

# Shore Stewards News

GUIDLINES AND RESOURCES FOR LIVING NEAR WATER | ESTABLISHED 2003

## Spring 2019

*This issue of Shore Stewards News helps boaters learn ways to prepare their vessel and enjoy time on the water in a safe and sustainable manner. This newsletter is written by Ann Precup, WSU Extension Island County Program Coordinator.*

## Green and Clean Boating

As the cold, wet Northwest winter moves aside welcoming longer days and the promise of warmer weather, we look for ways to explore this beautiful region. For many of us, it includes spending time on the waters of Puget Sound and on lakes and streams! Boating is a popular recreational activity that offers access to some of the most beautiful areas in Washington. At the end of 2018, there were over 200,000 registered vessels in our state. With this activity comes responsibility. In order to preserve and protect critical the marine ecosystem and prevent pollution, it's important our boat is clean, maintained and that we are well aware of the rules and regulations. We also need to know what to do in the event of a fuel spill, how to handle the waste we produce on the boat, ways to be a responsible fisherman and how to limit the spread of invasive aquatic species.



*Photo: Ann Precup*

# Keep your boat “ship shape”!

A boat can be an expensive investment. Therefore, it makes sense to maintain our boat and keep it in good working order. As our boat gets older, the potential for problems increases --- including fuel and oil leaks --- and can find their way in to the bilge, increasing the possibility of petroleum products ending up in the environment. If our boat has been idle for the winter, it's important to replace the old oil with fresh. And before going underway for the season, check fluid levels and mechanical systems, and routinely inspect them to catch a problem before it becomes serious.

The bilge space in our boat is the lowest section where rainwater, seawater and other fluids collect. This can include liquids (such as oil, fuel and antifreeze) that have leaked or spilled out of the vessel systems or from containers onboard. There are pumps located in the bilge space that move the fluid mixture out of the bilge and into the marine environment. It's illegal to discharge *contaminated* bilge water into parking lots, launch ramps or directly into the water. Here are ways to prevent or reduce the likelihood of contaminated bilge water being pumped into our waters:

- Keep bilge area as clean and dry as possible.
- When changing the oil, place a tray and absorbent pad under the engine to collect any drips. Recycle your marine oil for no charge at the Coupeville Solid Waste Complex, Camano Dropbox & Recycle Park, Bayview Dropbox & Recycle Park and the North Whidbey Dropbox & Recycle Park. Check out this link for a list of marinas that will collect old vessel oil for recycling: <https://ecology.wa.gov/DOE/files/4f/4f813a72-ee5c-4d74-bd02-b91daf1c539c.pdf>.
- Fix leaks right away.
- Place an oil absorbing pad or pillow in your bilge. These products are made of special materials that absorb oil but repel water.
- These pads are reusable. Squeeze out the oil into a container (using rubber gloves!). Safely store this contaminated oil and when the container is full, recycle it. When the pad is at the end of its life, also dispose of it as household hazardous waste for no charge at the locations listed above.
- Do not allow the discharge of detergents or bilge cleaners from a contaminated bilge.
- Consider installing an inline bilge filter.
- If the bilge is severely contaminated, it is recommended to use a pumpout service or bilge cleaning service.

We also want a clean boat. Keep in mind that soaps and cleaners can have a negative impact on marine life and water quality, so we need to be mindful of the products we use. If the boat is on a trailer, consider washing it at a do-it-yourself car wash. Here are few tips from the Boats U.S. Foundation to minimize the impact of boat cleaning:

- If your marina has a designated washdown area, use that for all boat cleaning.
- Regularly rinse the boat with fresh water to avoid needing harsh cleaners.
- Power washing or high-pressure washing can remove paint so it is critical to save pressure washing for when your boat is in a washdown area at a marina or other facility.
- If using soap, look for a non-toxic and biodegradable product and use it sparingly. Be cautious of environmental claims.

- Stock your boat with environmentally friendly products. Spring is a great time to take inventory of what you have on hand. It's also a great opportunity to replace old or expired toxic cleaners and chemicals with environmentally friendly options.

For a list of alternatives to toxic cleaning products, check out Puget Soundkeeper's "Sound Information: A Boater's Guide": <http://www.pugetsoundkeeper.org/wp-content/uploads/2015/06/2015-Boaters-Guide-FINAL.pdf>.

Peeling paint can also be a danger to wildlife. Hulls traditionally have been painted with a copper-based paint, which prevents marine growth on the surface. But when this peeling paint ends up in our waterways, it is eaten by salmon and can inhibit them from detecting and avoiding predators, as well as making it difficult for them to find their way back to spawn. Beginning in 2021, State Bill 5436 will require that no bottom paint containing more than 0.5% copper will be sold in Washington state. There are copper-free paint options on the market now. If you have a major renovation or maintenance project, conduct them in your local boatyard where tents and dust control systems are available to ensure waste products do not end up in the water. Check <http://www.cleanboatingfoundation.org/boat-owner-resources> for a list of "Clean Boatyards" in the Puget Sound region.

