

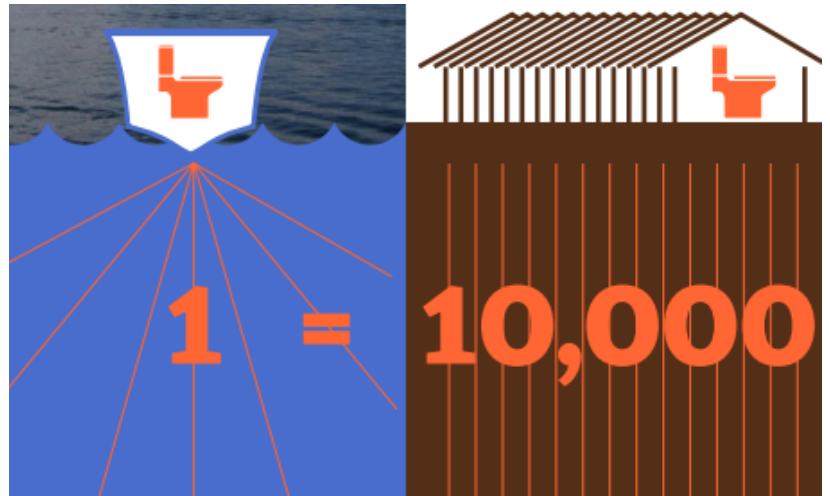
Spotlight on:

Boat Sewage Management

Impacts of Sewage on the Environment

While it is best to use an onshore toilet when nature calls, properly disposing of boat sewage makes a difference in water quality and protects us all. Whether you use a portable toilet for your boat or have an on-board head, it is important to know the law, and use common sense.

Did you know that one toilet flush of untreated sewage from your boat can cause the same impact as 10,000 flushes from your home toilet, where waste was processed by a sewage treatment facility (San Francisco Regional Water Quality Control Board, 2009)? Human waste contains bacteria, parasites, and viruses that can make you sick. Overboard discharges can also contaminate shellfish beds and infect humans and animals that eat the shellfish. Sewage can also cause fish kills, lead to harmful algal blooms, and limit beach and surf days for when we can go into the water safely.



1 toilet flush of untreated sewage from your boat can cause the same impact as 10,000 flushes from your home toilet, where waste is processed by a sewage treatment facility (San Francisco Regional Water Quality Control Board, 2009).

Sewage discharges are preventable. Here are some tips:

- Never discharge treated or untreated sewage into small bays, harbors, marinas, swimming or fishing areas, areas with low tidal flushing or near shellfish beds.
- Keep your y-valve in the closed position. (See article [What Is a Y-valve and Why Does It Matter?](#))
- Use a landside pumpout or portable toilet dump station to dispose of your boat sewage.

Find your nearest participating disposal facility on the free mobile app [Pumpout Nav](#). Chemical disinfectants and deodorizers from your holding tank can harm marine life, so it is important to choose less-toxic treatments when possible.

Watch [this video](#), *Sewage Impacts Into Waterways*, in which Northern California Clean Vessel Act Grant Manager Natasha Dunn discusses sewage impacts on the waterways and provides tips for sewage management.

What Is a Y-valve and Why Does It Matter?

