

CLEAN  
BOATING  
HABITS

[WWW.DBW.CA.GOV](http://WWW.DBW.CA.GOV)

CALIFORNIA DEPARTMENT OF BOATING AND WATERWAYS

# CLEAN BOATING HABITS

California is a boating mecca with 3,427 miles of coastal and tidal shoreline, 5,000 lakes, 2,600 miles of inland waterways, and one of the nation's most spectacular settings for boating, fishing, sailing, windsurfing and water skiing. It's no wonder there are nearly one million registered vessels in California.

Boaters play an important role in the health of California's waterways and share responsibility for their protection. Boat sewage, graywater, cleaning products, spilled fuel and oil, trash and aquatic nuisance species are potential sources of pollution.

Government alone cannot protect California's environment. Each of us must take responsibility for pollution prevention. This guide can help you to minimize the environmental and public health impacts from your boating activities.

# TABLE OF CONTENTS

| Topic                                   | Page             |
|---|------------------|
| Foul Weather Preparation . . . . .      | 3                |
| Boat Maintenance . . . . .              | 5                |
| Oil and Gas . . . . .                   | 7                |
| Bilge Oil . . . . .                     | 9                |
| Aquatic Nuisance Species . . . . .      | 11               |
| Solid Waste and Marine Debris . . . . . | 13               |
| Household Hazardous Waste . . . . .     | 15               |
| Sewage . . . . .                        | 17               |
| No Discharge Areas . . . . .            | 19               |
| Graywater . . . . .                     | 20               |
| Fish Waste . . . . .                    | 21               |
| Minimum Required Safety Equipment . . . | Back Inner Cover |

# FOUL WEATHER PREPARATION

## FACT:

Wind, waves, tides, currents and fog can cause problems for boaters, and result in accidents and the release of gasoline, oil, chemicals and other pollutants into the environment. Weather conditions can change suddenly anywhere and at anytime. Checking the weather before departing and while underway is important both for your safety and to protect the environment from the accidental discharge of toxic substances.

## GOAL:

In foul weather, prevent accidents and water pollution by using extreme caution and securing loose items and potential sources of pollution.



## ACTIONS YOU CAN TAKE:

- Check weather conditions on a marine band radio at 162.55 MHz, or 162.40 MHz, on a local US Coast Guard or commercial radio station that gives weather updates or visit [www.dbw.ca.gov](http://www.dbw.ca.gov).
- Wear your lifejacket. Maintain a safe speed and proceed with caution.
- Head for the nearest shore that is safe to approach.
- Head the bow into waves at about a 40° angle. Watch for floating debris.
- Keep bilge free of water. Shift to full fuel tank if vessel is equipped with dual fuel tanks.
- If your engine fails, anchor the boat.
- Secure portable containers, paint cans, petrochemicals, cleaners and other loose items that could spill and pollute.

**Remember: Life is more important than property.**

## BOAT MAINTENANCE

**FACT:** Products used to wash boat hulls and decks often contain toxic ingredients that are harmful to the marine environment. Degreasers dry the natural oils that fish need for their gills to take in oxygen. Underwater hull cleaning can leave toxic paint residues in harbor sediments.

**GOAL:** For boats in the water, use cleaning methods that prevent pollutants, sanding dust or other debris from being released into the water.



### ACTIONS YOU CAN TAKE:

- Do most maintenance and repair at the end of the season when your boat is out of the water.
- Limit in-water maintenance and perform cleaning where debris can be captured and disposed of properly.
- Use fresh water to clean your boat after every use.
- Use environmentally friendly cleaning methods and non-toxic, biodegradable cleaning products.