*(Note: The Washington State Water Pollution Control Act prohibits the discharge of any pollutants into the water, including soaps, paints and dust from sanding. Underwater cleaning of boat hulls with soft or abrasive anti-fouling paint is illegal. Hard bottom paint or gel coat may be cleaned in the water only with non-mechanical devices and only if no discharge of paint occurs.)*

## Let's "come about" with fuel and oil leaks and spills!



Specialists busy at work cleaning an oil spill. Photo: Washington Sea Grant

Did you know that as little as a quart of oil, diesel or gasoline can contaminate 100,000 gallons of water? This can be deadly for our water ecosystems. For example, fish eggs in shallow water, like salmon eggs in a streambed, and other marine life in the larval stage can be killed by an oil spill. Gasoline vapors may be toxic to birds and mammals. And many shellfish species don't possess certain enzymes that are needed to break down petroleum contaminants.

Regardless if it's accidental or not, the Oil Pollution Act and the Clean Water Act makes it illegal to discharge any amount of gasoline, diesel, oil or other petroleum product into United States waters. By law, in Washington it is required that any oil or fuel spill be reported to 2 agencies:

The U.S. Coast Guard National Response Center 1-800-424-8802  
and Washington State Department of Ecology Emergency Management Division  
1-800-OIL-911

It's also against the law to use detergents or chemicals to disperse a spill. These products can cause the petroleum to sink, resulting in contaminating bottom sediments.

The good news is reporting a spill does not necessarily mean a fine. Anyone who sees a spill is encouraged to report it. Immediate notification is required so cleanup efforts can begin ASAP.

To help bring attention to the law, boats 26' and longer are required to display a "Discharge of Oil Prohibited" placard near the engine. This placard must be at least 5"x9" in size, made of a durable material and can be found at marine supply stores.



An example of a Discharge of Oil placard that must be display near the engine of boats 26' or longer. *Photo: boat-ed.com.*

Boat owners know that fueling their vessel can be challenging. This video helps explain the differences between fueling a boat and a car fuel and why extra care needs to be taken when filling up your boat's fuel tank: <http://www.boatus.org/clean-boating/fueling/>.

Fueling tips:

- Always keep the nozzle tip pointing up to avoid spills and drips.
- Wrap an absorbent pad or rag around the nozzle end to prevent spilling.
- Fill the fuel tank to no more than 90% capacity. Fuel expands and can slosh out of the vent when temperatures rise or waters become choppy.
- Always refill portable fuel containers on the pavement or dock to ensure a good electrical ground. Place an absorbent pad under the container to catch any drips and spills.



- The best option for transferring fuel from a portable can is a fuel siphon with a shut-off feature. If a siphon is not available, a nozzle/spout with a shut off is a good alternative.
- Use a high flow funnel to help prevent spills.
- Always store portable fuel tanks in a cool, dry place away from direct sunlight.
- Six gallons is the maximum container size permitted to be filled at a fuel dock for transport, according to the International Fire Code.

## 2-Stroke Engines

As of 2006, the EPA has banned the manufacture of new conventional two-stroke outboard engines. These engines release as much as 30% of the fuel and oil unburned into the water. It's still legal to use and sell old two-stroke engines, but by upgrading to a 4-stroke or new 2-stroke technology that complies with the 2006 ruling, the fish will thank you! For smaller boats, newer electric outboard motors are an environmentally friendly option with good power and range.

## Don't go "overboard" with waste!

Every day, whether we are on land or water, we produce waste of all sorts, including household trash and food waste, Styrofoam, plastic bags, six-pack rings, fishing line, debris from demolition or construction projects, and much more. On the water, trash can quickly become marine debris that can kill birds, fish and marine mammals, and smother sea grasses. It also impacts tourism and the fishing industry. Plastic is trouble because the sun's UV rays degrades it, breaking it down into very small pieces that our wildlife mistakes for food. To manage our waste, it's important to reduce it and reuse as much as possible, with waste ending up in the landfill being our last resort.

Under federal law, it is illegal to toss garbage of any kind from a boat while you are anywhere in lakes, rivers, bays, sounds, and offshore in the ocean less than 3 miles. In the same manner as the "Discharge of Oil Prohibited" sign, all boats 26 ft or more in length must have a written garbage placard "prominently posted" to remind you and your passengers what can be thrown overboard and what can't. These placards can be found at your marine supply store. Boats 40 ft and longer must also have a written waste management plan, as brief as one paragraph, stating how you manage the waste collection onboard, who handles it, and where it is disposed ashore.



