

**ST. CROIX NATIONAL SCENIC RIVERWAY
AQUATIC INVASIVE SPECIES
INTERAGENCY TASK FORCE
2005 ACTION PLAN FOR THE LOWER ST. CROIX RIVER.**

February 25, 2005

Background

The introduction of non-native aquatic invasive species (AIS) into Minnesota and Wisconsin waters threatens the ecology of the region's and states' water resources, and may harm industrial, recreational and subsistence use of the infested waters. Minnesota and Wisconsin have been subject to the invasion of non-native aquatic species since the settlement of the region by Europeans. Although many human activities may spread AIS, on the St. Croix River, the main potential pathway for dispersal of adult or larval zebra mussels is by recreational watercraft and other vessels. For the 2005 recreational watercraft season, the focus of this action plan will be zebra mussels, but include selected AIS (e.g.: Asian carp and New Zealand mudsnail).

Zebra mussels are small non-native bivalves introduced into the United States in the Great Lakes region in the late 1980's. They have since rapidly spread to connected water bodies, primarily through attachment to, and spread by, commercial traffic. They have also expanded into inland waters in 22 states and 2 providences mainly through recreational watercraft transport. This invader has been documented to kill native unionid mussels, disrupt ecosystems, impact fisheries, damage municipal water supply and industrial intakes, damage boats, and impair water recreation. There are no environmentally safe control methods once they have been established in a waterbody.

In response to the threat of this invader, a St. Croix River Zebra Mussel Task Force (Task Force) was formed in 1992 (see St. Croix National Scenic Riverway Aquatic Invasive Species Interagency Task Force below). A Zebra Mussel Response Plan, prepared in 1993, was implemented to try and keep the zebra mussel from spreading into the St. Croix River. The primary focus in the first years of the plan was to enlist public support through voluntary watercraft restrictions. However, the discovery in 1994 of boats moored in the river with attached zebra mussels resulted in the decision that voluntary actions were not sufficient to prevent movement of the mussel. The NPS enacted emergency travel restrictions for the 1995 season, preventing northbound traffic past the Arcola sandbar unless the owner met specific conditions (see Appendix A).

Beginning in 1994, zebra mussels have been found on boats within the lower twenty-five miles of the river and in 1997, singularly on substrate such as native mussels and rocks south of the Stillwater Lift Bridge. However, during the summer of 2000, the settlement of juvenile zebra mussels from reproducing adults was discovered in the last 16 miles of the Lower St. Croix National Scenic Riverway. Monitoring since 2001 suggests reproduction now occurs south of the Stillwater Lift Bridge (~River Mile 22).

Minnesota regulations prohibit transport of zebra mussels and other AIS either via the waterways or overland. The state has a legal definition of infestation and AIS. The state of Wisconsin has enacted legislation making it illegal to transport zebra mussels into the lower St. Croix. NPS regulations also prohibit zebra mussel transportation into the lower St. Croix River north of Stillwater. Due to the reproduction of zebra mussels downstream of Stillwater, the State of Minnesota legally declared this portion of the river infested in 2001. This status regulates the transport of water (bait buckets, live wells, etc.) from the St. Croix River into the State. The State of Wisconsin does not currently have such regulations. NPS regulations published in the Federal Register on June 23, 1997, is in effect for the St. Croix River upstream of Stillwater, including waters designated by the state of Minnesota as “infested.”

In 1998, the Governors of Minnesota and Wisconsin, and Chairpersons from the Anishinabe (Ojibwe) tribes signatory to the 1837 treaty, submitted a comprehensive interstate management plan for the prevention and control of AIS to the Federal Aquatic Nuisance Species Task Force to obtain federal funding. The plan was approved and the states and tribes have received federal funds to implement the AIS management plan.