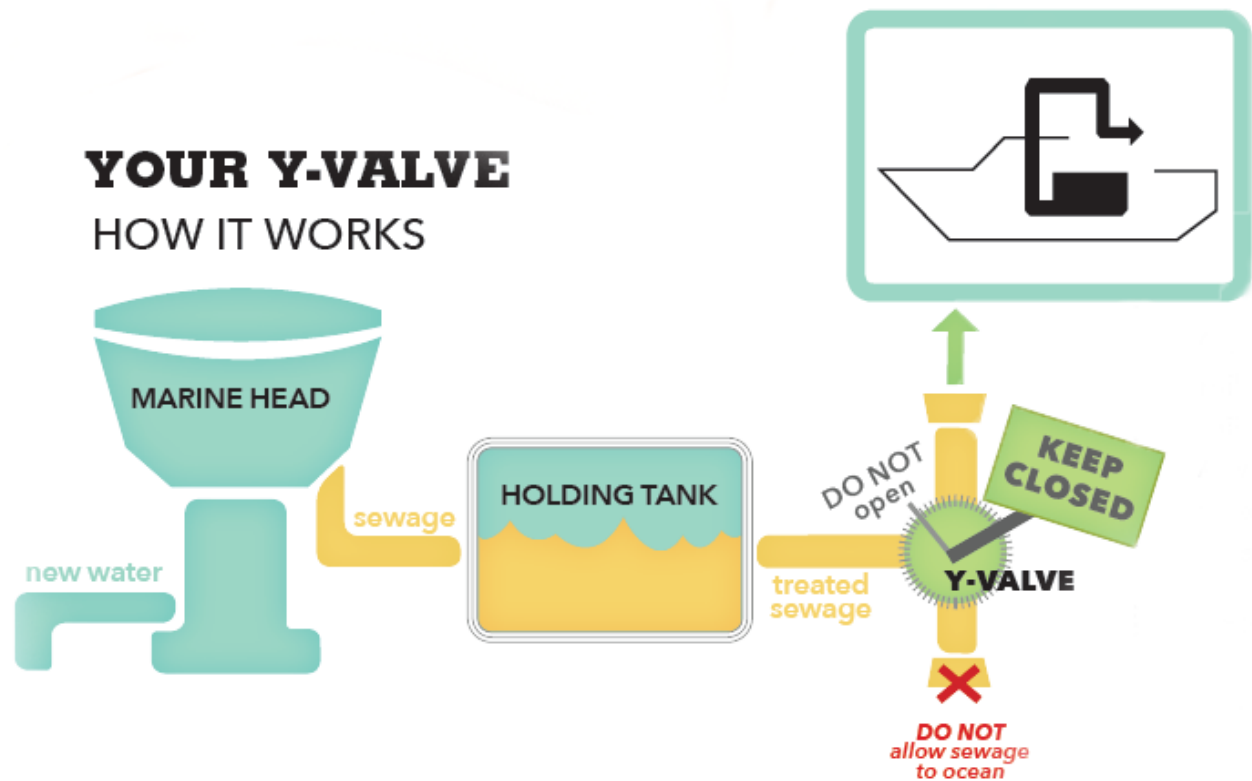
Y-valves, or diverter valves, are a crucial part of boats with onboard heads. This valve can prevent unintentional or illegal sewage discharges in small bays, marinas or yacht harbors, and other protected waterways. Many y-valves have arrows that point in the direction of the flow of waste to either the deck waste fitting or overboard.

The “closed” position will point sewage to the deck waste fitting for pumping out, and boaters should have it in the closed position within the 3-mile limit and while in marine sanctuaries and other protected waters. To secure it closed, use a non-re-

leasable zip tie or a padlock, or remove the handle altogether, if you can. To test your system, flush a dye tracer tab down the head to make sure there are no leaks.

There are a few different types of y-valves. Get to know yours, and keep it secured to protect the waters we all love.

Videos by The Bay Foundation ([Marine Sanitation Device & Y-valve Information for Boaters](#)) and the San Francisco Estuary Partnership ([Y-valve](#)) have additional helpful information about y-valves and the important role they play in sewage management.



The y-valve can allow sewage to flow overboard but should remain closed within the three-mile limit and Marine Protected Areas to be pumped out once boaters return coastside (Morro Bay). Photo: Morro Bay National Estuary Program

Consider a Marine Composting Toilet

Marine composting toilets are an eco-friendly, safe and economical alternative to traditional installed toilets. Also, they are waterless, lighter-weight systems, so plumbing is not required. They are considered Type III marine sanitation devices and meet U.S. Coast Guard “no discharge” requirements.

Composting toilets have many benefits: with less complex plumbing comes saved time and money on maintenance and repairs. They also have less offensive odors—since the solids and liquids are separated, it does not create a typical sewage smell. Without the strong, foul smell, there is no need to use deodorizing chemicals that can often be hazardous to the environment. Lastly, you can cruise the seas for longer periods without stressing or detouring to find the closest pumpout station.

How do they work?

- This system separates liquids from solids. When separated, the solids sit in a lower compartment that gets mixed with peat moss, sawdust or coconut husk fibers and oxygen.
- Bacteria break down the solid waste by consuming nutrients such as carbon, nitrogen and phosphorus, which releases carbon dioxide and starts the composting process. The transformation of carbon-to-carbon dioxide creates heat, which warms up the organic mass. The high temperatures destroy disease-causing bacteria and protozoa. Oxygen aeration furthers the composting process.
- Once the compost is established, a black odor-free powder is left that has no harmful bacteria. The compost solids should not be dumped overboard. Rather, it can be used as a soil amendment for indigestible plants or can be placed in a bag for disposal on land.



