

HB 57/SB 444 CLEAN OCEANS ACT FACT SHEET FOR LEGISLATORS

CRS Report for Congress: Cruise Ship Pollution: Background, Law & Regulations, and Key Issues 2/18/05
<http://www.ncseonline.org/NLE/CRSreports/05feb/RL32450.pdf>

“Those wastes, if not properly treated and disposed of, can pose risks to human health, welfare, and the environment.”

“Cruise ships generate a number of waste streams that can result in discharges to the marine environment, including sewage, graywater, hazardous wastes, oily bilge water, ballast water, and solid waste.”

“However, particular types of wastes, such as sewage, graywater, and solid waste, may be of greater concern for cruise ships relative to other seagoing vessels, because of the large numbers of passengers and crew that cruise ships carry and the large volumes of wastes that they produce. Further, because cruise ships tend to concentrate their activities in specific coastal areas and visit the same ports repeatedly (especially Florida, California, New York, Galveston, Seattle, and the waters of Alaska), their cumulative impact on a local scale could be significant, as can impacts of individual large-volume releases (either accidental or intentional).”

(GAO Report to Congressional Requesters) Marine Pollution: Progress Made to Reduce Marine Pollution by Cruise Ships, but Important Issues Remain <http://www.gao.gov/archive/2000/rc00048.pdf>

“The Coast Guard inspectors we interviewed who conduct cruise ship inspections said they rarely have time to closely examine pollution prevention equipment and would have, for example, little time to lift floor plates and closely examine the piping for the oily water separator¹¹ to ensure that it is properly routed.”

“Officials from the Coast Guard, Justice, and the Center for Marine Conservation (CMC) acknowledged that the cruise ship industry has made progress in addressing illegal discharge issues. However, they expressed concern about emerging issues, most of which are related to the purity of wastewater discharged from these ships.”

“CMC officials said that the annual discharge of millions of gallons of gray water and black water may harm ecologically sensitive areas, affecting such things as the long-term vitality of coral reefs.”

Council on Environmental Quality, Committee On Ocean Policy <http://ocean.ceq.gov/>

“We have a responsibility, a solemn responsibility, to be good stewards of the oceans and the creatures who inhabit them. In 2004, my administration released an ocean action plan to promote an ethic of responsible use and stewardship for our oceans and coastal resources.” – President Bush

Marine Pollution in the United States (Pew Commission)

http://www.pewtrusts.org/pdf/env_pew_oceans_pollution.pdf

“Overenrichment by plant nutrients, particularly nitrogen, has emerged as the most pervasive pollution risk for living resources and biodiversity in coastal ocean ecosystems. Many of the nation’s coastal environments exhibit symptoms of overenrichment, including algal blooms (some of which may be toxic), loss of seagrasses and coral reefs, and serious oxygen depletion. Consequences include reduced production of valuable fisheries, threats to biodiversity on regional scales, diminished ecosystem services, and less resilient ecosystems.”

“Recognizing inherent uncertainties, policies, and management regimes must also be precautionary and adaptive. As stated in the United Nations’ Rio Declaration, the precautionary principle requires that: “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”

“Effective ocean resource policies and management regimes must be integrated.”