St. Croix National Scenic Riverway Aquatic Invasive Species Interagency Task Force

The purpose of the St. Croix National Scenic Riverway Aquatic Invasive Species Interagency Task Force (formally the *St. Croix Zebra Mussel Task Force*) is to help agencies and stakeholders slow the spread and prevent new populations of zebra mussels further upstream in the St. Croix River and into other waters in Minnesota and Wisconsin. The Task Force also seeks to actively identify other aquatic invasive threats and reduce their harm. The Task Force tries to accomplish this by developing strategies, assessing the effectiveness of strategies that are implemented and recommending tools to use against the zebra mussel and other AIS, by linking agencies and stakeholders in this effort. Participants in the Task Force have included: National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), Wisconsin and Minnesota Departments of Natural Resources (WDNR, MDNR), Xcel Energy, University of Minnesota Sea Grant Program (MN Sea Grant), Macalester College, Biological Resources Division of the U.S. Geological Survey (USGS), U.S. Coast Guard (USCG), U.S. Army Corps of Engineers (USACE), Great Lakes Indian Fish and Wildlife Commission (GLIFWC), and the St. Croix Marinas Association.

2005 Action Plan

This plan outlines strategies and actions proposed by the participating agencies for the 2005 season to help accomplish the Task Force purpose and implement actions from the St. Croix Scenic Riverway Comprehensive Interstate Management Plan.

Implementing this action plan will help attain the following goals of the comprehensive interstate management plan:

Goal I: Prevent or slow the spread of aquatic invasive species into and within the St. Croix River.

Goal II: Abate harmful ecological, economic, social and public health impacts resulting from infestation of aquatic invasive species.

Strategy IA: RISK IDENTIFICATION AND PRIORITIZATION

Determine the AIS that have the potential to infest the St. Croix River. Identify existing and potential transport mechanisms that are likely to introduce these species.

- a. Develop a prioritized list of threats from pathways¹ and species to aid in prioritizing activities in annual action plans and the comprehensive interstate plan. (St. Croix National Scenic Riverway Aquatic Invasive Species Interagency Task Force)

Strategy IB: REGULATIONS AND ENFORCEMENT

Publicize and enforce regulations to prevent introductions into the St. Croix River.

- a. Publicize all state and federal regulations prohibiting the transport of zebra mussels and AIS. (MDNR, NPS, WDNR, MN Sea Grant)
- b. Inspect watercraft leaving and/or entering at St. Croix River and Mississippi River public access sites in Minnesota and Wisconsin to reduce the transport of zebra mussels and other AIS. (MDNR, WDNR, NPS)
- c. Provide regulatory and AIS information to marina owners/operators to assist in education and compliance by their boating clientele. (MDNR, MN Sea Grant, NPS, WDNR, USFWS)
- d. Continue permit boating restrictions established in 2001 at river mile 28.5 (High Bridge) (NPS).
- e. Enforce infested watercraft laws by randomly inspecting riparian boats with special use permits located in the noninfested waters of the St. Croix River. Staff may respond with appropriate information, orders or citations to achieve compliance. (NPS)

Strategy IC: MONITORING FOR AQUATIC INVASIVE SPECIES

¹ such as, but not limited to, recreational watercraft, live bait release by anglers, aquarists, water gardeners/pond owners, scuba divers, fish stocking operations, management agency operations, researchers, consultants, commercial boat haulers, aquaculture, commercial watercraft operations, etc.

Develop/maintain monitoring programs in the St. Croix River watershed to provide for the early detection of infestations for use in management decisions and actions.

- a. Continue passive zebra mussel monitoring stations (settling plate samplers and slides) on the St. Croix and Namekagon Rivers. (NPS, USFWS, MDNR)
- b. Continue dive searches for zebra mussels on river substrate, marinas, boats, and other possible attachment sites. This action will be done in the St. Croix and Namekagon rivers and selected lakes within the watershed upstream of the infested area. (GLIFWC, MDNR, NPS, USFWS, WDNR, USACE, U of MN)
- c. Collect and analyze water samples for veligers. Areas included for sampling are Prescott, Hudson, Stillwater, Marine-on-St. Croix, St. Croix Falls and flowages on the Sunrise and Snake Rivers. Events will occur in July and August and/or September. (MDNR, NPS, WDNR, USACE)
- d. Conduct quantitative sampling at Prescott, St. Croix Bluffs, Kinnickinnic Narrows, Afton, Lake St. Croix Beach, Hudson, Bayport, and/or Stillwater (NPS, USFWS, USACE).
- e. Monitor for Asian carp species in the nearby areas of the Mississippi River (WDNR, MDNR).

