

# **ST. CROIX ZEBRA MUSSEL TASK FORCE**

## **2003 ACTION PLAN FOR THE LOWER ST. CROIX RIVER.**

May 1, 2003

### **Background**

The introduction of nonindigenous aquatic nuisance species 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 aquatic nuisance species since the settlement of the region by Europeans. Although many human activities may spread exotic species—on the St. Croix River, the main potential pathway has been determined to be recreational boats and other vessels that carry adult or larval zebra mussels.

The zebra mussel is a small exotic bivalve introduced into the United States in the Great Lakes region in the late 1980's. It has since rapidly spread to connected water bodies, primarily through attachment onto commercial traffic. It has also expanded into inland waters in more than 19 states mainly through recreational boat traffic. This exotic has been documented to kill native unionid mussels, disrupt ecosystems, possibly impact fisheries, damage municipal water supply and industrial intakes, and damage or impact boats and water recreation. There are no environmentally safe control methods once it is established in a water body.

In response to the threat of this exotic, the St. Croix River Zebra Mussel Task Force (Task Force) was formed in 1992 (see **St. Croix Zebra Mussel Task Force** below). A Zebra Mussel Response Plan prepared in 1993 was the initial plan to try and keep the zebra mussel from spreading into the St. Croix River. The primary focus in the first years of the Task Force was to enlist public support through voluntary boating 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 singularly on substrate such as native mussels and rocks, and on boats within the lower twenty-five miles of the river. 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 in 2001 and 2002, suggested these findings remained constant.

Minnesota regulations prohibit transport of zebra mussels either via the waterways or overland. The state has a legal definition of infestation and aquatic nuisance species. 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 Ojibwe (Chippewa) tribes signatory to the 1837 treaty, submitted a comprehensive interstate management plan for the prevention and control of *nonindigenous aquatic nuisance species* (ANS) 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 aquatic nuisance species management plan.

### **St. Croix Zebra Mussel Task Force**

The purpose of 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 tries to accomplish this by developing strategies, assessing the effectiveness of strategies that are implemented, recommending tools to use against the zebra mussel and linking agencies and stakeholders in this

effort. Participants in the Task Force include: National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), Wisconsin and Minnesota Departments of Natural Resources (WDNR, MDNR), Northern States Power Company (now Xcel Energy), University of Minnesota Sea Grant Program (UMSG), Macalester College, Biological Resources Division of the U.S. Geological Survey (BRD), U.S. Coast Guard (USCG), U.S. Army Corps of Engineers (ACoE), Great Lakes Indian Fish and Wildlife Commission (GLIFWC), and the St. Croix Marinas Association.

## 2003 Action Plan

This plan outlines strategies and actions proposed by the participating agencies for the 2003 season to help accomplish the Task Force purpose and implement actions from the St. Croix Scenic Riverway Comprehensive Interstate Management Plan.

The goals of this Action Plan for 2003 are designed to slow or stop 1) the spread of zebra mussels and identify other nonindigenous aquatic nuisance populations in the St. Croix River; and 2) the colonization of zebra mussel populations within the St. Croix River, including the harmful impacts resulting from colonization. This plan does not preclude other actions by agencies or stakeholders to assist this purpose.

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

- ☀ Goal I: Prevent or slow the spread of nonindigenous aquatic nuisance species into and within the St. Croix River.
- ☀ Goal II: Abate harmful ecological, economic, social and public health impacts resulting from infestation of nonindigenous aquatic nuisance species.

### **Strategy IA: RISK IDENTIFICATION AND PRIORITIZATION**

Determine the aquatic nuisance species 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 pathways (bait industry, boaters, free swimming, pet releases, etc.) and from species to aid in prioritizing activities in annual action plans and the comprehensive interstate plan. (St. Croix Zebra Mussel 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 nuisance aquatic species. (MDNR, NPS, WDNR)
- 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. (MDNR, WDNR)
- c. Provide regulatory and aquatic nuisance species information to marina owners/operators to assist in education and compliance by their boating clientele. (MDNR, MN Sea Grant, NPS, WDNR)
- d. Continue permit system and boating restrictions established in 1995 at river mile 28.5

(High Bridge) (NPS).

e. Enforce infested-watercraft laws by randomly inspecting boats at access points along the Riverway. These boat launches may be located in infested or noninfested waters of the St. Croix River. Staff may respond with appropriate information, orders or citations to achieve compliance. (MDNR, NPS, WDNR, USFWS)

### **Strategy IC: MONITORING FOR ZEBRA MUSSELS**

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) on the St. Croix and Namekagon Rivers. (NPS, USFWS)

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)

c. Collect and analyze plankton tows for veligers. (MDNR, NPS, USFWS, WDNR)

### **Strategy ID: INFORMATION AND EDUCATION**

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

a. Maintain aquatic nuisance species information signs at public access sites along the river. (MDNR, NPS, WDNR)

b. Continue general exotic species awareness 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 slip renters on or near 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) about the threat posed by zebra mussels and the annual Action Plan. (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 to boating public at lock and dam areas, particularly Lock and Dams 2 and 3. (ACoE)

g. Provide information to public at river community public events (ACoE)

h. Provide information about the Task Force and St. Croix-specific regulations via the Minnesota DNR web site ([www.dnr.state.mn.us](http://www.dnr.state.mn.us)) and general aquatic nuisance species information through the MDNR site and linked sites.

i. Set up and staff booths at community events to provide information on zebra mussels and aquatic exotic species (NPS)

j. Continue to display zebra mussel and aquatic nuisance species exhibits at NPS visitor

centers and to present programs on zebra mussels to park visitors (NPS)

**k.** Distribute to schools and/or conduct winter series outreach to schools using “Aquatic Exotics” traveling trunks, and provide training for teachers for use of the trunks (NPS, MN Sea Grant)

### **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 (NANPCA, 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)

### **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 aquatic nuisance species populations. (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 (ACOE, MDNR, MN Sea Grant, NPS, USFWS, WDNR, others)

**Appendix A.**

**NATIONAL PARK SERVICE VESSEL ACCESS RULES**

**ST. CROIX NATIONAL SCENIC RIVERWAY**

**2003 BOATING SEASON**

The National Park Service will restrict upstream travel at the Soo Line High Bridge (mile 28.5) to protect Riverway aquatic resources from the accidental introduction of the zebra mussel. 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.
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 (140+ 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.