

Boat Operation & Fueling



The way that you operate your boat or personal watercraft can have a direct effect on public safety and the environment. When not operated properly, boats can result in injuries to people and animals, and can cause pollution. Specific considerations should be given when fueling your boat. Consider the following tips to make sure your boating activities are safe and protect the environment.

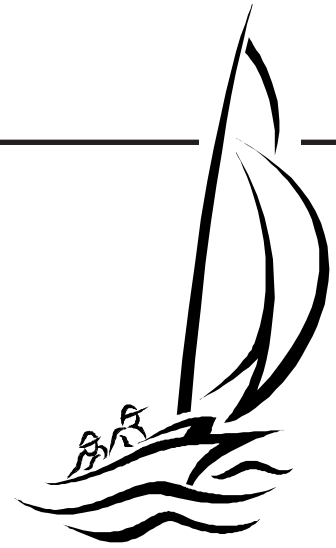
Boat Operation

1. Observe all rules and regulations including “no wake” zones.
2. Avoid driving through shallow areas (<3 feet). You risk causing damage to your boat and you may be harming sensitive fish habitat, such as eelgrass. If you are not familiar with the waters near the shore, proceed cautiously and refer to the most current local charts.
3. Watch your wake when boating near salt marshes and eroded banks. Your wake could cause erosion of the salt marsh.
4. Don’t regularly operate your personal watercraft within 150 feet of shore. Besides traveling to and from a port of entry or through a navigational channel, it is illegal to do so under Massachusetts State Law.
5. Take a free boater safety training course. Call the Massachusetts Environmental Police at (617) 727-8760.
6. When your outboard motor needs replacing, consider a highly efficient 4-stroke. These higher efficiency engines will save you money on fuel and reduce the amount of unspent fuel that is released into the environment.

Fueling

1. Never leave the fuel hose unattended when fueling.
2. Always use an oil absorbent cloth or pad when fueling to catch small drips, particularly when you remove the fuel nozzle from the boat’s fuel line.
3. Don’t top off your tank. It will cause a gasoline spill.
4. Use a spill collection bottle under the fuel line to catch fuel back splash, if the marina has one available.
5. Listen to the filler pipe to anticipate when the tank is full. This will prevent gasoline from spilling back out of the pipe.
6. To prevent spills from the tank vent, install a fuel/air separator or an air whistle in your tank line. Ask the marina staff if they know who can provide this service.
7. Fill portable tanks on shore.
8. Remember fuel expands as it heats up. If you do fill your tank when returning to port, fill it only 90%.
9. Add a fuel stabilizer to your tank if you use your boat infrequently. This will help preserve the fuel and make sure it burns efficiently.
10. If you see a leak of hazardous waste (e.g., fuel, oil, etc.), stop the spill at the source and contact the marina staff immediately.
11. Notify the marina or the Coast Guard if you cause a spill – it’s the law. Call the National Response Center at (800) 424-8802.

Trash, Garbage, and Hazardous Waste Disposal Tips



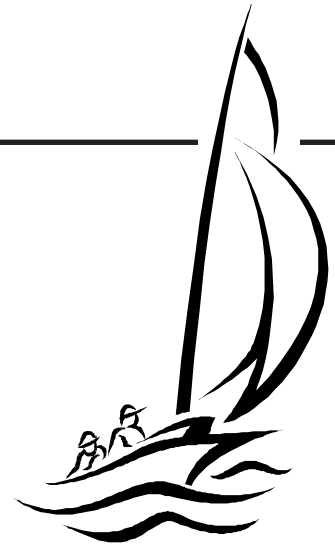
Everyone generates trash and garbage. When not handled properly, trash, fish waste, fishing line, hazardous waste, and pet waste can injure marine life and people, and can ruin the boating experience.

Consider the following tips:

1. Don't toss trash, including cigarette butts, overboard.
2. Always store your trash on-board your boat and dispose of it when you return to land. Store it securely so it does not fly away while boating.
3. Use the appropriately marked trash receptacles. If a trash can is full, find another that has room for your trash.
4. Separate recyclable materials, like cans and bottles, from regular trash for recycling at the marina or at a local redemption center.
5. Fish waste should be discarded offshore. If fish are cleaned at the marina, they should be cleaned at a designated location and the waste should be disposed of as directed by the marina staff.
6. Take particular care to properly dispose of nylon fishing line. In the water, it can entangle fish, wildlife, swimmers, and boat propellers.
7. If you need to dispose of or recycle hazardous waste, including used oil, absorbent pads, paints, and solvents, ask the marinas staff where this material may be properly handled.
8. Never leave used oil unattended near a dumpster after hours. Store it in a safe and secure place (on-board your boat for example) and contact the marina office during normal business hours.
9. If you see a problem with trash or hazardous waste at the marina, contact a staff member immediately.
10. Be a good neighbor and pick up trash that you come across, either floating in the water or on land.
11. Always pick up after your pet and dispose of pet waste in the marina's trash receptacles.

