



National Marine Manufacturers Association Position on Aquatic Invasive Species

NMMA's AIS Mission: The National Marine Manufacturers Association (NMMA) is working to combat the spread of AIS by promoting changes in boat designs, boater education programs, and federal, state and local decontamination and inspection programs. As the leading trade association for the North American recreational boating industry, NMMA has a responsibility to help prevent the spread of AIS, which cause long-term negative impacts to communities and ecosystems and threaten the future of recreational boating.

The Issue: Aquatic invasive species (AIS) continue to spread throughout the United States, threatening America's water habitats with long-lasting environmental damage that directly affects boaters, anglers, local communities and the recreational marine industry. Invasive species can be spread across the United States in surprisingly small quantities of water and in a very short amount of time. According to the National Oceanic and Atmospheric Administration (NOAA), the environmental impact of both aquatic and terrestrial invasive species are second only to habitat destruction as a cause of global biodiversity loss¹. Managing these invasive species costs an estimated \$137 billion annually to the U.S. economy². AIS affect individual boaters, their access to boating opportunities and the broader boating industry.

The Goal: **Curb the spread of aquatic invasive species to protect freshwater and marine habitats.** It is unlikely that the United States will ever eradicate all of the AIS already within its waters, however it is crucial that state and federal governments, citizens and private industry work together to curb the spread of these species and prevent the infestation of new waters.

Background:

AIS are plants, animals, insects and other organisms that are non-native to a given area or region and whose introduction causes, or is likely to cause, economic or environmental damage to that region. There are thousands of AIS, however, those most visible to the boating industry are zebra and quagga mussels, aquatic weeds, including three species of milfoil, New Zealand mudsnails, and Asian carp. These species have few, if any predators, disrupt the natural food chain, outcompete native plants and animals for resources, and can cause poor water quality. These environmental impacts also threaten

¹ Wilson, E.O. (1999). The diversity of life. WW Norton & Company

² Pimentel, D., S. McNair, J. Janecka, J. Wightman, C. Simmonds, C. O'Connell, E. Wong, L. Russel, J. Zern, T. Aquino and T. Tsomondo. 2001. Economic and environmental threats of alien plant, animal, and microbe invasions. *Agriculture, Ecosystems & Environment* 84(1): 1-20.

local and regional economies and recreation. AIS are very costly to manage and control, can restrict boating access, degrade waters, reduce tourism, and cause damage to vessels.

Aquatic invasive species can be spread from water body to water body by attaching to commercial vessels but also to recreational boats, trailers or docks. AIS proliferation prevention already has caused governments to limit boating access, close public boat ramps, and reduce fishing opportunities across the United States. For example, in 2017 the National Park Service closed the waters of Glacier National Park due to the confirmation of aquatic invasive mussels in a Montana reservoir. In 2018 these waters are open to boaters after decontamination and a dry period³. A large number of federal agencies, including the Department of the Interior, Department of Defense, Department of Homeland Security, Department of Commerce, Department of Transportation, Department of Agriculture, the Environmental Protection Agency, Department of State and state agencies have enacted laws and regulations for inspections, permits, launching availability, and access restrictions for vessels entering public waterways.

AIS can seriously damage boats and their component parts by fouling propellers, jamming impellers, clogging drains and intake pipes, and causing bilge pump failure. They damage speedometers, fish-finders and depth finder transponders. Zebra and quagga mussels attach deep inside vessel systems as near-microscopic larvae and quickly grow to completely block any space they inhabit. Milfoil and other aquatic invasive plants attach to the outside of a boat, most notably to trailers and engines. Invasive plants can become dense mats across the water and can get tangled in engines and cause damage. It only takes a single plant fragment to spread into a previously clean area⁴.

Asian carp species are also detrimental to boaters and both recreational and commercial fishing. Asian carp cause serious damage to native fish populations in lakes and rivers. These species have voracious appetites, eating 40% of their body weight daily in plankton, plants and other fish, and weigh up to 110 pounds. They deplete commercially-important fish populations and reduce recreational fishing opportunities. Asian Carp can throw a waterway's ecosystem out of balance, decreasing water quality, reducing biological diversity and causing long-term environmental harm. These long-term environmental harm could decrease fishing opportunities by killing all native fish species. Schools of Asian Carp also are known to jump several feet out of the water when disturbed by approaching boats, often injuring boaters and damaging equipment.