Strategy ID: INFORMATION AND EDUCATION

Continue an effective information/education program on the prevention of aquatic invasive species introductions into or within the St. Croix River.

- a. Maintain AIS information signs at public access sites along the river. (MDNR, NPS, WDNR)
- b. Continue general AIS public outreach and communication efforts on biology, impacts and regulations through such media as billboards, radio spots, and literature distribution. (GLIFWC, MDNR, MN Sea Grant, NPS, USFWS, WDNR)
- c. Provide information on the NPS regulations to riparian land owners and marina slip owners on the St. Croix River prior to boating season. (NPS)
- d. Provide agency staff and commercial businesses (marinas) along the Mississippi and St. Croix Rivers with information (such as brochures, posters, fact sheets and the annual Action Plan) about the threat posed by zebra mussels and other aquatic invasive species. (MDNR, MN Sea Grant, NPS, USFWS, WDNR)
- e. Contact boaters with prevention information at water accesses on the Minnesota and Wisconsin sides of the St. Croix. (MDNR, WDNR)
- f. Provide information on AIS to boating public at lock and dam areas. (USACE)
- g. Provide information to public at river community public events (NPS, USFWS)
- h. Provide information about the Task Force and St. Croix-specific regulations via the Minnesota/Wisconsin DNR web sites (www.dnr.state.mn.us) (www.dnr.state.wi.us/org/caer/ce/invasives/education.htm) general aquatic invasive species information through the DNR sites or linked sites (www.seagrant.umn.edu/exotics/index.html) and provide zebra mussel information at the NPS web site (http://www.nps.gov/sacn/management/zebra_mussels.html). (MDNR, WDNR, MN Sea Grant, NPS)

- i. Continue to display zebra mussel and AIS exhibits at NPS visitor centers and to present programs on zebra mussels to park visitors (NPS)
- j. Distribute to schools and/or conduct outreach to schools using “Aquatic Exotics” traveling trunks and other educational materials, and provide training for teachers for use of the trunks (NPS, MN Sea Grant, MDNR, WDNR)

Strategy IE: EXPLORE NEW PREVENTION TECHNIQUES

Once potential invasive threats and pathways have been identified, provide for the physical prevention of these species.

- a. Begin discussions with potential contractors for evaluation of fish barrier at mouth of St. Croix to prevent Asian carp from entering from the Mississippi River (MDNR).

Strategy IIA: CONTROL

Establish mechanism(s) to ensure that the control strategies developed and implemented are: a) done so in coordination with state and federal agencies, tribal authorities, local governments, inter-jurisdictional organizations, and other appropriate entities; and b) are based on the best available scientific information and conducted in an environmentally sound manner as stated in the National Aquatic Nuisance Prevention and Control Act, Section 1202. (MDNR, MN Sea Grant, NPS, USFWS, WDNR)

- a. The NPS has established threshold levels in their Integrated Pest Management Plan for zebra mussels and will use these levels to implement increased NPS actions in the river upstream of Stillwater. (NPS)
- b. Direct the removal and cleaning of boats that are found to have zebra mussels attached in noninfested areas of the St. Croix River. (Marinas, MDNR, NPS, WDNR)
- c. Based on monitoring results from Strategy IC, the Task Force will review this and all other strategies. (GLIFWC, MDNR, MN Sea Grant, NPS, USFWS, WDNR)
- d. Develop and implement *Aquatic Invasive Species: Hazard Assessment and Critical Control Point Plans* to ensure that management, conservation officers, researchers, consultants, and commercial operators are taking appropriate precautions to prevent the spread of zebra mussels and other aquatic invasive species via field operations. Plans can be developed by participating in workshops sponsored by Minnesota Sea Grant and the Great Lakes Sea Grant Network. (MN Sea Grant)