## ALTERNATIVES TO TOXIC PRODUCTS

### Toxic Product

Detergent & Soap

Bleach

Scouring Powders

Floor Cleaner

Window Cleaner

Varnish Cleaner

Head Cleaner

Shower Cleaner

Aluminum Cleaner

Chrome Cleaner/Polish

Fiberglass Stain Remover

Drain Opener

Mildew Remover

Wood Polish

### Alternative

Fresh water and a lot of elbow grease

Hydrogen peroxide

Baking soda or salt

One cup white vinegar in 2 gallons water

One cup vinegar in 1 quart warm water

Wipe with 1/2 cup vinegar and 1/2 cup water solution

Brush with baking soda

Wet surface, use scouring cloth with baking soda

Use 2 tablespoons cream of tartar in 1 quart of water

Apple cider vinegar to clean, baby oil to polish

Baking soda paste

Disassemble and replace; avoid toxic products

Paste of equal parts lemon juice and salt

Use 3 parts olive oil and 1 part white vinegar;

almond or olive oil (interior unvarnished wood only)

# OIL AND GAS

## FACT:

Oil and gasoline contain hydrocarbons and heavy metals that pollute and are toxic to aquatic life. Oil can coat the feathers and fur of wildlife, destroying their natural insulation from cold. Even a thin film of oil can kill aquatic organisms that live near the water's surface. A single gallon of fuel can contaminate over a million gallons of water. Once ingested, oil moves up the food chain from tiny plankton to fish, birds and even humans, and can cause reproductive problems, weakness and death. The cumulative effect of small spills has a serious impact on coastal and inland waters. Using soap to remove fuel or oil sheen in the water is also bad for the environment and is illegal.

## GOAL:

Prevent pollution from oil and gas spills to help maintain a healthy and aesthetically pleasing recreational environment for boaters and others.







## ACTIONS YOU CAN TAKE TO PREVENT OIL AND GAS SPILLS

- Use caution when filling your fuel tank and don't top off. Know the capacity of your tank and leave it at least 10% empty.
- Catch fuel drips with an absorbent pad. Properly dispose of soiled absorbents at a hazardous waste disposal location.
- Do not hose down gas spills, or apply detergents or soaps to an oil sheen.
- Install fuel tank vent whistles or fuel/air separators to avoid spills.
- Inspect fuel lines and hoses periodically. Replace as needed.
- Use funnels for pouring oil and keep a supply of absorbent pads onboard for cleaning up spills.
- Dispose of used oil and drained oil filters at a waste oil recycling center.
- If a spill occurs, notify the marina management immediately. All oil and chemical spills must also be reported to the National Response Center (800) 424-8802 and the State Line (800) OILS911 (645-7911).

Visit [www.earth911.com](http://www.earth911.com)  
or call (800) CLEANUP  
(253-2687) for the nearest  
oil, recycling & hazardous  
waste disposal centers.

## BILGE OIL

### FACT:

Ninety percent of oil in marine waters is from small, chronic sources such as bilges, outboard motors, poor fueling procedures, urban run-off and improper disposal of used oil products.

### GOAL:

Protect California's waterways by preventing oily bilge water from being pumped overboard.

To report all oil fuel and chemical spills in California call both the National Response Center (800) 424-8802 and the State Line (800) OILS911 (645-7911).



## ACTIONS YOU CAN TAKE FOR BILGE OIL

- Use drip pans with absorbent pads while draining oil from the bilges.
- Keep engines well tuned; regularly check seals, gaskets, hoses and connections for leaks and drips. Change oil filters often.
- Place an oil absorbent material or bioremediating bilge boom in the bilge. Recycle or properly dispose of used absorbents. Check with your marina manager for petroleum disposal regulations.
- Clean and maintain bilges. Do not use detergents while cleaning.
- Don't mix used oil with other substances.
- Before pumping the bilge, use water/oil separators or absorbents to soak up oil hydrocarbons.
- Remove oily bilge water at a bilge pumpout station.

**Regulatory Requirements:** Harbors and Navigation Code, §133: It is unlawful to discharge oil into or upon the navigable waters of the state.

