs will be lost. Property values will be reduced. The local tax base will decline resulting in higher taxes and/or reduced services for those that remain. Costs to maintain Municipal infrastructure will also contribute to higher taxes.

The following table, we hope, will assist you to determine the importance of your community’s recreational waters:

		Yes	No
	Economic Components		
	Tourism & Recreation		
	Does the summertime population of the area increase substantially?		
	Do stores stay open on weekends and holidays in the summer?		
	Do visitors shop at the local stores and not worry about bringing everything with them because local selection and prices are reasonable?		
	Are events like festivals held in the community in the summer?		
	Are there activities in the evenings such as live bands and other gatherings in the summer?		
	Is the waterway known as a good place to go fishing?		
	Are fishing derbies held at your lake?		
	Are the campgrounds full in the summer?		
	Do you have to reserve a campsite?		
	Are existing campgrounds expanding to handle more campers?		
	Is the waterway used for recreational purposes such as water skiing, tubing, swimming, etc.?		
	Is there a beach that is reserved for swimmers?		
	<ul style="list-style-type: none"> • Is there a public washroom close to the swimming area? • Change rooms close to the swimming area? • Showers close to the swimming area? 		
	Are there plans to upgrade or create new public facilities such as piers, boat launches, beach areas, playgrounds, washrooms, etc.?		
	Is there a boat launch?		
	Is there a marina?		
	Real Estate & Businesses		
	Do many property owners draw water from the waterway?		

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		Are property values stable or increasing?		
		Is the real estate market doing well and property that is priced properly selling?		
		Is construction of new houses/cottages and renovation of existing properties a regular occurrence?		
		Does your community have businesses that are supported by tourism?		
		• Gas Station		
		• Auto Repair Shop		
		• Car wash		
		• Convenience Store		
		• Restaurants		
		• Hotel		
		• Bar		
		• Beer Vendor		
		• Grocery Store		
		• Hardware Store		
		• Bank or Credit Union		
		Does your community have a merchant’s organization that promotes tourism?		
Ecological Components				
		Are the fish populations healthy?		
		Are swimming beaches clean and attractive?		
		Is the submerged plant growth in balance? (Not taking over the waterway.)		
		Are toxic blue-green algae blooms under control?		
		Total		

AIS Risk Assessment

An AIS invasion can be caused by a single incident and the effect is the same no matter how it occurred.

The location of your waters should also be taken into account when determining risk because the risk of an AIS Invasion increases:

1. The closer your waterway is to other AIS invaded waterways.
2. If your waterway is used by boaters that also use an invaded waterway.
3. If a watercraft decontamination station is too far away from your waterway.
4. If there is no way to prevent a high risk watercraft from launching into your waterway.

The next step is to identify the risk level of each threat to your waters. This will help determine which preventive measures should put in place and their priority.

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AIS Risk Assessment Worksheet

The table below is a worksheet that can be used to identify:

- a. Each AIS invasion threat to your waterway. Marking the “Risk” column with Extreme (E), High (H), Medium (M) or Low (L) and
- b. For each threat you have identified, you can mark the “Mitigate” column with a “Y” for each preventive measure you believe should be implemented to protect your waters.

AIS Risk Assessment Worksheet				
	Threat	Possible Preventative Measures	Risk	Mitigate
1.	Nearby waters have been invaded with AIS.			
	a)	Your waterways are at greater risk of an AIS invasion and you will need to implement more restrictive protective measures than waterways that are some distance from an invaded waterway.		
2.	A watercraft arrives at your boat launch and it has not been decontaminated.			
	a)	Post Provincial AIS signs at the boat launches.		
	b)	Post prescriptive signs that instruct the boater: <ul style="list-style-type: none"> • If it is ok for them to launch; • If their watercraft must be inspected and where to get it inspected; • If their watercraft must be decontaminated and where that can be done. 		
	c)	Provide educational pamphlets at the boat launch.		
	d)	Provide local volunteer AIS Inspectors trained by the Province.		
	e)	Setup an inspection station with paid employees.		
	f)	Restrict boat launching to one or a few locations by posting signs.		
	g)	Restrict boat launching to one or a few locations using barriers.		
	h)	Install lockable gates to prevent watercraft from launching.		
	i)	Close your waters to day use boaters. (Day use individuals could rent a boat if that option was available.)		
	j)	Close your waters to all human activity.		
3.	A visitor brings a water toy to your waters that can be launched anywhere.			
	a)	Post Provincial AIS signs at the boat launches, beaches and all public areas where canoes, kayaks, inflatable and other items can be launched.		
	b)	Post prescriptive signs that instruct the boater: <ul style="list-style-type: none"> • If it is ok for them to launch; • If their watercraft must be inspected and where to get it inspected; • If their watercraft must be decontaminated and where that 		

