

Marina Facilities Management Plan

2407 N. Roosevelt Blvd.

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I. INTRODUCTION

Dr. Richard C. Walker owns a boat basin, and the submerged lands therein, which is located in Key West, Florida, at 2407 North Roosevelt Boulevard. Within the boat basin will be a docking facility which will be exclusively provide wet-slips for live-aboard vessels. Vessels using the facility will be restricted to a maximum length of 45-feet and a maximum draft of 3.0-feet. The vessel restrictions will avoid and/or minimize impacts to marine benthic resources. It is anticipated that many vessels using the facility will be smaller than the maximum size.

The docking facility will include standard utilities and a vacuum wastewater collection system that is connected to the Key West sanitary wastewater sewer system. The facility will not have fuel sales or vessel maintenance facilities.

This facility management plan provides best management practices (“BMPs”) for the operation of the facility regarding areas of operation which may affect water quality in the boat basin. Additionally, this plan provides an education program targeted toward the users of the facility, as well as an educational sign plan to provide information regarding the Florida Keys National Marine Sanctuary and manatees.

II. EDUCATION PROGRAM

In order to implement long-term solutions to upgrading environmental conditions at the docking facility, a series of strategies and actions will be developed. This education program will involve the users of the facility with focus on their role in the long-term health of the docking facility, water quality, and the surrounding area. This continuing program will be implemented in the form of an orientation session for users of the facility, in a manner that will ultimately educate them and offer "ownership" in the program.

The education program will include, but is not limited to, the following:

- An overview of the FDEP permit conditions and regulations governing water quality and habitat protection at the docking facility and surrounding area.
- An explanation of the consequences of bottom cleaning in the basin, especially related to bottom paint.
- Explain the value of using environmentally-friendly cleaning methods and products and eliminate the use of hard abrasives or chemical treatments.
- Explanation of the value of floating debris collection and recycling efforts.

- Information and the long-term impacts of fuel spilling into the water.
- Explain methods to reduce or eliminate oil content in bilge water.
- Provide information regarding proper handling and disposal of used oil products.
- Inform all boaters regarding sanitary sewer use and system requirements.
- Demonstrate the proper disposal of hazardous wastes such as paint, old gasoline, left over chemicals, out of date flares and paint chips.
- Discuss compliance concerns, non-compliance trends and provide refresher discussions on areas of consistent non-compliance.
- Review all elements of the education program and discuss modifications that would make implementation of this management plan more effective.

Education - Conduct annual workshops for staff regarding implementation, compliance and monitoring of this management plan. Tailor the education program to include methods and procedures for executing the BMPs listed in this management plan.

In addition, educational signs relating to the Florida Keys National Marine Sanctuary and “Florida Friendly Boating” will be installed as shown on the attached sign plan (Exhibit 1). The purpose of the signs is to educate boaters regarding the Sanctuary and to raise awareness to remind boaters to watch out for manatees, sea turtles, and other marine wildlife.

Marina Staff and Personnel Education:

The Marina’s annual training workshops for personnel, contracted services and employees include implementation, compliance and monitoring of the Operations and Maintenance Plan. The topics discussed during training include:

- An overview of the Florida Department of Environmental Protection (FDEP), Army Corps of Engineers and all other applicable agencies, permit conditions and regulations governing water quality and habitat protection in the Marina and surrounding area.
- An explanation of the potential sources of contaminants from vessels and how they affect water quality.
- A synopsis of the County’s recycling program, to include designated areas for disposal, proper techniques regarding handling of batteries over the water surface and the docks. Batteries shall be taken off the Marina property by the vessel owner or contractor to be disposed of in an appropriate manner.
- The prohibition on the use of hard abrasives or chemical treatment.

- An explanation of the value of floating debris collection and recycling efforts.
- Information on the correct procedures for fuel spill containment.
- An explanation of methods to reduce or eliminate oil content in bilge water.
- Information regarding proper handling and disposal of used oil products.
- An explanation of the value of using environmentally friendly cleaning methods and products.
- Instruction on the proper disposal procedure for hazardous wastes such as old gasoline left over chemicals, out of date flares, etc.
- Discussion of compliance concerns, non-compliance trends and provide refresher discussions on areas of consistent non-compliance.
- Review of all elements of the education program and discuss modifications that would make implementation of the Plan more effective.
- Overview of the personal safety practices of the Marina.
- Implementation of operation practices to maintain an environmentally friendly marina.
- Education of Marina Staff on the best means to manage on site fire protection. The Key West Fire Department provides educational guidance to the Marina and has a fire boat berthed at the adjacent City Marina.