Boats 26 feet or longer must display both this MARPOL sign and the Discharge of Oil Prohibited sign in a prominent place.

*Photo: boat-ed.com.*

### Waste prevention tips:

- Keep durable trash and recycling containers with lids aboard.
- Bring all trash and recycling ashore after being out on the water.
- Purchase reusable products, containers, water bottles and sacks.
- Recycle your plastic, metal, glass, paper products and monofilament fishing line. You'll find fishing line can be recycled at many tackle shops or in waterfront recycling tubes. Here's a step-by-step video on how to build your own monofilament recycling bin:  
<http://www.boatus.org/monofilament/build-a-bin/>
- Be sure to stow or tie down all gear when underway on the water or while trailering your boat.

## Get a-“head” of sewage!

Human waste is not a fun thing to talk about. It can contaminate water with bacteria, viruses and parasites that can make boating and swimming unsafe and can put fish, birds and other wildlife in danger. Sewage, also called black water, can pollute shellfish beds, resulting in harvesting closures. Human waste in our waters can also cause dangerous algae blooms.

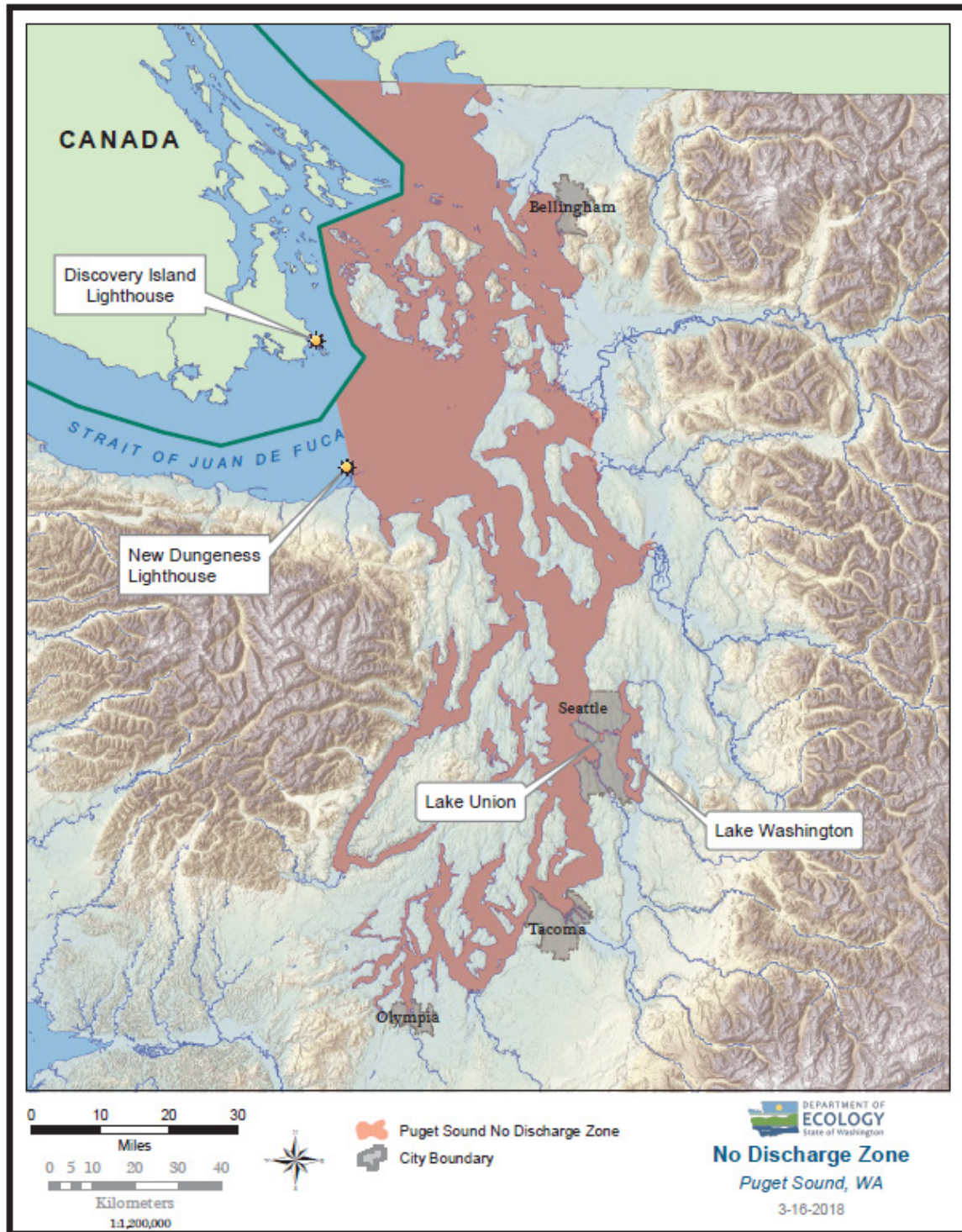
Most of us with smaller boats know to use the restroom before we leave shore. Some larger boats have onboard human sewage management options such as toilets, holding tanks and onboard treatment devices. But even sewage treated by these onboard treatment devices is prohibited from being discharged into our waters because these devices don't remove pathogens. If your boat has an installed toilet by law you must have a Marine Sanitation Device: <http://www.boatus.org/clean-boating/sewage/msd-types/default.asp>

