

## How Florida Boaters and Marinas Can Help Manage Nonpoint Source Pollution



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*By Thomas J. Burrell in partnership with Florida Department of Environmental Protection's Clean Boating Program and Florida SeaGrant*

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Florida is world-famous for its beautiful beaches, lakes, rivers, and springs. Tourism is central to the state's economy, and boating and marinas contribute significantly to the state's economic health. In fact, activities on and near ocean and coastal resources contributed more than [\\$73.9 billion](#) to the state's economy and added more than 1 million jobs in 2018.

Let's look at how Florida boaters and marinas can help manage nonpoint source pollution that enters the state's waters, groundwater, and beaches.

### **A Problem and a Solution**

For many Floridians, the water is their livelihood. They live by and work on the water, depending on it for their career and food sources. [Nonpoint source pollution](#) is contaminants, both naturally occurring and caused by humans, carried by stormwater runoff that reaches Florida's water resources. As stormwater flows, it can pick up oil, pesticides, fertilizers, sediment, sewage, bacteria and more. Boaters and marinas can help minimize contaminants that could end up in the water.

### **What Boaters Can Do**

Although most boaters do not realize it, their favorite runabout can impact the water and bay bottom below that they depend on for recreation or their livelihood. Leaking fluids, cleaning products, and even how and where the boat is operated can damage the local environment.

The question is, what can boaters do to limit their impact?

## 1. [Practice Clean Boating Habits](#)

By adopting pollution prevention measures, Florida Clean Boaters can take satisfaction in knowing they are doing their part in keeping Florida's waterways clean and preserving them for the future. The [Clean Boater Habits](#) booklet provides information on how to properly inspect equipment, cleaning techniques for boats and trailers, and preventing the spread of invasive species. Visit the [Clean Boater FAQ](#) for tips on best practices for a Clean Boater, including black water pollution prevention. Florida boaters are encouraged to take the [Clean Boater Pledge](#) and educate other mariners on the importance of protecting the environment. The University of Florida IFAS Extension offers a wealth of information on [Green Marine Practices](#) and Clean Boating tips.

## 2. Operate responsibly

By avoiding seagrass beds and operating at slow idle speeds while near the shoreline, boaters can reduce seagrass scarring, erosion, or the loss of valuable plant or animal life. Seagrass provides food, nursery and habitat for fish and other aquatic species. Seagrasses trap fine sediments and help filter pollutants from stormwater containing nonpoint source pollution from the uplands. For more information on what you can do to help keep seagrass beds healthy, read [Be Seagrass Safe](#). Learn the impacts and take the Florida Sea Grant Pledge. Read and follow navigational charts and markers to avoid sensitive areas: [NOAA navigational charts viewer](#)

## 3. Avoid harsh cleaning products

Many products used to treat teak wood, clean the hull, or shine the chrome boat ladder can be highly toxic to aquatic wildlife if allowed to enter the water. You can help avoid this hazard by choosing [eco-friendly cleaning products](#) under the [EPA Safer Choice Label](#) or choosing [alternative products](#) while keeping your boat shipshape. A boat that is well maintained produces fewer potential pollutants.

## 4. Fuel responsibly

Petroleum products, including fuel and oil, are a significant source of water pollution. Whenever possible, fuel ashore. When fueling, consider placing an absorbent bib around the fuel nozzle to catch leaks and backflow, use a vent whistle, and make sure to never leave a fueling vessel unattended. Contact your marina staff for assistance in how to recycle your used oil. For tips on how to handle oil and fuel spills, read [Boaters guide to oil and fuel spills](#) developed by the Gulf of Mexico Sea Grant Programs.