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			can be done.		
4.			A visitor brings a watercraft or water toy to your property and wants to launch it into your waters.		
		a)	Educate residents, businesses and visitors so they are: <ul style="list-style-type: none"> • Familiar with the AIS threat, • Know the law as it pertains to AIS, • Know when it is safe to launch a watercraft, • Know when a watercraft should be inspected and where this can be done and • Know when a watercraft must be decontaminated and where that can be done. 		
		b)	Provide stickers or signs that identify the occupants of the property as being AIS Aware.		
5.			A watercraft is inspected and is not allowed to launch into your waters.		
		a)	Direct the watercraft owner to a Provincial AIS Decontamination Station.		
		b)	Provide the watercraft owner with a copy of the Province’s instructions on how to decontaminate a watercraft.		
		c)	Setup a local AIS Decontamination Station if the nearest Provincial AIS Decontamination Station is too far away.		
6.			A watercraft arrives at your car wash		
		a)	Install signs that alert watercraft owners of the risks of introducing AIS into the local sewer system if they have not been inspected.		
7.			An outboard or inboard motor arrives at your repair shop for servicing		
		a)	Implement an AIS Awareness program for all staff making sure that they understand the risks of live AIS entering the drainage system.		

Establishing an effective AIS prevention program should take all of the above threats into consideration.

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AIS Risk Register

The AIS Risk Register is a tool that summarizes the most concerning AIS Invasion threats identified in the AIS Risk Assessment Worksheet above.

This document can be used by stakeholder groups to communicate the risks to others. For example, this could be:

- A Municipality communicating with their rate payers.
- A cottage owners' association communicating with their members or their municipality.

The AIS Risk Register is a one or two page document, used to communicate the most serious threats.

Creating your AIS Risk Register

For each preventive measure you believe should be implemented to protect your waters, the following information should be included in the Risk Register:

- Threat Description
- Risk assessment – Extreme (E), High (H), Medium (M) or Low (L)
- Preventative measure proposed
- A short description of how the preventative measure could be implemented
- Additional information could include, implementation costs and funding

Hopefully, this document will help your community focus on the threats and move forward.

AIS Awareness Materials

Educating all stakeholders is probably the most important part of any AIS Prevention Plan. If individuals understand the seriousness of the threat and how they can prevent an AIS invasion, they will do their part to protect their waters and support any additional protective measures that their community proposes be put in place.

AIS Public Awareness Resources from RMBR

Internet resources

The Riding Mountain UNESCO World Biosphere Reserve (RMBR) has posted a selection of links that enable visitors to quickly and easily get up-to-speed on AIS:

<http://rmbrc.ca/SpreadTheWordNotTheMussels>

Visit the RMBR Facebook page at:

www.facebook.com/RMBRInvasiveSpecies

Presentations

A public “Zebra Mussel Awareness Presentation” is available from the RMBR. To make arrangements for a presentation in your community, Email: rmbrc@mymts.net or visit RMBR.ca

AIS Resources from the Province of Manitoba

The Province of Manitoba maintains the StopAIS & StopTheSpread websites at the following addresses:

<http://www.gov.mb.ca/waterstewardship/stopais>

<http://www.gov.mb.ca/stopthespread>

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The two websites contain current information including:

- A Get Started section
- A Quick Links section
 - Zebra Mussel Q & A
 - Watercraft Inspection Program Schedule
 - Stop the Spread
 - Control Zones (Maps of waterways that have been invaded by AIS)
 - Other information such as posters

Available AIS Signage

Contact the Province regarding AIS signs or art work.

AIS Literature

The Province produces AIS literature and posts it on their website as web pages or links to PDF documents.

AIS Inspections

The Province of Manitoba may be able to provide local people with training.

