

# SHORE STEWARDS NEWS

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*This edition of the newsletter was written by Erica Bates, Water Resources Coordinator,  
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## Recreational Boating on Puget Sound



In 2011, there were nearly 145,000 vessels registered in the counties that border Puget Sound. In addition, there are thousands more rowboats, kayaks, canoes, inflatable boats, and other personal watercraft that do not require registration. The information and tips that follow can help us all be responsible boaters to protect water quality and aquatic life.

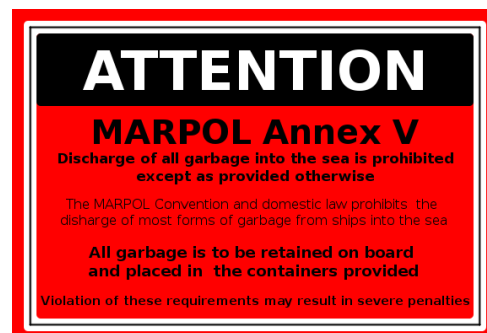
Photo: Rachel Samanyl (CC BY 2.0)

## Bring Your Trash to Shore

Litter, such as plastic bags, fishing line, Styrofoam, and other debris can injure, trap, or kill animals and birds. Plastics are particularly destructive in the marine environment, where animals like birds, fish, and marine mammals commonly mistake them for food. Instead of biodegrading, plastic products are broken down by sunlight into smaller and smaller pieces. These microplastics remain in the environment, absorbing pollutants in the water and entering the food chain.

The Marine Pollution Act (MARPOL) is an international treaty that regulates pollution from ships. Annex V of MARPOL prohibits the dumping of plastics from any vessel anywhere in the ocean, or in our navigable waters, and restricts dumping of other refuse from vessels. All boats over 40' in length are required to have a written Waste Management Plan onboard.

Store all trash and waste onboard your vessel and dispose of it in garbage or recycling receptacles when you return to shore. Not only will it help protect water quality and marine life, but it can protect your boat as well, since garbage in the water can also foul propellers and block the cooling water intake on your engine.



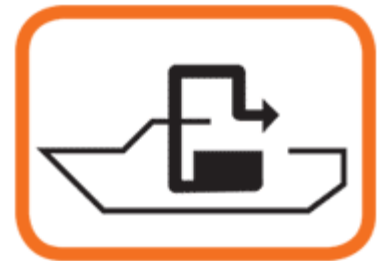
## Watch Your Waste

Boat sewage is a significant environmental concern for Puget Sound and the surrounding areas. It is illegal to discharge untreated sewage within 3 miles of shore, which includes all of Puget Sound and the San Juan Islands. Some boats have a Coast Guard approved marine sanitation device (MSD) onboard that serves as either a treatment system or holding tank, depending on the type. For smaller boats, a portable toilet is often the easiest solution.

Although it is legal to discharge sewage treated in MSDs in many areas, it is not recommended. Even sewage that has been treated in a MSD can contain high levels of bacteria and chemicals, which is especially problematic near shellfish beds or swimming areas. The sewage may also lead to excess levels of nutrients in the water. Excess nutrients can cause algal blooms that may close shellfish harvest, block sunlight to eelgrass and other underwater plants, and deplete dissolved-oxygen when decomposing.

The best solution when dealing with boat sewage is to pump it out at one of the many facilities located throughout Puget Sound. Washington Sea Grant has a pumpout program that educates boaters about proper sewage disposal. Visit the Pumpout Washington website (<http://pumpoutwashington.org>) for an interactive map and list of pumpout stations in Washington, as well as directions and a video showing how to use a pumpout.

*Look for this symbol the next time you need to pump out*



## Prevent Oil and Fuel Spills

Obvious potential sources of pollution from boats are oil and fuel. Although large oil spills capture much of the attention, smaller spills and discharges actually account for much more of the problem. Oil is a toxic product that sickens or kills fish and other aquatic animals. It is also persistent and remains in the environment for many years. Motor oil, gasoline, and diesel fuel may enter the environment through bilges, outboard motors, careless fueling habits, and improper disposal. It is illegal to discharge any oil or petroleum products into navigable waters, and fines can run as high as \$20,000 per day per violation.