## 5. Maintain your boat's safety

The U.S. Coast Guard Auxiliary and U.S. Power Squadrons have certified vessel examiners who will perform a free Vessel Safety Check (VSC) of your boat, at a time of mutual convenience. There is no charge, and no consequences if you don't pass. The goal is simply to help [make boating as safe as possible](#) for you, your family and your friends through education. To schedule a courtesy vessel check, see: [U.S. Coast Guard Auxiliary Vessel Safety Check](#)

## 6. Visit Florida Clean Marinas

Boaters are encouraged to visit Florida's Clean Marinas and Resilient Marinas. The Clean Marina Program (CMP) is a voluntary designation program that encourages marina facilities to incorporate environmental Best Management Practices (BMPs) which exceed regulatory requirements. Clean facilities operate utilizing marina best practices and offer many services to boaters. For a listing of Florida's

designated marinas visit [Florida Clean Marinas](#). For a listing of the other states' Clean Marinas and clean boating resources visit the [BoatUS Foundation](#) website.

## 7. Pumpout


Pumping out a boat's sewage holding tank helps prevent sewage from entering our waterways. Florida SeaGrant, in partnership with the Florida Department of Environmental Protection, offers [Sewage Solutions](#) and develops tools, videos and other resources that engage the boating community in properly disposing of waste and protecting Florida's water resources.

Find a public pumpout, mobile pumpout vessel or dump station by downloading the **free Pumpout Nav mobile**

**app**, available on [iOS](#) and [Android](#). 

Use the app to:

- Locate over 250 public pumpout services.
- Keep a log of your pumpouts.
- Learn your holding tank capacity to avoid emergency pumpouts.
- Report broken stations and more.

Look for the international pumpout symbol. 

## **What Marinas Can Do**

Although boaters can help reduce nonpoint source pollutants, the more significant contribution of pollutants can occur at the marina. Not only is the marina itself a potential contributor, but the impact is increased by the number of boats in a single area. The good news is there are many ways a properly designed and managed marina can prevent any negative impacts. The Florida Clean Marina Program works to create partnerships with local communities and businesses to protect natural resources, promote economic growth and serve the boating community.

### 1. Marina Best Management Practices

[Marina Best Management Practices](#) (BMPs) address critical environmental issues such as sensitive habitats, waste management, stormwater control, spill prevention and emergency preparedness. Facilities can incorporate Clean and Resilient Marina BMPs by increased planning and by fortifying structures, thereby strengthening the facility's ability to withstand natural and human-made disasters. A wealth of information on Clean and Resilient strategies is available through online resource programs.

The Gulf of Mexico Alliance created a [Clean and Resilient Marina guidebook and policy guide](#) to promote environmentally responsible operations and Clean and Resilient BMPs at marinas in the Gulf region. The National Oceanic and Atmospheric Administration (NOAA) additionally distributes resources for [hurricane safety and preparedness](#), which include emergency planning, evacuation, and recovery materials. For steps on how to prepare your marina for a hurricane, the Federal Emergency Management Agency has prepared a [Hurricane Seasonal Preparedness Digital Toolkit](#).

## 2. Select the proper location

Marinas need a calm area for safe operation. Selecting locations that are in a cove, near sheltering barrier islands or nestled within the natural environment can offer many resiliency benefits in storm events. While quieter waters allow nonpoint source pollutants to settle on the bay bottom, it is an opportunity for the marina facility to incorporate environmental best practices to limit and to intercept pollutants before they enter the water.

## 3. Use an eco-friendly design

Maintain native terrestrial and aquatic plants wherever possible. Rather than remove native vegetation, there are several reasons to keep at least some plants in place. Native plants need little to no watering or fertilizers. Plants filter pollutants from the land and water, provide shelter and food for wildlife and release valuable oxygen. Plants also help keep soil in place both on land and in the water, reducing damaging erosion. The following guides may assist marinas in choosing Florida native plants for landscaping and buffering areas.

UF/IFAS' Florida-Friendly Landscaping™ <https://ffl.ifas.ufl.edu/>

WaterWise: South Florida Landscapes - Plant Guide <https://www.sfwmd.gov/document/waterwise-south-florida-landscapes-plant-guide>

A design that includes riparian buffers, protected shorelines and permeable parking areas separated from the water's edge will limit the amount of pollution-laden runoff that enters the waterway.

