

# CLEAN MARINAS

HELP PROTECT FLORIDA'S COASTLINE



By Florida Department of Environmental Protection

More than 2,000 marinas provide services to the hundreds of thousands of boaters who use Florida's waters every day. Year-round boating helps fuel Florida's economic engine, but it also is stressful for fragile marine and aquatic ecosystems. A marina that safeguards coastal water quality is protecting its own livelihood.

Florida's Clean Marina Program fosters environmental stewardship among marinas, boatyards and marine retailers. The voluntary program, administered by the Florida Department of Environmental Protection (FDEP), promotes business practices beyond regulatory requirements that protect natural resources.

The Clean Marina program addresses environmental issues such as waste management and spill prevention. Ongoing assistance is offered in implementing best management practices to reduce pollution, as well as waste disposal fees and potential clean-up costs.

The program workbook covers all aspects of pollution reduction and elimination, beginning with having complete plans in place for dealing with emergencies such as fires, oil spills and natural disasters. Written action plans, accessible emergency equipment, and well-ordered petroleum and chemical storage areas are critical in limiting property damage and pollutant release.

Safe management of petroleum products is especially important. Fueling operations, engine maintenance and bilge pumping can cause small, incremental discharges that add up to significant impacts. One gallon of fuel can contaminate more than 1 million gallons of water.

Pamphlets and signs can educate boat owners about what precautions should be taken and possible liabilities for cleanup costs. Convenient disposal and/or recycling sites for used oil and fuel, used oil filters and other petroleum-contaminated wastes are important services that many Clean Marinas offer the boating public.

Marinas also are encouraged to set clear policies for employees and patrons regarding boat maintenance and repair, another potentially significant source of pollution.

When possible, boats should be removed from the water and any cleaning performed where debris can be captured for safe disposal. Wash and rinse water should be directed to a recycling system or a wastewater treatment facility, not to a storm drain.

Marinas and boatyards generate multiple forms of waste, and managing these materials can be complex. Providing trash and recycling bins equipped with wind- and wildlife-proof covers is a simple first step. Daily litter patrols should include netting debris out of the water.

Hazardous waste, including refrigerants, solvent-soaked rags, antifreeze and used batteries, is a common byproduct at many marinas and boatyards. Federal, state and local regulations apply to the handling of these materials.

A special storage unit for liquid and hazardous wastes can limit spills and other emergencies. When unlocked, the unit should be staffed by an employee trained to segregate and store waste. Spill control materials and empty containers should be handy for emergency clean-ups.

Major hull and topside work performed inside a building helps contain contaminants, reduce wind dispersal, and minimize rain and runoff exposure. Do-it-yourselfers and contractors performing hull work should be required to use tarps and vacuum sweepers, along with additional measures.

A low-emissions policy encourages boat owners to perform regular engine maintenance. In turn, employees and patrons should know how to manage the waste generated by engine work. Designated engine-repair areas and labeled disposal bins can help contain hazardous waste.

Overboard discharges of sewage are a serious threat to human and environmental health. Raw sewage discharges are illegal in all fresh waters and within coastal water limits. Boaters can be reluctant to use poorly maintained dockside facilities, so it is critical that marinas provide high-quality solutions to this problem.

Marinas can make sure dockside pumpouts and waste dump receptacles

are clean and in good working order. Pumpout facilities are especially important in marinas with live-aboard tenants.



The Department's Office of Sustainable Initiatives administers Clean Vessel Act grants for pumpout facilities, pumpout vessels and boater education. The program covers 75 percent of the cost of approved projects.

Applicants to the Clean Marina, Boatyard and Retailer programs receive a workbook and a copy of the Florida Sea Grants Panic File for emergency planning. Upon designation, a clean facility is given a flag and permission to use the program's logo, which sends a strong signal to the community that the facility is a good environmental steward. Boaters are encouraged to take the Clean Boater Pledge and adopt environmentally-friendly practices such as using bilge socks and fueling collars. To learn more, visit [www.dep.state.fl.us/cleanmarina/boater/default.htm](http://www.dep.state.fl.us/cleanmarina/boater/default.htm).

Building on the success of Clean Marina programs, the Gulf of Mexico Alliance created the Clean and Resilient Marina Initiative. The Alliance is a five-state partnership with a regional approach to improving the health of the Gulf Coast. A resilient marina is prepared to protect human life and safety, limit property damage, and resume normal operations as quickly as possible after a natural disaster.

There are many ways to work with the environment to make either a new or existing marina more resilient to the stresses of severe weather. Registered engineers with marine experience should guide the process of building a new marina or retrofitting an existing one. One of the first steps would be to identify the specifics of soil type and stability as well as the maximum potential forces of wind and water.

Design and construction of any marina is complex. Hurricanes and tropical storms can bring storm surge, high winds and erosion. Ideally, marinas should be sited in sheltered harbors requiring little dredging, filling or breakwater construction. Siting should accommodate natural navigation channels, and landside construction focused in upland areas that are less prone to flooding.

Selecting the many materials that make up a marina is a challenging process. Considerations include the resilience and lifespan of materials for water- and land-based construction.

Emergency preparedness is already part of the Clean Marina Program. The Resilient Marina program focuses more explicitly on natural hazards such as tornadoes and hurricanes. Planning and practice must occur before a storm threatens. It's a year-round effort involving regular facility maintenance, staff training and clear expectations for boat owners. A marina evacuation plan is an essential component of emergency preparedness.

The size and number of boats will determine how long evacuations will take. Removing boats from the water is the surest strategy for limiting property damage in a severe storm. Plans should be in place for securing boats in dry and wet slips, with nearby safe harbors identified and mapped. The *Clean and*

*Resilient Marina Guidebook* offers tie-down and anchoring strategies.

To learn more about the Resilient Marina program, visit [www.gulfofmexicoalliance.org/2013/05/gomas-clean-resilient-marina-initiative/](http://www.gulfofmexicoalliance.org/2013/05/gomas-clean-resilient-marina-initiative/).

Severe weather tests the strength of coastline businesses and communities. Clean Marinas protect Florida's economy and the state's future. The Department is fully committed to protecting both the environment and the livelihood of those who invest their time and resources to assist us in our efforts. Without partners in Florida's local communities, the difficulty of our task would be far beyond what it is today. ■



Since 2000, FDEP's Clean Marina Programs have been designed to bring awareness to marine facilities and boaters regarding environmentally-friendly practices intended to protect and preserve Florida's natural environment. The continued success of the state's \$56 billion tourism industry, its \$14 billion marine industry and \$6.6 billion fishing industry rely on Florida's waterways and coastlines being clean. The program recognizes facilities engaging in environmentally-friendly practices, beyond regulatory requirements.



Resilient Marina Initiative is a five-state partnership with a regional approach to improving the health of the Gulf Coast.