In North America, recreational boating contributes more than 250 million gallons of hydrocarbon pollution into our waters every year. This huge amount of pollution is made up of many frequent small spills. You can prevent fuel spills by:

- Filling your fuel tank to no more than 90% of capacity
- Filling your tank slowly to prevent overflow
- Installing a “no spill” device to catch spills from the fuel vent
- Refraining from transferring fuel when you are on the water
- Upgrading to a four-stroke or 2006-compliant two-stroke motor

The bilge is also a source of frequent pollution from a variety of fluids that drip or leak, including oil, fuel and antifreeze. The best practice is to prevent oil from entering your bilge in the first place by:

- Maintaining your engine and frequently checking it for leaks
- Fitting a drip tray under your engine to catch leaks
- Wiping up drips, splatters, and spills immediately
- Securing an oil absorbent pad in your bilge, or placing it under your engine. These pads soak up oil, not water, and are very effective. Use gloves to wring out oil into a container for recycling and reuse the pad.
- Installing an inline bilge filter designed to remove petroleum products from bilge water without restricting the performance of the bilge pump. This allows for a clean discharge.

If you have a spill, you are required to notify both the state and federal agencies. Call the US Coast Guard at 1-800-424-8802 and Washington Department of Ecology at 1-800-OILS 911. Do not squirt liquid detergent into your bilge or into the water to hide a spill, which is illegal. Doing so only breaks oils into smaller floating droplets that end up covering a greater surface of water and harms the larval stages of many marine creatures.

## Keep Our Waters Clean While Keeping Your Boat Shipshape

Cleaning products and paint can harm marine life and have a negative impact on water quality. When possible, it is best to clean, sand, and paint your boat on land. Under Washington State law (Water Pollution Control Law, RCW 90.48.080), a pollutant is defined as anything that changes the chemical, physical, or biological nature of the water it enters. It is illegal to discharge any pollutant, and all soaps and detergents are technically “pollutants.”

The easiest solution is to give your boat a quick freshwater rinse when you return to shore. If you are looking for alternatives to toxic cleaning products, consult Puget Soundkeeper’s [“Sound Information: A Boater’s Guide” here](#). Just keep in mind that even the less toxic alternatives are still foreign elements to the marine world, so you should use the minimum amount needed and safely dispose of any excess on shore.

## Prevent the Spread of Invasive Species

Invasive species are non-native species that are a nuisance and harmful to our environment. They can be easily spread by boats, trailers, fishing gear, and other equipment. Non-native species can spread rapidly in new environments where they don’t have natural enemies and harm stocks of native and commercially grown species. They may also damage irrigation and water systems, clog hydroelectric dam intakes, and disrupt efforts to recover endangered salmon stocks.

Invasive species in the inland waters of Puget Sound include tunicates, oyster drills, varnish clams, and cordgrasses. Freshwater species include New Zealand mudsnails, Asian clams, Red Swamp crayfish, and Eurasian water milfoil. The zebra and quagga mussels that have caused billions of dollars of damage to the Great Lakes have spread throughout North America and we are at risk of them in Washington State.