# AQUATIC NUISANCE SPECIES



Hydrilla

## FACT:

Non-native aquatic species – plants, fish and animals – are invading California’s coastal and inland waters. These pests can increase dramatically under the right conditions, displacing native species, clogging waterways, and impacting navigation and recreation. Once introduced, they are nearly impossible to eliminate. *Hydrilla*, *Egeria densa*, Water Hyacinth, Quagga and Zebra mussels are nuisance species that can be accidentally transported by recreational boaters when caught in propellers, intakes or attached to hulls. Controlling these aquatic nuisance species is a multi-million dollar problem in California.

## GOAL:

Prevent the introduction and spread of non-native species from one body of water to another.



Water Hyacinth



*Egeria densa*



*Zebra Mussel*



## ACTIONS YOU CAN TAKE:

- Avoid chopping vegetation with your boat's propeller.
  - Inspect your boat and remove aquatic plants or animals before you leave any body of water.
  - Inspect all exposed surfaces. Small mussels feel like sandpaper to the touch.
  - Wash the hull of each watercraft thoroughly.
  - Remove all plant and animal material.
  - Drain all water and dry all areas.
  - Drain and dry the lower outboard unit.
  - Clean and dry all live-wells.
  - Empty and dry any buckets.
  - Dispose of all bait in the trash.
  - Wait 5 days in warm and dry weather and up to 30 days in cool moist weather between launches into different fresh waters.
- Report new infestations of non-native aquatic species to the U.S. Fish and Wildlife Service at (209) 946-6400. Visit [www.dbw.ca.gov](http://www.dbw.ca.gov) for more information on Quagga and Zebra mussels or call (866) 440-9530.

## SOLID WASTE & MARINE DEBRIS

### FACT:

Trash in the water or washed up on the beach is unsightly and can injure or kill birds, fish and marine mammals. Ingestion of plastic waste or entanglement in fishing lines and nets can result in mortalities. Floating debris and solid objects may result in structural damage to boats or mechanical failures. Federal law prohibits the discharge of plastics or garbage containing plastics into any waters.

### GOAL:

Manage and dispose of all solid waste properly to keep our waters clean and prevent fish and wildlife injuries.





## ACTIONS YOU CAN TAKE:

- Never throw trash overboard.
- Prevent plastic bags, drink cans and loose items from blowing overboard.
- Carry a trash bag. Whatever you take out, bring it back to port for proper disposal.
- Take reusable containers. Recycle paper, cans and bottles.
- Encourage your marina to provide trash cans with lids and recycling bins.

### REGULATORY REQUIREMENTS:

Under the Maritime Pollution Act (MARPOL) Annex V agreement and U.S. 33 Code of Federal Regulation (CFR) 151.63 et seq., it is illegal for any vessel to discharge plastics or garbage containing plastics into any waters.

## HOUSEHOLD HAZARDOUS WASTE

### FACT:

Topside and anti-fouling paints, wood preservatives, lacquers, solvents, batteries, used oil, zinc anodes and out-of-date flares are typical hazardous wastes generated by boaters. Some are suspected carcinogens and all are toxic to humans and aquatic life.

### GOAL:

Dispose of hazardous waste properly. Call 1-800-CLEANUP (253-2687) or visit [earth911.org](http://earth911.org) to find hazardous waste disposal locations near you.







## ACTIONS YOU CAN TAKE:

- Use non-toxic, biodegradable products when possible.
- Never dispose of hazardous wastes in the trash, water or gutter.
- Use the smallest amount of a toxic product necessary to do the job.
- Place ignitable paint waste and old gasoline in closed containers to prevent pollution or fire.
- Check with your marina before disposing of used oil or other hazardous wastes. Some marinas provide recycling/disposal service.
- Contact your local solid waste authority for instructions on how and where to properly dispose of household hazardous waste.

## SEWAGE

### FACT:

Untreated sewage discharged from boats can spread disease, contaminate shellfish beds and lower oxygen levels in water. Exposure to sewage-polluted water can result in gastroenteritis, hepatitis, dysentery and cholera. It's illegal to discharge raw sewage into any of California's lakes, rivers, reservoirs or coastal waters within three miles of shore.