Strategy IIB: RESEARCH

Monitor/support/coordinate scientific research between state and federal agencies and academic institutions that investigate possible environmentally safe control methods to use against zebra mussel and other AIS. (MDNR, MN Sea Grant, NPS, USFWS, WDNR, others)

- a. Obtain and evaluate information on possible control methods and ongoing research through research conferences, Internet access, and other sources (USACE, MDNR, MN Sea Grant, NPS, USFWS, WDNR, others)

Appendix A.

NATIONAL PARK SERVICE VESSEL ACCESS RULES ST. CROIX NATIONAL SCENIC RIVERWAY 2005 BOATING SEASON

The National Park Service will restrict upstream travel at the Soo Line Railway High Bridge (mile 28.5) to protect Riverway aquatic resources from the accidental introduction of the zebra mussel and certain other aquatic invasive species. Using existing regulatory authority found in the Code of Federal Regulations Title 36 Sections 3.3 and 7.9, the National Park Service may provide a special use permit for upstream travel past the Zebra Mussel Checkpoint under the following case-by-case conditions:

A. The vessel is legally moored (north of mile 25.4 and south of Marine on St. Croix) on the St. Croix River by a riparian land owner or marina slip renter/owner. A riparian land owner is someone who owns property directly on the river, or someone who has legal, deeded access to the river.

1. The owner/operator agrees to not operate the vessel south of Mile Long Island (25.4) or in any infested waters, including the Mississippi River, at any time. This condition is subject to change if zebra mussels are found upstream of Stillwater.
2. The owner/operator contacts NPS staff prior to removing the vessel from the noninfested zone of the St. Croix River.
3. The owner/operator checks in at the Zebra Mussel Checkpoint whenever access upstream is desired.

B. The owner/operator of a vessel has been issued a same-day pass from authorized personnel. The pass will be issued subject to the following conditions:

1. If the vessel is new and never been operated in open water, or has only been operated in

noninfested water above mile 25.4 on the St. Croix.

2. If the vessel has been operated in infested water below mile 25.4, the vessel must undergo one or both of the following prior to placement in noninfested waters:

a. Remain out of the water over the winter, or operated and moored in water below 50° F exclusively, and be visually inspected for attached zebra mussels. The vessel must then travel upstream when water temperatures (less than 50° F) and other factors minimize possibility of zebra mussel transport (such as launch location).

b. Be removed from the water and cleaned with a high pressure hot water wash (120+ degrees Fahrenheit) and be visually inspected for attached zebra mussels. The vessel must then travel upstream when water temperatures (less than 50° F) and other factors minimize possibility of zebra mussel transport.

Visual inspection and cleaning must include all areas that zebra mussels may attach to or reside in: hull, motor mounts, intakes, trim tabs, swim platforms, live wells (must be dry), and trailers. Visual inspections should be performed by agency staff or other qualified persons.

Vessels traveling upstream beyond the High Bridge must meet the conditions outlined above. Vessel owner/operators not conforming to the above conditions are in violation of 36 CFR Sections 2.32 Interfering with Agency Functions, 3.3 Permits, and 7.9(c) Vessels. Violators may be required to appear before a federal magistrate and may be subject to a fine of up to \$5000.00 and/or imprisonment for up to 6 months.

Vessel owner/operators in violation of the above regulations (e. g.: with a vessel containing zebra mussels), are also in violation of 36 CFR section 2.1(a)(2) Preservation of Natural, Cultural, and Archeological Resources, and may be in both civil and criminal violation of 16 U. S. Code Chapter 53 Control of Illegally Taken Fish and Wildlife, Section 3372(a) Prohibited Acts - Offenses other than Marking Offenses. Violators will be subject to a mandatory court appearance before a federal magistrate and may be subject to a fine of up to \$5000.00 and/or imprisonment for up to 6 months.