Regional and Legislative Landscape/Management:

Broad initiatives are being taken on the national level to combat AIS. While there is no expansive federal authority over all waters in the U.S., the land and water that is under federal jurisdiction is primarily managed by five federal agencies: the Bureau of Land Management, the Fish and Wildlife Service, the National Park Service, the U.S. Forest Service and the Department of Defense own 97% of the federal lands, the other 3% are owned by other agencies in the Dept. of Interior, the U.S. Postal Service, NASA and Department of Energy. These agencies can restrict boat transportation between water bodies and close bodies of water to boaters. Congress depends upon agency recommendations and expertise when enacting legislation to slow the spread of these species. Many federal and state fixes are restrictive to

³ <https://www.nps.gov/glac/planyourvisit/boating.htm>

⁴ <https://www.dnr.state.mn.us/invasives/aquaticplants/milfoil/index.html>

the boating industry and recreational boaters. Most laws and regulations used in the fight against AIS are more reactive than proactive, regulating boats and AIS once they have infected a water body rather than inspecting boats for any potential AIS.

Many state agencies have strong management plans to tackle aquatic invasive issues. However, all state agencies are at a disadvantage because these species know no state boundaries as they follow the landscape and watersheds, making prevention and education an inter-state, inter-jurisdictional problem. Consequently, ineffective or underfunded efforts in one state can affect the success of programs in neighboring states. Interstate coordination, cooperation and innovation can be difficult as several agencies typically have some piece of a state's overall AIS effort. For example, Montana has national forests, national parks, state parks, state owned bodies of water, and a shared border with Canada – all of which have different regulations on AIS or water access. In recent years, budget cuts and staff reductions have put stress on the capabilities of AIS prevention and education programs, making it difficult to provide boat inspection stations at each lake or river within a state's waterways. These stations, and the staff to operate them, are essential to keeping waterways open to boaters. Many states have imposed fees on boaters to replace reduced government staff members at these inspection stations. Some states require boat owners to buy and display an AIS sticker, with the revenue dedicated solely to the management and implementation of anti-AIS programs. Other states have added a dedicated fee to boat registrations.

Vessel decontamination programs and boat inspection stations are commonly used throughout the western United States. State agencies usually oversee these programs, often supported by national educational initiatives. The federal- and state-funded programs share similar components, focusing on the "Clean, Drain, and Dry" and "Stop Aquatic Hitchhikers" programs. These educational programs target recreational boaters and anglers on ways that they can decrease their direct impact from spreading AIS. The "[Clean, Drain, Dry](#)" program conveys three simple steps for boaters to stop the spread of AIS – clean off any visible AIS, drain all bilges, livewells, or other water containing areas and dry the boat for at least five days. The "[Stop Aquatic Hitchhikers](#)" campaign is a call to action that empowers recreational users of aquatic resources in the United States and other countries to help stop the spread of harmful aquatic invasive species through outreach and partnerships. These programs are widely publicized in some regions and boating access points, however research has found they are not as effective in changing the behavior of boaters as agencies had hoped for.

State laws in the West vary on when and where a boater must have their vessels inspected. Some inspection stations serve one large lake or reservoir, while others are centralized and inspect boats bound for any of several water bodies. The most common programs place inspection stations at state borders. If boats are infested, they often are impounded and must be decontaminated before being allowed to enter the state.

Proactive Initiatives of the Boating Industry: The boating industry has been at the forefront to educate boaters and support state, federal and regional AIS programs. NMMA is a strong advocate for increased funding on the federal and state levels and workable protections across the country. Its government relations staff also reviews hundreds of bills in state legislatures to ensure that proposed laws do not unnecessarily restrict boating while ensuring effective management continues.

For the last decade, NMMA's federal affairs team has supported numerous Congressional efforts to prevent the spread of AIS and research long-term solutions. Legislation has ranged from strengthening

biological assessments that build the scientific foundation for fishery management to increasing funding for federal invasive species programs. In 2017 and 2018, NMMA began to push Congress to increase funding for AIS-specific infrastructure and education, including funding for additional inspection locations and decontamination stations throughout the West.

The NMMA state government relations team supports state AIS action plans that incorporate strong prevention and treatment efforts, while still allowing boaters to access to their local waters. The Aquatic Nuisance Species Task Force, a federal advisory committee, has approved 41 state plans and three interstate plans. NMMA's state government relations team serves on the Task Force and reviews each draft management plan from the perspective of the boating industry and proposes improvements when appropriate. A full list of Task Force members can be [found here](#).

The boating industry has taken proactive steps to combat AIS through boat design and construction. Changes to pontoon boat designs have been widely adopted and include welding hull strakes shut to prevent AIS from growing in these difficult-to-contaminate areas. Pontoon manufacturers have also increased the size of their drainage ports, added a skirt along the sides of the pontoon tubes to keep weeds and other species from being caught on tubes, and improved deflectors to prevent weeds from catching on the vessel. Manufacturers of pontoon and other boats have altered the design of swim/boarding ladders so that they fold up and out of the water and have increased the size and design of drainage ports to facilitate water removal.