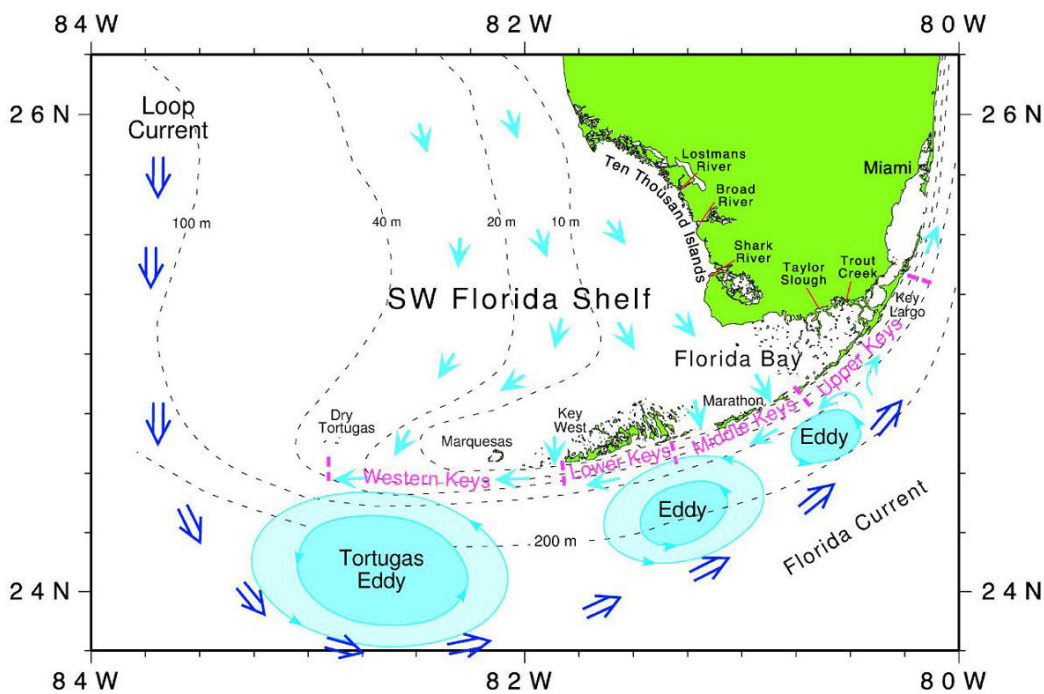
An Ocean Blueprint for the 21st Century Final Report of the U.S. Commission on Ocean Policy http://www.oceancommission.gov/documents/full_color_rpt/16_chapter16.pdf

“Every day, vessels ranging from large cruise ships to small recreational boats discharge wastes into coastal waters. The waste streams from recreational vessels primarily contain sewage, while cruise ships discharge both sewage and toxic substances. These wastes, if not properly disposed of and treated, can be a significant source of pathogens and nutrients with the potential to threaten human health and damage shellfish beds, coral reefs, and other aquatic life. According to the U.S. Environmental Protection Agency (EPA), the amount of bacterial pollution in the discharge of untreated sewage from just one recreational boat is equivalent to the amount in the treated sewage of 10,000 people during a similar time period.”

“An Alaskan study conducted in 2000 found that most cruise ship MSDs failed to treat sewage to levels necessary to meet federal standards, despite claims by the manufacturers.”

Deep Trouble: Peril in the Gulf (video) <http://www.bonitadailynews.com/deeptrouble/video/vid2.htm>

Gulf Coast Map of Florida Currents – Displays how Gulf Coast vessel discharges would move south into “NO Discharge Zones” in Florida Keys. <http://oceancurrents.rsmas.miami.edu/atlantic/florida.html>



Water Quality Concerns In the Florida Keys: Sources, Effects & Solutions (Sept 99) http://floridakeys.noaa.gov/research_monitoring/wapp_white_paper.pdf

“This is less a matter of needing scientific evidence and more a matter of applying common sense.”-Brian Keller, NOAA Sanctuary Biologist

“18. Sewage discharges from vessels degrade the water quality of marinas and other confined water anchorages.”

“25. The costs of water quality improvements are a small fraction of the long term asset value that natural resources, such as reefs, hard bottoms, and seagrasses, provide to the economy of the Florida Keys.”

“If sources of nutrient enrichment continue unabated, it is likely that the ecological balance of nearshore communities of the Keys will be changed. Changes in the structure and function of nearshore communities could result in stresses to other components of the Keys ecosystem.”

“Natural resources have market values and non-market values. Market values are the prices of commodities on the open market (e.g., an acre of land). Effects of habitat loss and other non-market values may take years to become apparent, but these values **have long lasting socio-economic effects.**”

“Cost of water quality improvements (assume \$1 billion) are only 5.5% of the long term asset value of the natural resource (**\$18.3 billion**). Clearly, the costs of water quality protection and improvement measures are a relatively small proportion of the non-market economic user value of the resources they are designed to protect.”