### GOAL:

Eliminate overboard discharge of sewage into our waters and increase the use of pumpout facilities and porta-potty dump stations.

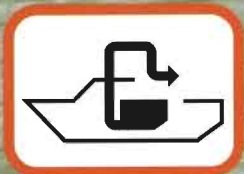
MUTUAL FUN

NT • BM • CE • CW • WFC • 20  
• CL • 2000 • 2001 • 2002

AN JOSE CA



## ACTIONS YOU CAN TAKE:



**KEEP OUR  
WATER CLEAN—  
USE PUMPOUTS**

- Never dump raw sewage into California waters.
- Use public toilets onshore before departing.
- Use a pumpout facility to dispose of holding tank wastes.
- Visit [www.dbw.ca.gov](http://www.dbw.ca.gov) for California pumpout locations. Click on the *Clean and Green* tab.
- For small boats, use a porta-potty and dispose of wastes in an onshore dump station or toilet.
- Keep the "Y" valve properly secured in the closed position when navigating inland waters or less than three miles offshore to prevent accidental discharge.
- Reduce the use of chemical additives containing formaldehyde, quaternary ammonia and chlorine.

### REGULATORY REQUIREMENTS:

Federal Water Pollution Control Act (33 U.S.C. 1311 et seq.):  
Discharges of untreated sewage are prohibited within the navigable waters of the U.S.

# NO DISCHARGE AREAS

It is illegal to release wastes, treated or not, into a federally designated No Discharge Area. Your MSD must be connected to a holding tank or secured to prevent all sewage discharges. No Discharge Areas in California are:

- Avalon Bay Harbor, Los Angeles County
- Channel Islands Harbor, Ventura County
- Dana Point Harbor, Orange County
- Huntington Harbor, Orange County
- Lake Tahoe, Placer and El Dorado Counties
- Mission Bay, San Diego County
- Oceanside Harbor, San Diego County
- Richardson Bay, Marin County
- San Diego Bay, San Diego County
- Sunset Bay, Orange County
- Upper and Lower Newport Bay, Orange County

# GRAYWATER

**FACT:** Water from onboard sinks, washers and showers is called graywater and is discharged directly into the water without treatment. Graywater is often rich in phosphates that pollute the water and encourage the growth of unwanted algae. The discharge of graywater is prohibited in some harbors and marinas. Check with marina personnel for local restrictions.

**GOAL:** Reduce the amount of graywater discharged.



## ACTIONS YOU CAN TAKE:

- Use shore-side laundry facilities and showers whenever possible.
- Limit the amount of water you use in your boat's sinks and showers.
- Use non-phosphate and biodegradable soaps.
- Use the smallest amount of a cleaning product to get the job done.

## FISH WASTE MANAGEMENT

### ACTIONS YOU CAN TAKE:



- Dispose of unwanted bait at sea.
- Gut fish and dispose of the contents at sea.
- Use fish cleaning stations with trash receptacles and wastewater hookups.

### FACT:

The amount of fish waste disposed into a small, enclosed basin can exceed amounts that are naturally found in the water. In small quantities, this fish waste is eaten by scavenging fish and is not a problem. In large amounts where water circulation is restricted, decomposition of fish waste can deplete the water of dissolved oxygen, leading to water quality degradation and fish kills. "Fish feeding" with bait or cleaned fish loads basins with nutrients and can disrupt the feeding behavior of wild animals or spread disease among them.

### GOAL:

Practice proper fish-cleaning methods and proper disposal of fish wastes.

# MINIMUM REQUIRED SAFETY EQUIPMENT CHECKLIST

## Vessels that are 16 feet (4.9m) to less than 26 feet (7.9m)

Life Jackets  
USCG Approved,  
Serviceable condition,  
Properly stowed.

One approved Type I, II, or III Life Jacket for each person on board or being towed on water skis.

One throwable Type IV device.