Still from the video [Consider a Marine Composting Toilet](#)

Discover the pros and cons of marine composting toilets in [this helpful guide](#) from The Bay Foundation, and learn about installing a composting toilet system on your vessel by watching [this informative video](#); there is also a version available with captions in [Spanish](#).

Little Things that Matter: Summer Tips

Clean and Safe Boating Tips

- Before beginning your boating experience, [here are some reminders](#) to ensure your recreational time on the water is clean, green, safe and fun, and that you also receive your [free California Boater Kit](#). Thank you for being good stewards of the environment. Happy boating!

Be Aware and Vigilant Against Fires on Board!

- Fire safety precautions are especially important in live-aboard and marina communities, and for occupants with limited escape routes during an emergency. The U.S. Coast Guard encourages the boating community to be aware of and remain vigilant against fires through active prevention and mitigation. Review [important information](#) and recommendations from the U.S. Coast Guard.



Boating Tips Before You Go



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Photo: United States Coast Guard.

Ideas for future
newsletter articles?
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Matuk at [Vivian.
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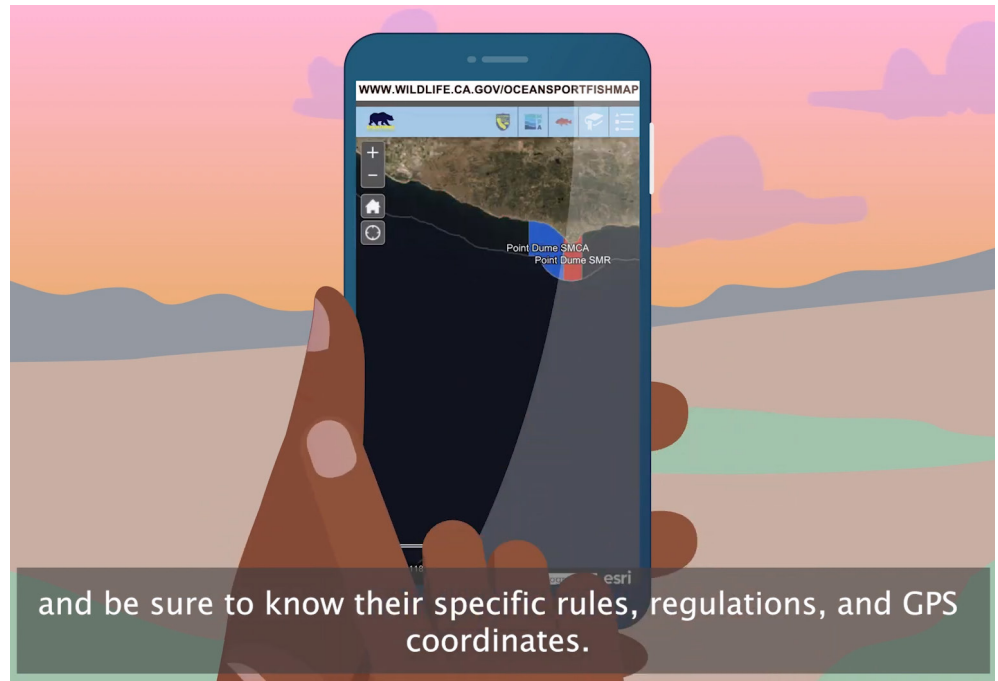


Cruising or Fishing Near Marine Protected Areas

Today, California's Marine Protected Area (MPA) Network consists of 124 different MPAs, Recreational Management Areas, and Special Closures. Did you know that these designated marine spaces create the nation's first statewide MPA Network, and the largest ecologically connected MPA network in the world! Together, they act as a natural underwater corridor to protect, conserve, and rehabilitate underwater ecosystems and marine populations along California's coast.

With the assistance of the California Department of Fish and Wildlife (CDFW) and with support from the California Ocean Protection Council and Coastal Quest, The Bay Foundation's Boater Education and Outreach Program created a first-of-its-kind animated video on California's MPA network, breaking down each type of MPA and other conservation areas within the network in an easy-to-understand manner. The video is called [Fishing in California? Get Clear on Marine Protected Areas!](#); there is also a version available with captions in [Spanish](#).