In May of 2018, a Vessel Sewage No Discharge Zone (NDZ) was established for Puget Sound and certain connecting waters. This No Discharge Zone is roughly 2,300 miles in size and is where boats may not release sewage, *whether treated or not*, in an effort to protect people, water quality and marine habitat. To legally dispose of sewage, boaters must either have an on-board treatment device (Type I or Type II Marine Sanitation Device) and hold it for release outside of the NDZ, or a holding tank (Type III Marine Sanitation Device) and have it pumped out at an onshore facility. [Find a pumpout](#) in Washington State or visit the [State Parks pumpout website](#).

You can locate the No Discharge Zones in the areas where you are boating by checking out [the EPA's list of No Discharge Zones](#).

### What About Gray Water?

Gray water is what's left after washing in the sink and shower. This can be a confusing issue for many boaters because it is not regulated like sewage (black water). But the Washington State Water Pollution Control Act states that it is illegal to discharge *any* pollutants into our waters. Most boats are not able to capture and store gray water, so the best advice is to minimize the amount of water used and discharged whenever possible. We can do so by washing and showering ashore. If you need to do dishes onboard, remember that grease and oil form a sheen on the surface of the water and that dish detergent pollutes.



Boats may not release sewage, treated or not, in the designated No Discharge Zone (DNZ).  
*Photo: Washington Department of Ecology.*



## “May-day” to invasive species!

Many non-native plant and animals pose a serious threat to Washington’s ecology and economy. Invasives, including the European Green Crab, zebra mussels and some grasses, hitchhike on boats, trailers, fishing gear, clothing and footwear. Once these invaders become established in their new environment where their natural enemies don’t exist, they can spread quickly and outcompete the native species for food and habitat.



The European Green Crab is a serious threat to our native shellfish.

*Photo: Sea Grant Washington.*

It’s encouraging to know that anyone who spends time on our waters can help prevent the spread of invasive species. Here’s how:

**Clean:** After being on the water, clean your boat and other equipment before leaving the boat ramp. Use a stiff brush on any hard to clean areas. Rinse all surfaces. Dispose of any plants or animals that have washed off your boat in the trash.

**Drain:** Remove the drain plug and make sure all water from your boat, bilge and other locations are free of water before towing.

**Dry:** In order to help prevent any hitchhikers from invading other waterways, it’s advised to let your boat and gear dry for several days before using them again.

Throw all unwanted fish and bait in the trash.

Refrain from throwing live fish or other organisms from one waterbody into another.

**We hope this issue of Shore Stewards News has offered you some helpful tips and information about boating and how keep our beautiful waters clean and healthy!**



## Sources

Washington State Recreation and Conservation Office: <https://boat.wa.gov/default.asp>

“Sound Information: A Boater’s Guide”: <http://www.pugetsoundkeeper.org/wp-content/uploads/2015/06/2015-Boaters-Guide-FINAL.pdf>

Washington Department of Licensing: <https://www.dol.wa.gov/vehicleregistration/boatresources.html>

Washington Department of Ecology (No Discharge Zone): <https://ecology.wa.gov/Water-Shorelines/Puget-Sound/No-discharge-zone>

Washington Department of Fish and Wildlife (list of aquatic invasive species): <https://wdfw.wa.gov/ais/youcanhelp.html>

Adventures in Boating Washington Handbook: <https://www.boat-ed.com/washington/handbook>

Boat US Foundation: <https://www.boatus.org>

U.S. Coast Guard National Response Center (oil spills and maritime incidents): <http://www.nrc.uscg.mil>

Clean Marina Washington: <https://www.cleanmarinawashington.org>

Copper paint: <https://apps.leg.wa.gov/rcw/default.aspx?cite=70.300.020>  
<http://www.cleanboatingfoundation.org/blog/washington-state-phases-out-copper-based-bottom-paint-what-the-legislation-means-for-you-and-what-the-alternatives-are>

Sea Grant Washington: <https://wsg.washington.edu>



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