Note: A type V hybrid may be substituted for a Type I, II, or III device. Every person under 13 years of age must wear an approved Type I, II, III or V Life Jacket while the vessel is under way, except when tethered on a sailboat, or when the person is in the cabin or other enclosed area. Skiers: Every person skiing or aquaplaning must wear an approved Type I, II or III Life Jacket, except during competitions or exhibitions.

Fire Extinguisher  
USCG Approved,  
Serviceable condition.

At least one Type B-1 USCG approved hand portable fire extinguisher, except for vessels powered by an outboard motor equipped with a portable fuel tank.

Visual Distress Signal  
Required on the high sea  
and coastal waters only.

Carry visual distress signal for daytime and nighttime use.

Coastal waters mean the Pacific Ocean, and all bay harbors, rivers, inlets where any entrance is over 2 miles wide to the first point where the distance between shorelines narrows to 2 miles.

Bell and Whistle  
(Sound Producing Devices)

Must carry an efficient sound-producing device required by the Navigation Rules.

## Vessels that are 26 feet (7.9m) to less than 40 feet (12.2 m)

Life Jackets  
USCG Approved,  
Serviceable condition,  
Properly stowed.

One approved Type I, II, or III Life Jacket for each person on board or being towed on water skis.

One throwable Type IV device.

Note: A type V hybrid may be substituted for a Type I, II, or III device but it must be worn whenever the vessel is under way and the person is not in the cabin or other enclosed area. Skier: Every person skiing or aquaplaning must wear an approved Type I, II or III Life Jacket.

Fire Extinguisher  
USCG Approved,  
Serviceable condition.

At least two Type B-1 USCG approved hand portable extinguishers or at least one B-II type approved hand portable fire extinguisher. If vessel is equipped with a fixed fire extinguishing system, only one additional Type B-1 extinguisher is required.

Visual Distress Signal  
Required on the high sea  
and coastal waters only.

Carry visual distress signal for daytime and nighttime use.

Coastal waters mean the Pacific Ocean, and all bay harbors, rivers, inlets where any entrance is over 2 miles wide to the first point where the distance between shorelines narrows to 2 miles.

Bell and Whistle  
(Sound Producing Devices)

Must carry an efficient sound-producing device required by the Navigation Rules.

Government alone cannot protect California's environment. Each of us must take responsibility for pollution prevention. This guide can help you to minimize the environmental and public health impacts from your boating activities.

Special thanks to the US EPA, NOAA and the State of Florida.



California Dept. of Boating and Waterways  
2000 Evergreen Street, Suite 100  
Sacramento, CA 95815-3888  
1-888-326-2822  
www.dbw.ca.gov



KEEP OUR WATER CLEAN—USE PUMPOUTS

Design: www.dcampeau.com 2010  
Photo, page 13: Center for Marine Conservation

CLEAN BOATING HABITS

CLEAN BOATING HABITS

SAFETY EQUIPMENT

Vessels that are less than 16 feet (4.9m)

One approved Type I, II, or III life jacket for each person on board or being towed on water skis.

Note: A type V hybrid may be substituted for a Type I, II, or III device but it must be worn whenever the vessel is under way and the person is not in the cabin or other enclosed area. Skiers: every person skiing, aquaplaning or riding a personal watercraft (populantly known as jet skis) must wear an approved Type I, II, III or V life jacket.

At least one Type B-1 USCG approved hand portable fire extinguisher.

Life Jacket  
USCG Approved  
Serviceable condition,  
Properly stowed.

Fire Extinguisher  
USCG Approved,  
Serviceable condition.

Carry visual distress signal for nighttime use.  
Coastal waters mean the Pacific Ocean, and all bay harbors, rivers, inlets where any entrance is over 2 miles wide to the first point where the distance between shorelines narrows to 2 miles.

Visual Distress Signal  
Required on the high sea  
and coastal waters only.

Must carry an efficient sound-producing device required by the Navigation Rules.

Bell and Whistle  
(Sound Producing Devices)