

# NMMA 2019 AQUATIC INVASIVE SPECIES (AIS) RESOURCE GUIDE

## WHAT ARE AIS?

According to the U.S. Fish and Wildlife Service (USFWS), aquatic invasive species (AIS) are aquatic organisms that invade ecosystems beyond their natural, historic range. In other words, AIS (e.g. plants, animals, shellfish) are not native to an area or region and whose introduction can cause significant economic or environmental damage.

AIS are in every region of the U.S. and there are thousands of different types of AIS. However, those most visible to the boating industry are zebra and quagga mussels, aquatic weeds, New Zealand mudsnails, and Asian carp.



The map illustrates some of the key AIS issues within the United States. Numerous species have either invaded or threaten to invade the nation; therefore, the examples represented on the map should not be viewed as the only, or highest priority, AIS that threaten U.S. waters.

## WHY DO WE CARE?

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. For example, Zebra and quagga mussels attach deep inside vessel systems and quickly grow to completely block any space they inhabit. Another example is milfoil and other aquatic invasive plants that can 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, and it only takes a single plant fragment to spread into a previously clean area.

Not only can AIS cause irreparable harm to boats, but AIS cause significant environmental, economic and public health effects. As invasive species, they have no predators and can change the composition of the water by out competing other species. According to the National Wildlife Federation, approximately 42 percent of threatened or endangered species are at risk due to AIS.

## HOW MUCH DOES IT COST TO COMBAT AIS?

Currently, 15 federal agencies combat AIS, and Congress established the Aquatic Nuisance Species (ANS) Task Force – which is co-chaired by the USFWS and National Oceanic and Atmospheric Administration (NOAA) – in 1990 to create and implement a plan to stop and reverse the spread of AIS (along with terrestrial invasive species).

According to the ANS Task Force, it costs billions of dollars to manage the spread of AIS. The federal government spends more than \$100 million every year just to combat invasive aquatic weeds, let alone the thousands of other AIS-species, such as Asian carp – which the Great Lakes Restoration Initiative has spent more than \$130 million since 2010 to prevent and control.

For a more specific example of the significant amount of funding required to combat AIS, the U.S. Army Corps of Engineers' (USACE) proposed a nearly \$800 million project at the Brandon Road Lock and Dam in Illinois to prevent the spread of Asian carp from the Mississippi River to the Great Lakes region. Recreational boating and fishing have a tremendous economic impact in the Great Lakes region. Thus, the prevention of the spread of Asian carp into the Great Lakes is crucial for the Great Lakes economy and ecosystem.

The Government Accountability Office (GAO) estimated a few years ago that the federal government spends approximately \$260 million annually to combat AIS. With so many different agencies directing funds to this issue – not to mention state agencies and their respective programs – NMMA has asked Congress to direct the GAO to review the effectiveness of federal funding – including administrative expenses and programmatic implementation – directed to state and local agencies for the purposes of addressing AIS, identifying best practices for state and local agencies to conduct decontamination and inspection, and provide recommendations for how federal funds could be used more efficiently to address AIS.

At a time of state and federal budgetary constraints, it is critical that all funds are used efficiently and effectively to combat AIS at the federal, state, and local level.

## WHAT ARE STATES DOING TO ADDRESS AIS?

While states receive some federal funding for AIS prevention, control, or containment, states also have instituted their own programs or additional fees (e.g. stamps, stickers) for recreational boaters in order to fund their own AIS management programs. Moreover, some states have inspection and decontamination programs and various regulations for recreational boaters, so it is important for recreational boaters to understand the rules and restrictions as they travel from state to state.

Currently, 13 states have dedicated fees to serve as funding sources for their various programs:

1. **California:** \$16 AIS sticker for boats used in freshwater.
2. **Colorado:** \$25 AIS stamp for residents and \$50 for nonresidents.
3. **Connecticut:** \$5 AIS stamp for residents and \$20 for nonresidents.
4. **Idaho:** Included in registration, a \$7 AIS fee for residents and \$30 for nonresidents.
5. **Indiana:** \$5 annual fee for AIS.
6. **Louisiana:** Included in registration, a \$9 AIS fee.
7. **Maine:** \$10 AIS sticker for residents and \$20 for nonresidents.
8. **Minnesota:** Included in registration, a \$10.60 AIS sticker fee.
9. **Nebraska:** \$5 AIS stamp for residents and \$15 for nonresidents
10. **New Hampshire:** Included in registration, \$9.50 fee for residents and \$20 for nonresidents.
11. **Oregon:** \$5 AIS permit for residents and nonresidents.
12. **Washington:** \$2 AIS permit for residents and \$24 for nonresidents.
13. **Wyoming:** \$5 AIS stamp for residents and \$30 for nonresidents.



19 states have established inspection and decontamination programs that require boaters to have their boats inspected for AIS and decontaminated if an invasive species is found:

- |                |                  |
|----------------|------------------|
| 1. Arizona     | 11. New York     |
| 2. California  | 12. North Dakota |
| 3. Colorado    | 13. Oregon       |
| 4. Idaho       | 14. South Dakota |
| 5. Iowa        | 15. Utah         |
| 6. Minnesota   | 16. Vermont      |
| 7. Montana     | 17. Washington   |
| 8. Nebraska    | 18. Wisconsin    |
| 9. Nevada      | 19. Wyoming      |
| 10. New Mexico |                  |

40 State Management Plans, 3 Interstate Management Plans:

<https://www.anstaskforce.gov/stateplans.php>

9 National Aquatic Nuisance Species Management and Control Plans:

- Brown tree snake, *approved June 1996.*
- Eurasian ruffe, *approved November 1996.*
- European green crab, *approved November 2002.*
- Mitten crabs, *approved November 2003.*
- Caulerpa species (an invasive algae), *approved October 2005.*
- Snakehead, *approved November 2006, revision approved May 2015.*
- New Zealand mudsnail, *approved May 2007.*
- Asian carp (black carp, bighead carp, grass carp, and silver carp), *approved November 2007.*
- Lionfish, *approved May 2015.*

## RESOURCES

ABYC Technical Report, Design and Construction in Consideration of Aquatic Invasive Species:

<https://abycinc.org/store/ViewProduct.aspx?ID=12011631>

- [Great Lakes Regional Panel](#), established in 1991  
(IL, IN, MI, MN, NY, PA, OH, WI)
- [Gulf & South Atlantic Regional Panel](#), established in 1999  
(AL, GA, FL, MS, LA, SC, TX)
- [Mid-Atlantic Regional Panel](#), established in 2003  
(DE, DC, MD, NC, NJ, NY, PA, VA, WV)
- [Mississippi River Basin Regional Panel](#), established in 2002  
(AL, AR, CO, IA, IL, IN, KS, KY, LA, MS, MN, MO, MT, NC, ND, NE, OH, OK, PA, SD, TN, TX, VA, WI, WV, WY)
- [Northeast Regional Panel](#), established in 2001  
(CT, MA, ME, NH, NY, RI, VT)
- [Western Regional Panel](#), established in 1997  
(AK, AZ, CA, CO, GU, HI, ID, KS, MT, ND, NE, NM, NV, OK, OR, SD, TX, UT, WA, WY)
- Aquatic Nuisance Species Task Force 2015 Report to Congress: [https://www.anstaskforce.gov/Documents/ANSTF\\_2015\\_Report\\_to\\_Congress.pdf](https://www.anstaskforce.gov/Documents/ANSTF_2015_Report_to_Congress.pdf)