Managing Wastewater

All boats generate wastewater. Sources include bilge water, marine toilets, and laundry/dishwashing facilities. Please follow the tips listed below to make sure that you dispose of this wastewater properly.



Bilge Water

Oil and gasoline can collect in your bilge and mix with bilge water. Discharging your bilge to coastal waters exposes marine organisms to these toxic substances.

1. Never discharge your untreated bilge water directly into coastal waters.
2. Regularly check fuel lines and hoses for leaks to prevent oil from entering the bilge and do not discharge your bilge water if you observe an oily sheen.
3. Place an oil-absorbent pad in your bilge as a low cost method for treating your bilge water. Change the oil-absorbent pad regularly. Dispose of used pads at the marina's used oil collection area.
4. Consider installing a bilge oil filter or oil/water separator in your bilge discharge line to allow you to directly discharge bilge water while protecting the environment. Check with your marina staff to see if the marina offers services to install such systems or if they can refer you to an installer.
5. Ask your marina if they provide bilge water removal services. If they do not, maybe they know where such a service is provided nearby.
6. Keep your engine well tuned, to prevent leaks, and clean, to spot oil and gas leaks more easily.

Graywater

Graywater includes soaps and detergents from boat showers, dishwashing, and laundry facilities. These soaps, even those labeled as "biodegradable", contain substances harmful to marine life.

1. Use shoreside showers, dishwashing stations, and laundry facilities whenever they are available.
2. Use low nitrogen and phosphorous detergents for on-board laundry, dish washing and general cleaning.
3. Use all soaps and cleaners sparingly by using a little extra "elbow grease."

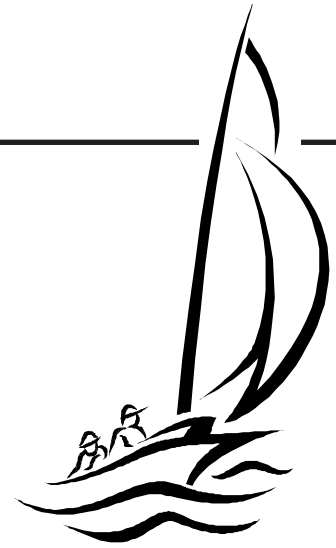
Boat Sewage

Boat sewage contains disease-causing bacteria that can make people sick either through direct contact in the water, or through consumption of affected shellfish. Sewage also disrupts the chemical balance of the natural environment, degrading fish and shellfish habitat.

1. For a list of pumpouts in Massachusetts, call the nearest marina or harbormaster, or contact the Massachusetts Office of Coastal Zone Management (CZM) at: 617-626-1200 or <http://www.state.ma.us/czm/>.
2. Always radio ahead to find out the operation hours for a particular pumpout facility.
3. Remember that it is illegal to discharge untreated sewage within three miles of shore.
4. Maintain your Marine Sanitation Device (MSD). Keep the disinfectant tank full, use biodegradable treatment chemicals, and follow the manufacturer's suggested maintenance program.
5. Never discharge your holding tank soon after adding deodorants since some deodorants contain toxic formaldehyde that can kill fish.
6. Have your MSD inspected regularly to ensure that it is functioning properly.
7. Do not dispose of fats, solvents, oils, emulsifiers, disinfectants, paints, poisons, phosphates, diapers, and other similar products in your MSD.
8. Don't discharge treated sewage in congested or poorly-flushed areas.
9. Use shoreside toilets rather than boat heads whenever possible.
10. Contact CZM to find out the location of No Discharge Areas (NDAs) in Massachusetts. In NDAs, even the discharge of treated sewage is prohibited.

Boat Maintenance

Do you routinely work on your boat rather than hire others to do the work for you? Do you clean the deck, repaint the hull, and change the oil? If so, there are some important tips that you should consider to ensure that your work is protective of the marina's coastal environment.



Boat Cleaning

Soaps and solvents are toxic to marine life. Care should always be taken when using harmful products near the water.

1. Wash your boat frequently with a coarse cloth and some water. By using a little bit of "elbow grease" you can often avoid the need to use soaps and cleaners.
2. If washing with water does not work, try natural cleaners, such as lime juice, borax, and baking soda.
3. When you need to use detergents, always use biodegradable soaps. Biodegradable soaps are comprised of natural compounds that breakdown more rapidly in the environment. Even these soaps can negatively affect marine life so always use as little as possible.
4. Try cleaning teak with a mild soap and abrasive pad, nylon brush, or bronze wool.
5. Do not use cleaning solvents on your boat when the boat is in the water.