The video was created as an educational tool to help increase the knowledge of MPAs and compliance with associated regulations across Southern California's recreational boating and angling communities. The video not only ed-



A still from the video [Fishing in California? Get Clear on Marine Protected Areas!](#) highlighting an MPA.

ucates and empowers boaters on MPAs and their regulations, but also informs them of compliance on how to interact with these protected spaces while out on the water.

With over 4 million recreational boaters in California, the actions of this growing and evolving community can easily impact the health of the ocean environment. So, if you're going fishing or boating, learn where MPAs are and be sure to know their specific rules, regulations and GPS coordinates. Remember, there are many other fishing rules and regulations, so be informed and plan your trip before leaving home.

Visit CDFW's [MPA webpage](#) for additional resources and information. partners to execute rescue plans for injured animals.

Get Ready for CA's Largest Volunteer Event: The 37th Annual California Coastal Cleanup Day!

Authors: Rebekkah Scharf (CA Coastal Commission),
Public Education Program

After more than a year of being unable to organize group cleanups due to the COVID-19 pandemic, Coastal Cleanup Day is anticipated to be in-person this year: **The 37th Annual California Coastal Cleanup Day is set for Saturday, September 18, from 9 a.m.-noon, at beaches and waterways throughout the state.**

California Coastal Cleanup Day helps bring awareness to the marine litter problem and provides a community event with direct involvement. Volunteer efforts help prevent trash from polluting coasts and waterways, flowing to the ocean and harming ecosystems. The event is a great activity for individuals, families, friends, coworkers, scout groups, school groups and service clubs. In 2019, more than 74,000 volunteers picked up more than 900,000 pounds of trash from beaches and waterways throughout California.

Volunteers are also invited to participate all month long, by cleaning up their neighborhoods, parks and other local areas. Trash from inland areas flows downstream to the coast, so cleaning up neighborhood trash helps prevent marine debris. Gather cleanup supplies from home, download the [Clean Swell app](#) and pick up trash on your own time throughout September.

In addition to preventing marine debris, Coastal Cleanup Day serves as a crucial community science project. Trash collection data gathered from Coastal Cleanup Day has been used to influence policies and legislation to prevent marine debris, including California's plastic bag ban, Styrofoam food packaging bans in more than 80 cities, and new regulations to keep trash out of stormwater systems. Cleanup data from past cleanups continue to be critical in decreasing the amount of trash that enters the waste stream.

CALIFORNIA COASTAL CLEANUP 2021

SATURDAY SEPTEMBER 18TH AND ALL MONTH LONG



PHOTO BY DANTE VASCO

EVEN AFTER MORE THAN A YEAR APART, WE'RE STILL ALL CONNECTED, FROM THE MOUNTAINS TO THE OCEAN. COME BACK TOGETHER ON SEPTEMBER 18TH FOR CALIFORNIA COASTAL CLEANUP DAY, AND HELP THROUGHOUT THE MONTH TO CLEAN UP YOUR NEIGHBORHOOD OR ANYWHERE ELSE THAT MAKES UP YOUR HAPPY PLACE.

VISIT COASTALCLEANUPDAY.ORG TO LEARN MORE.



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CALIFORNIA
COASTAL
COMMISSION

the CHANGING TIDE

The cleanup is organized by the California Coastal Commission, in partnership with dozens of regional coordinators who organize beach and waterway cleanups in their respective counties throughout the state. The event is part of the International Coastal Cleanup, organized by the Ocean Conservancy. California Coastal Cleanup Day is the largest volunteer event in the United States, and International Coastal Cleanup Day is the largest volunteer event on the planet!

We hope you will join us for this year's cleanup. To find a Coastal Cleanup Day site near you and to learn more, please visit CoastalCleanupDay.org. If you are a boating facility or belong to a boating group that wants to be part of this event, please contact Vivian Matuk at Vivian.Matuk@coastal.ca.gov.



LA LIMPIEZA DE LAS COSTAS DE CALIFORNIA

SÁBADO, 18 DE SEPTIEMBRE Y TODO EL MES DE SEPTIEMBRE



FOTO DE BILL BOUTON

INCLUSO DESPUÉS DE MÁS DE UN AÑO DE DISTANCIAMIENTO, TODAVÍA ESTAMOS CONECTADOS DESDE LAS MONTAÑAS HASTA EL OCEANO. REUNÁMONOS EL 18 DE SEPTIEMBRE PARA CELEBRAR EL DÍA DE LA LIMPIEZA DE LA COSTA DE CALIFORNIA Y AYÚDANOS DURANTE TODO EL MES A LIMPIAR TU VECINDARIO O CUALQUIER OTRO LUGAR QUE TE HAGA FELIZ.