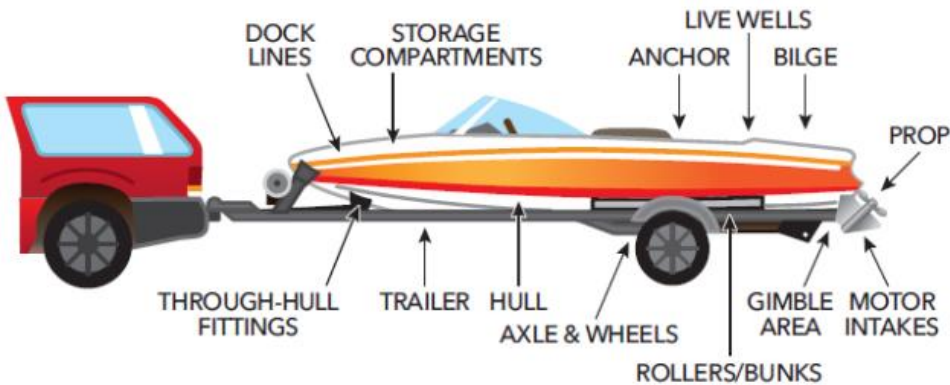
The Washington Department of Fish and Wildlife manages the state’s Aquatic Invasive Species and Ballast Water Management Programs. WDFW offers a free Washington State Watercraft Passport that is free to the public to use to keep track of the waters you’ve visited and the aquatic invasive species inspection stations that you stop at. You can request your passport and find more information at <http://wdfw.wa.gov/ais/>

To help prevent the spread of aquatic invasive species be sure to thoroughly inspect and rinse your boat (including jet skis and kayaks), fishing equipment, and wading boots.



Photo: Jason Taellious (CC BY-SA 2.0)

## Before Leaving or Launching: Inspect Everything!



### Protect Eelgrass Habitat

As a boater, you can have a great impact on eelgrass. Although it may just look like a grassy field growing underwater, an eelgrass meadow is brimming with life. Your propeller, anchor, or crab pot can quickly harm and even destroy an eelgrass meadow.

The eelgrass meadow is used as a nursery by perch, crab, salmon, and Pacific herring. Juvenile salmon use eelgrass beds as a protective location to hide from predators, grow, and feed. Eelgrass meadows can cushion the impact of currents and waves, trapping sediments and protecting against erosion. When eelgrass blades die, they decompose, providing food for worms, shellfish and sea stars.

Eelgrass grows in locations without strong wave action and good water clarity on sandy and muddy bottoms, from the intertidal zone down to a depth of about 35 feet. The leaves are long and slender, measuring about a half inch in width and up to 3 feet long. You can protect eelgrass beds by:

- Slowing down or stopping when cruising over eelgrass. Propellers can cut eelgrass and boat wakes can disturb the sediment that protects the root system.
- Avoiding anchoring over eelgrass beds. Anchors hold poorly in eelgrass, tear out eelgrass when pulled up, and the chain acts like a slow moving weed trimmer as the boat rotates around the anchor below. In the waters off Port Townsend there is a voluntary “No Anchor Zone” to avoid anchor damage to eelgrass beds. There are special marker buoys to identify the area.
- Avoid dropping crab pots into eelgrass beds. Eelgrass will wrap around your crab pot rope and trap, tearing out eelgrass as you retrieve the trap and make a mess on the deck of your boat.
- Install mooring buoys correctly. Rotating mooring chains scour eelgrass habitat. DNR must approve mooring buoys and other agencies may also require authorization.



## Resources

**Shore Stewards: Guide for Shoreline Living**, 82p, Washington State University Extension, 2015. [Link](#).

**Sound Information: A Boater's Guide**, 56p, Puget Soundkeeper Alliance, 2015-2016. [Link](#).

**Kelp and Eelgrass in Puget Sound**, Thomas Mumford Jr, 34p, Puget Sound Nearshore Partnership Technical Report 2007-05, US Army Corps of Engineers, 2007.

**Pumpout Washington**, <http://pumpoutwashington.org>, Washington Sea Grant.

**Aquatic Invasive Species**, <http://wdfw.wa.gov/ais/>, Washington Department of Fish and Wildlife, 2016.

**Support Shore Stewards in Island County!** If you would like to see this program continue to make a difference in Island County, please consider making a donation to the WSU Shore Stewards Excellence Fund: <https://secure.wsu.edu/give/default.aspx?fund=496> Your tax-deductible donation will help ensure future funding for newsletters, demonstrations at local events, and to make sure that the program and educational materials continue to be free for shoreline landowners and others interested in protecting our islands. Thank you for your contribution!

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