

This Oregon State Marine Board guidance is specifically geared towards boats. However, invasive species identification, inspection and cleaning procedures, and contact information are applicable to placer mining equipment covered by the NPDES 700PM permit.



## Aquatic Nuisance Species

### A Boater's Primer



Tiny but mighty...

**Aquatic nuisance species are a serious threat to Oregon's waterways. Introducing harmful non-native organisms into a lake, river or bay can lead to environmental degradation and millions of dollars in control and clean up costs - all of which affects boaters. The Oregon Marine Board hopes the following pages will help boaters learn what they can do to protect their favorite waterways from aquatic nuisance species.**



## Overview

Think of all the reasons you're a boater: the recreation that water offers, the stunning scenery of Oregon's lakes, rivers and bays, the thrill of salmon fishing, of water fowl hunting. . . The list could go on.

All of these things depend on the natural balance of aquatic ecosystems. The plants and animals of Oregon's waters have evolved over time into a complex but delicate relationship with each other and their environment. Introducing harmful non-native species into Oregon waters can upset the balance of the ecosystem, hurting the environment and jeopardizing all of the things that make our waterways special..



Take a look at what a harmful non-native or "nuisance" species can do.



**Before**



**After**

Within a short time after the aquatic weed hydrilla was introduced into this lake, it choked out native vegetation, displaced fish stocks and made boating, swimming and water skiing next to impossible.

Ironically, the weed was more than likely introduced into the lake by a boater.



Aquatic nuisance species most often spread between waterways by hitching a ride on boats and trailers. When transplanted into waters without natural predators, competitors or diseases, these non-native organisms can proliferate, displacing native species and damaging the water resource.

Once established, aquatic nuisance species are costly and difficult to control or eradicate. The best means of protecting Oregon's waterways is prevention. This is where boaters play a key role.

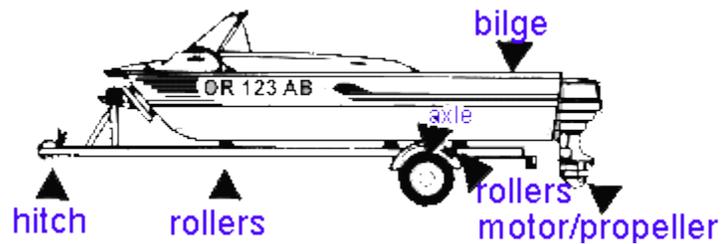
## Prevention

Finished boating and ready to head out? Here's what you can do to prevent spreading aquatic nuisance species. [Here's a list of waterbodies with known aquatic invasive species in Oregon.](#)

**CLEAN** your boat and trailer, especially at the points listed in the graphic. Remove any plants and animals you see before leaving the waterbody. It's best to use a hot-pressure washer, but garden hoses also work.

**DRAIN** your motor, live well, and bilge on land before leaving the waterbody.

**DRY** your boat and equipment for as long as possible. Five days is optimal.



**CLEAN, DRAIN & DRY YOUR BOAT**

## Identification

There are dozens of aquatic nuisance species that can harm Oregon's waterways. But there are three that are considered among the most threatening. Click the images below to find out what they are. Learn to recognize these organisms. If you find one or suspect there may be a new infestation, report it to the toll-free Oregon Invasive Species hotline, 1-866-INVADER.



**Left -the dreaded quagga mussel and cousin to the zebra mussel. These are very small and feel like a grain of sand when they first attach to a solid object.**

**Right -The pesky  
New Zealand Mud  
Snail -it can clone  
itself!**



**Zebra Mussel**



**Hydrilla**



**Mitten Crab**

## **Contacts**

**What do you do if you find an Aquatic Invasive Species?  
Report it to the toll-free Oregon Invasive Species Hotline (1-866-INVADER) or contact one of  
the following agencies:**

- [Oregon Department of Fish and Wildlife](#)  
(503) 947-6000
- [Oregon Department of Agriculture Weed Control Division](#)  
(503) 986-4621

**To learn more about invasive species of Oregon, visit:**

- <http://www.boatoregon.com/OSMB/Clean/StopInvasion.shtml>
- [http://community.statesmanjournal.com/wiki/index.php?title=Main\\_Page](http://community.statesmanjournal.com/wiki/index.php?title=Main_Page) -  
Statesman Journal Invasive Species Database

**If the biologist in you wants to learn more about aquatic nuisance species, check out these  
links:**

- [Oregon Invasive Species Council](#)
- [United States Geological Survey - Non-indigenous Aquatic Species \(NAS\) information  
resource](#)
- [100th Meridian Project - Keeping Zebra Mussels east of the 100th Meridian.](#)
- [Oregon State University Sea Grant](#)
- [Portland State University -Center for Lakes and Reservoirs](#)