## 4. Have designated areas for maintenance

Repair operations can include the release of potentially harmful waste if not prevented. Whether it is fuel, oil, lubricants, or the paint on the hull, when these materials enter water, they can impact fish, plant life and other aquatic species. Having a designated maintenance area away from the water, with a waste containment system, allows any releases to be collected and disposed of properly. The Marina [Best Management Practices](#) guide offers tips on service and repair operations, hull work and managing hazardous wastes.

## 5. Have a designated fueling area operated by trained staff

Boats need fuel, and marinas often supply both diesel and gasoline. Although it is impossible to conduct all a marina's refueling operations in off-the-water locations, a designated fueling area can be run in an eco-friendly manner. Well-maintained supply lines and equipment will reduce potential leaks, and trained staff can conduct refueling without unnecessary spills. If a spill does occur, having the proper clean-up and containment equipment on-site and acting quickly can lessen the environmental impact. For more tips on petroleum management, see [Best Management Practices](#)

## 6. Install and maintain pumpout facilities

The Florida Clean Vessel Act (CVA) Pumpout Grant Program can fund up to 75% of eligible project costs relating to site preparation, equipment purchase, installation, operations, maintenance, signage, sewage hauling and educational outreach. The grant application can be downloaded here: [Clean Vessel Act Pumpout Grant application](#). The CVA grant program is a great way to upgrade your marina's waste-handling facilities and provide customers with a quick and convenient option for proper disposal.

Visit Florida SeaGrant's [Dockmaster Corner](#) to learn more about the different types of pumpout systems and find tips on how to properly maintain them.

## Free Pumpout Nav App

Florida boaters now have access to the free interactive mobile app, Pumpout Nav, available on [iOS](#) and [Android](#), to locate over 250 publicly available pumpouts, portable toilet dump stations and mobile pumpout vessels throughout the state. By having a publicly available pumpout or portable toilet dump station, your facility can be listed in the app, which could help drive more business your way. Help spread the word about Pumpout Nav. With these marketing materials you can:

- Use our [digital flyer](#) or [print flyer](#) on your webpage or community bulletin boards.
- Use our [social media toolkit](#) to post about the app.
- Use our [press release](#) for your newsletter.

**Volunteer Opportunities:** If you are interested in volunteering at outreach events or for other projects, please contact the Florida Department of Environmental Protection's Clean Boating Program at 850-245-2847.

A well-maintained boat or marina, operated in an eco-friendly way, can reduce its contribution to pollution. In the case of a marina, operators can also help manage other nonpoint source pollutants. This can make a marina and the boats it supports beneficial for the environment and a boost to the local economy.

## ***About the Authors***

**Thomas J. Burrell** is an avid outdoorsman with a passion for hunting, fishing, and boating. Growing up in rural Pennsylvania, he developed a love for spending time in nature. After time in the U.S. Marine Corps and Coast Guard, which allowed him to enjoy hunting and fishing around the world, he turned his passion into a career as a conservation officer. He now spends his time introducing his son to the same outdoor wonders he enjoyed in his youth.

[Florida Department of Environmental Protection Clean Boating Program](#) promotes a clean marine environment by building partnerships with marinas and educating the community about the importance of keeping Florida waters clean to reduce water pollution and improve water quality.

[Florida SeaGrant](#) is a university-based program that supports research, education and extension to conserve coastal resources for residents and visitors and enhance economic opportunities for the people of Florida. Florida Sea Grant envisions a future where people use coastal and marine resources in ways that capture the economic and social benefits they offer, while preserving their quality and abundance for future generations.

## ***About Florida Ocean Alliance***

The Florida Ocean Alliance is Florida's leading non-partisan, science-driven, private-public sector partnership comprising leaders from industry, academia, and nonprofits. The Alliance focuses on innovative thinking, planning and implementation actions. Our goal is to protect and restore Florida's ocean and coastal assets, while promoting responsible economic growth, diversification and job creation within Florida's ocean and coastal industry clusters. The Florida Ocean Alliance has been serving Florida as a trusted, independent leadership alliance for more than 20 years. Learn more at [floridaoceanalliance.org](http://floridaoceanalliance.org). For permission to reprint this article, <mailto:mlord.foa@gmail.com>.