RECREATIONAL VESSELS ALREADY IMPLEMENT NO DISCHARGE

http://www.reefrelief.org/pdf/NDZ_Sign.pdf

**PUMP IT.
DON'T DUMP IT.**

**ALL STATE WATERS OF THE FLORIDA KEYS
NATIONAL MARINE SANCTUARY ARE A
NO DISCHARGE ZONE**

The No Discharge Zone designation prohibits discharging sewage into all State waters of the Florida Keys National Marine Sanctuary. This includes treated sewage from marine sanitation devices but does not apply to gray water from showers or sinks, only sewage. Through-hull fittings for disposal of sewage should be closed and appropriate measures to dispose of sewage implemented.

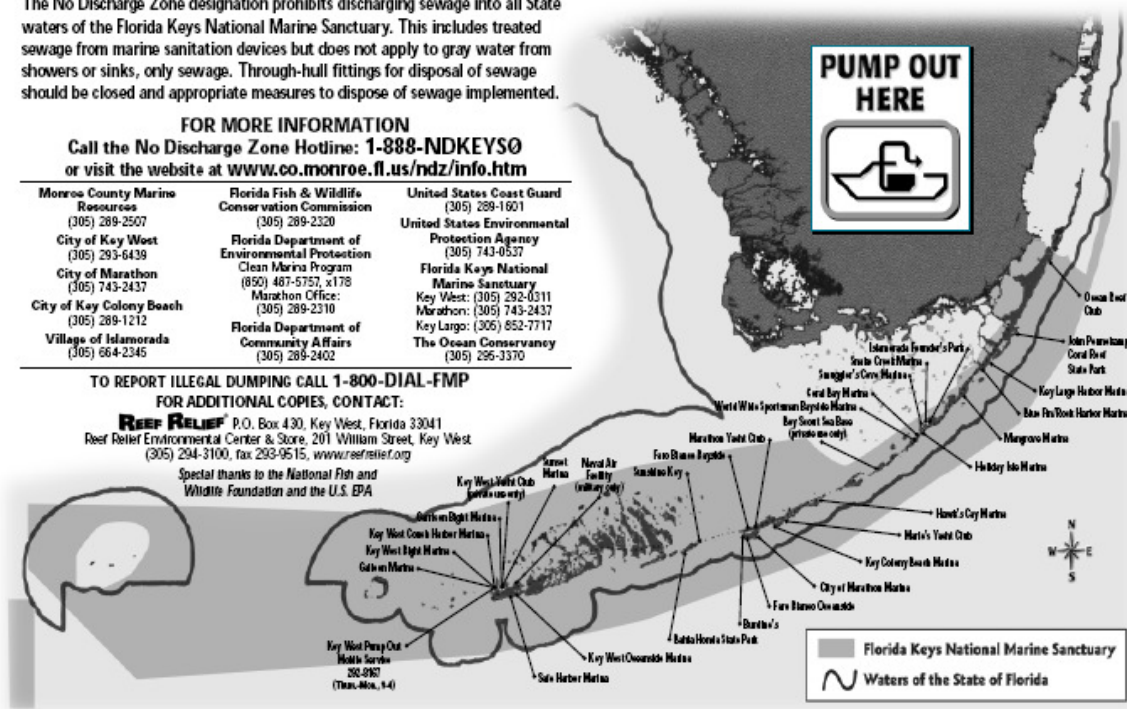
**FOR MORE INFORMATION
Call the No Discharge Zone Hotline: 1-888-NDKEYS0
or visit the website at www.co.monroe.fl.us/ndz/info.htm**