Boat and boat trailer manufacturers have added educational materials to their owner's manuals. In 2015, NMMA updated their "*You and Your Trailer*" manual to include a significant amount of AIS proliferation prevention information including how the most common AIS can be spread and highlights the "Clean, Drain, Dry" program that encourages boaters to clean boat surfaces, drain all wells, bilges and ballast tanks and dry off their vessels in between visits to the water. Invasive species can be spread across the United States in surprisingly small quantities of water and in a very short amount of time. Decontamination, typically done with hot water sprayed at high pressure, ensures that species that have hitched a ride are removed and or killed before they contaminate other lakes or streams.

The American Boat and Yacht Council (ABYC) was the first organization to consider how changes to boat, engine, and trailer designs can help fight the spread of AIS. ABYC hosted the "Aquatic Invasive Species Summit: Boat Design and Construction in Consideration of Aquatic Invasive Species" in January 2015. The Summit was sponsored by NMMA, the U.S. Fish and Wildlife Service, the States Organization for Boating Access, the Minnesota Department of Natural Resources, Tonka Bay Marina and the Marine Retailers Association of America. Participants included individuals representing the Oregon State Marine Board, the Association for Fish and Wildlife Agencies, Premiere Pontoon Boats, the Water Sports Industry Association, the Pacific States Marine Fisheries Commission, the Tahoe Regional Planning Agency, the Personal Watercraft Industry Association and the National Park Service. The goal of the Summit was to make boating and access quicker, cleaner, safer and ultimately more fun for recreational enthusiasts. There was particular emphasis on four areas: boat design and construction, system and component design and installation, propulsion and engine systems, and trailer design and construction.

ABYC will soon publish a technical paper, "Design and Construction in Consideration of Aquatic Invasive Species." It will recommend specific design and construction features that should be considered when boat manufacturers design and construct specific features of boats. These design and construction recommendations have been developed and approved by an ABYC committee comprised of recreational

boat manufacturers, engine manufacturers, state agency representative and other recreational boating industry experts. These recommendations for watercraft and accessory manufacturers are expected to make it easier for boats to clean, drain and dry their vessels. New designs also may help inspectors to more thoroughly and quickly inspect and decontaminate boats at boat ramps, minimizing the time boaters must spend at these stations. These procedures are intended to cover most AIS threats under worst-case scenarios that a boat may be exposed to in the field.

NMMA's Outlook on AIS

The most effective way to prevent AIS contamination is through robust, coordinated action on all levels - federal, state, local, industry and consumers. While it may be impossible to eradicate AIS from infested locations, ongoing management plans and regulations on the federal, regional and state levels have proven that it is possible to control and stop the spread of these species. Future efforts should place more emphasis on developing innovative ways to prevent AIS proliferation that still allow boaters to move their boats from one water body to another.

NMMA will continue to support the government funding and innovations needed to support the infrastructure, educational programs and research initiatives that must be available to strengthen the nation's fight against AIS. NMMA's federal team will push Congress to authorize and fund a national review and assessment of the effectiveness of current AIS methods, and identify areas for improvement. These include: decontamination procedures; the availability of decontamination stations in relation to usage and inspection procedures; and the need for a national decontamination standard. The federal team will also continue its support of state, regional and national programs that enhance AIS protections and appropriations in the Great Lakes and other regions.

Action Items

NMMA Federal Team:

- Authorize and fund a national review and assessment of current AIS effectiveness methods
- Report on areas of improvement including:
 - Decontamination Procedures;
 - Availability of decontamination stations in relation to usage and inspection procedures;
 - The need for a national decontamination standard;
 - Decrease inspection wait times.
- Continue to support the following legislation in the 115th Congress:
 - Water Resources Development Act of 2018 ([H.R. 8](#))
 - America's Water Infrastructure Act of 2018 ([S. 2800](#))
 - Consolidated Appropriations Act of 2018 ([H.R. 1625](#))
 - FY2019 Interior, Environment, and Related Agencies Appropriations Act
 - FY2019 Energy and Water Development and Related Agencies Appropriations Act ([S. 2975](#) and [H.R. 5895](#))

NMMA State Team:

- Encourage interstate uniformity in state management plans;
- Support management plans that balance prevention, decontamination and access;
- Support funding opportunities on the state and regional level that promote AIS programs and prevention.

NMMA Technical staff:

- Continue to push boat, accessory and boat trailer manufacturers to adopt new manufacturing designs that can help curb the attachment of these species;
- Encourage boat and trailer manufacturers to include “Clean, Drain, Dry” information in user guides, like the informational piece in the 2015 “+” safety guide.

Events:

- ABC Workshop, Wednesday May 9, 2018: “*Conservation and Regional Policy Issues Impacting Boating: Everglades, Aquatic Invasive Species, and Pacific Salmon*”;
- ABYC hosted Webinar after the completion their Technical Report.