PARA MÁS INFORMACIÓN, VISITA WWW.COASTALCLEANUPDAY.ORG

CALIFORNIA COASTAL CLEANUP 2021

SATURDAY SEPTEMBER 18TH AND ALL MONTH LONG



PHOTO BY D. KAY RENICK

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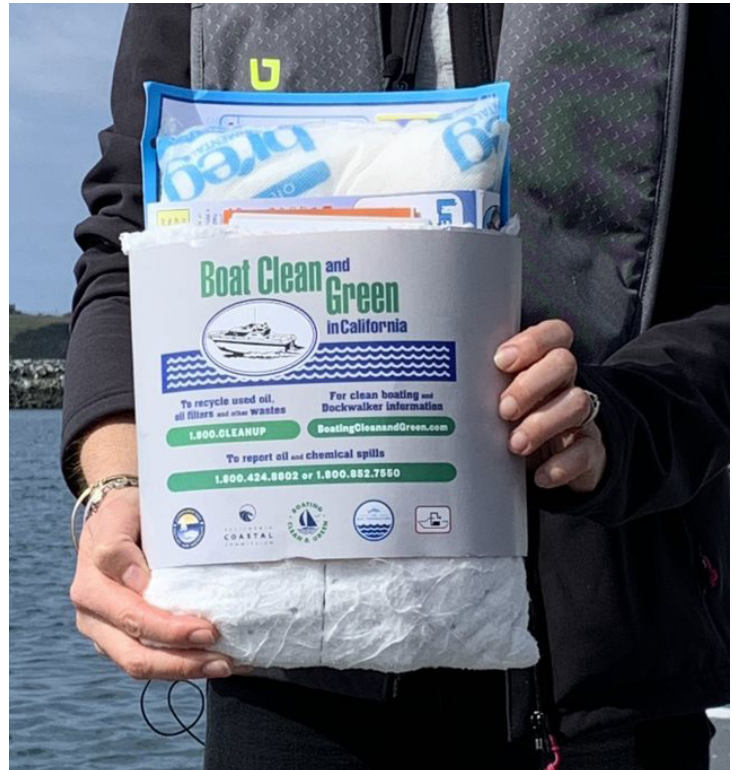
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Test Your Boater Knowledge & Receive a Boater Kit

Recreational boaters, have you gotten your hands on the [California Boater Kit](#) yet? The Boater Kit includes materials instrumental for a safe and clean boating season, specifically:

- Oil-absorbent pillow
- Oil-absorbent sheet
- Fuel bib
- Tide tables booklet
- “ABC’s of California Boating Laws” booklet
- “Environmental Boating Laws” brochure
- “A Boater’s Guide to Keeping Pollutants Out of the Water” reference sheet
- And more!



Get your California Boater Kit today! Photo: Vivian Matuk

Here’s what fellow boaters have to say about this handy kit:

“Great stuff that should be required for every boat and boater... always learning, thank you!”

“For a new boat owner, this was invaluable! Much needed, and much appreciated!”

It only takes a few minutes to get access to this FREE California Boater Kit. Simply click on bit.ly/2021CABoaterKit and complete a brief quiz that helps us with our outreach programs!

The California Boater Kit is produced as part of the California Boating Clean and Green Program operated by California State Parks and California Coastal Commission in partnership with The Bay Foundation. It is partially funded by the California State Parks Division of Boating and Waterways Clean Vessel Act Program and a federal Clean Vessel Act Grant through the Sport Fish Restoration Program.

CHANGING TIDE STAFF

SOUTHERN CALIFORNIA
The Bay Foundation
www.santamonicabay.org
Georgia Tunio
gtunio@santamonicabay.org
(888) 301-2527

CALIFORNIA DELTA
San Francisco Estuary Partnership
www.sfestuary.org
Natasha Dunn
natasha.dunn@sfestuary.org
(415) 778-6687

NORTHERN CALIFORNIA
California State Parks and
California Coastal Commission
www.BoatingCleanandGreen.com
Vivian Matuk
vivian.matuk@coastal.ca.gov
(415) 904-6905