Monroe County Marine Resources (305) 289-2507	Florida Fish & Wildlife Conservation Commission (305) 289-2320	United States Coast Guard (305) 289-1601
City of Key West (305) 293-6439	Florida Department of Environmental Protection Clean Marina Program (850) 487-5757, x178	United States Environmental Protection Agency (305) 743-0537
City of Marathon (305) 743-2437	Marathon Office: (305) 289-2310	Florida Keys National Marine Sanctuary Key West: (305) 292-0311 Marathon: (305) 743-2437 Key Largo: (305) 852-7717
City of Key Colony Beach (305) 289-1212	Florida Department of Community Affairs (305) 289-2402	The Ocean Conservancy (305) 285-3370
Village of Islamorada (305) 664-2345		

**TO REPORT ILLEGAL DUMPING CALL 1-800-DIAL-FMP
FOR ADDITIONAL COPIES, CONTACT:**

REEF RELIEF P.O. Box 430, Key West, Florida 33041
Reef Relief Environmental Center & Store, 201 William Street, Key West
(305) 294-3100, fax 293-9515, www.reefrelief.org

Special thanks to the National Fish and Wildlife Foundation and the U.S. EPA



Discharges from Vessels: A Legislative Report Required By Resolve 2003, Ch 79 Maine Dept. of Environmental Protection; Nov. 1 2003

Page 6,7 Section 2, Potential impacts, Pathogens are differently susceptible to treatment technologies some surviving all but the most aggressive treatment regimes, which may or may not be available on board ships. Waste discharged into the water can be taken up by fish or shellfish and transmitted to other hosts, including humans.

Treatment systems have varying effectiveness even when properly operated and maintained, and when not monitored closely they often provide unsatisfactory treatment greatly exceeding the federal discharge standards.

Page 7 Sect. 2 Comparing the treatment and monitoring on board vessels to similarly sized systems on land provides a dramatic contrast. Significantly, the MSD treatment standards are much less strict than those applied to land based discharges, particularly in the case of bacteria. Therefore, even vessels that have functioning MSD treatment systems are discharging treated waste water that is significantly more polluted than that coming from a municipal system....monitoring done in Alaska demonstrated that most small commercial passenger vessels are not meeting MSD standards and large commercial passenger vessels meet the standards only sporadically. Similar in constituents to blackwater, graywater can contain high levels of bacteria, nutrients and cleaning agents.....Unlike blackwater, current federal regulations do not require treatment or containment of graywater through use of a marine sanitation device. This means that all gray water and its pollutants go directly overboard. In contrast, graywater on land is subject to the same level of treatment as blackwater.

National Library of Medicine and the National Institutes of Health: Waterborne Virus Diseases

...With the introduction of sanitary living conditions populations are not exposed at an early age to virus infections and so do not acquire the immunity that would offer them protection in later life, with the result that a chance exposure to a virus through the water or food may be much more serious than it would be for someone who had acquired early immunity. Consequently the detection of enteric and other viruses in water and the epidemiology of the diseases is crucial.

US Environmental Agency, Ocean Regulatory Programs, Vessel Sewage Discharges And No Discharge Zones

Refers to partially treated human waste and fecal coliform bacteria, virus, protozoa's and other disease carrying pathogens and its human health risks. It also discusses the impact on coral reef systems and the overstimulation of aquatic plants such as algae blooms.

Regulations for the Prevention of Pollution by Sewage from Ships-annex IV of the International Convention for the Prevention of Pollution from Ships 1973/78 (MARPOL 73/78)

Page 2 Sect 1.7 Marine sewage impacts on human health.....Pathogenic bacteria can survive in the sea for days and weeks: viruses can survive in the water - or in fish and shellfish for months.

Code of federal Regulations 33 parts 125 to 199:

Summary: The USCG Regs CFR 33 beginning on page 519 explains MSD's. They allow suspended solids, fecal coliform and do not even account for any other disease pathogens such as virus, protozoa, parasites or other bacteria. They also do not address graywater which also contains these same pathogens. Shoreside treatment systems do process, test for and eliminate most if not all of these. Also, most FL facilities are either already or in the planning stages of elimination of their clean effluent via lawn/crop watering or other ecologically accepted standards.