Hull Maintenance

Boat paints contain harmful components including metals, solvents, and dyes. Precautions must be taken to prevent paint and paint chips from ending up in the water.

1. Check with marina staff to find out where hull maintenance is allowed at the marina.
2. Do not work on your hull near the water or on the mudflats at low tide.
3. Never clean your boat bottom when it is in the water because toxic paint may be removed.
4. Use a dust-free sander if possible. It will reduce cleanup time and is more enjoyable to use because you won't be breathing in paint dust.
5. If you are not using a dust-free sander, use tarps and filter cloth to help collect your scraps.
6. Keep your work area clean.

7. Let paint cans and brushes dry before disposing them.
8. Give your leftover paint to a friend or to the marina staff to use rather than throwing it away.
9. Dispose of paint chips, waste paint, and solvents at the marina's hazardous waste disposal area.
10. Use water-based paints and solvents. You can find them at most stores that sell marine paints.

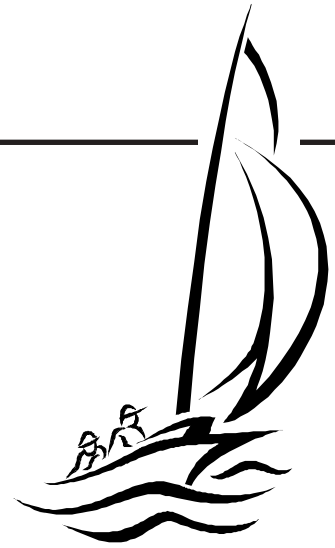
Engine Maintenance

Routine engine servicing requires handling toxic substance such as oil and solvents. While a clean engine is good for the environment, care must be taken while the cleaning is done.

1. Check with marina staff to find out where engine maintenance is allowed at the marina.
2. Never pour oil or oily liquids into the water — it is illegal.
3. Never hose down your work area. Instead, clean up with absorbent materials and a broom.
4. Dispose of your used oil at the marina's waste oil disposal area.
5. Drain oil filters for at least 24 hours, then place them in a sealed bag before disposal.
6. Pre-clean engine parts with a wire brush to eliminate the need for solvents.
7. Keep your engine well tuned, to prevent leaks, and clean, to spot oil and gas leaks more easily.
8. If you must use solvents, use VOC-free solvents.
9. Use the orange-pink colored propylene antifreeze, which is nontoxic, rather than the blue-green colored ethylene glycol, which is toxic to marine life.
10. Keep fuel tanks at 90% capacity during winter storage to prevent deterioration of the stored fuel. You should never fill the tank all the way because gasoline expands when heated causing a potentially explosive condition.
11. Dispose of all materials that have been soaked with oil at the marina's hazardous waste disposal area.

BOATER FACT SHEET

Non-Toxic Cleaning Alternatives



The following list provides non-toxic alternatives to typical cleaning products. It should be noted that even non-toxic substances can cause temporary harm to the environment. Therefore, always try cleaning with water and a coarse cloth first. If you resort to a non-toxic cleaner, use them sparingly.

ALL PURPOSE CLEANER:

Mix one cup white vinegar with two gallons water.

AIR FRESHNER:

Leave out an open box of baking soda.

AMMONIA-BASED CLEANERS:

Vinegar, salt, and water.

BRASS CLEANER:

Worcestershire sauce. Or paste made with equal amounts of salt, vinegar, and water.

COPPER CLEANER:

Lemon juice and water. Or paste of lemon juice, salt, and flour.

CHLORINE BLEACH:

Baking soda and water. Or borax.

CHROME CLEANER/POLISH:

Apple cider vinegar to clean; baby oil to polish.

DISINFECTANTS:

One half a cup borax in one gallon of water.

DRAIN OPENER:

Disassemble and use a plumber's snake. Or flush with boiling water mixed with one quarter cup baking soda and one quarter cup vinegar.

FIBERGLASS STAIN REMOVER:

Baking soda paste.

FLOOR CLEANER:

One cup vinegar plus two gallons of water.

PAINTS:

Use latex or water-based paints.

PAINT REMOVER / STRIPPER:

Use heat gun to peel off paint.

PAINT THINNERS:

Use water (effective for water-based paints).

STAINLESS STEEL CLEANER:

Baking soda or mineral oil for polishing, vinegar to remove spots.

TOILET BOWL CLEANER:

Use toilet brush and baking soda.

WOOD POLISH:

Olive or almond oil (interior walls only)

WINDOW CLEANER:

Mix two tablespoons vinegar in one quart of water or rub glass with newspaper