III. ENFORCEMENT

RESPONSIBILITY -It will be the responsibility of Dr. Richard C. Walker, or any successor in title, to protect and maintain water quality standards at the docking facility. It shall be the responsibility of Dr. Walker to identify pollution sources from within the facility that may result in water quality violations and to take appropriate actions to prevent such occurrences.

NOTIFICATION -It shall be Dr. Walker's responsibility to monitor all boaters using the facility. Upon observation of any non-compliance with the provisions of this Management Plan, Dr. Walker shall serve a written and/or verbal "Caution" statement to the boater, informing him of the infraction. A second infraction shall result in a written "Warning" notice, informing the boater of a second infraction. A third infraction will result in the immediate termination of the slip agreement and the boater will be given one hour to remove the vessel from the facility. Infractions do not have to be identical and separate notices of violations are cumulative. All Caution, Warning and termination Notices shall be documented in a Daily Log, including the reason for the infraction.

VIOLATIONS – Dr. Walker reserves the right to identify any offender causing a violation within the facility, and to name said offender in any enforcement action taken by any regulatory agency. Dr. Walker acknowledges that he has the duty to monitor the docking facility patrons to ensure their compliance with this Management Plan and with the conditions and requirements.

IV. MODIFICATIONS

It is the intent of both the FDEP and Dr. Walker to monitor, assess and implement changes to this Management Plan as necessary to comply with all FDEP Permits and state water quality standards. Changes to the Management Plan can be implemented through a request to FDEP, and after a final decision has been reached and a written agreement between Dr. Walker and the FDEP has been made.

V. PETROLEUM SPILLS

Issue: Petroleum spills cause pollution, damage the marine environment and are costly to clean up. Lack of proper containment and a fuel spill response plan can critically delay containing a discharge.

GOAL: Avoid all petroleum spills at the facility.

BEST MANAGEMENT PRACTICES:

- No fueling shall occur at the docking facility. However, spills may still occur. Spills, no matter how small, need to be cleaned properly.
- Fuel spill containers with absorbent pads and containment bags will be located in an accessible locker at a central location on the dock for immediate access by boaters. The locker will be clearly marked for visibility and assure the container remains unlocked and accessible. Provide education and new product updates to employees and patrons when available/appropriate.
- All spills shall be reported to the facility manager immediately.
- In the case of a spill or discharge of a hazardous substance this Marina contracts with Coffin Marine Services for emergency response. Coffin Marine Services is USCG approved for spill containment and remediation.
- Coffin Marine Services and the Marina Operations Manager are the First Responders to all fuel and oil spills within the Marina's waterways.
- The Clean-up Contractor for major spills is Coffin Marine Services; Coffin Marine Services and Marina personnel accomplish all other minor clean-up and proper disposal.
- The Marina Operations Manager generates a Fuel Spill Incident Report and is responsible for reporting all fuel spills to the following agencies: State of Florida (State Warning Point, 800-320-0519), U.S. Coast Guard (National Response Center, 800-424-8802), U.S. Coastguard (Marine Safety Office Marathon, Florida, (305-743-1945) and Florida Fish and Wildlife Conservation Commission (305-289-2320).

Solid Waste Disposal

The facility provides solid waste receptacles for the disposal of general refuse generated by the boaters. These receptacles are located in the upland adjacent to parking lot and have closing lids to eliminate spillage that could enter the waterway. For large bulk waste boaters are to use the large dumpsters located in the parking lot of the at the facility.

VI. BILGE WATER

Issue: Oil and grease from the operation and maintenance of inboard engines are sources of petroleum in bilges. Discharged bilge water is a source of pollution in marinas.

GOAL: Minimize the occurrences of contaminated bilge water and discharges.

BEST MANAGEMENT PRACTICES:

1. The docking facility prohibits the discharge of bilge water materials. If your bilge is full, please report to a local marina for proper cleaning and disposal.
2. Educate guest boaters on the importance of maintaining bilge water-free of oils and associated greases. Encourage boaters to conduct inspections of engine components and to repair leaks and eliminate spillage.
3. Encourage use of absorbent pads to maintain bilges oil-free. Encourage the use of drip pans with absorbent pads while draining oil from the bilge. Encourage boaters to keep all engines well- tuned; regularly check seals, gaskets, hoses and connections for leaks and drips.
4. "Flag" and immediately report observations of petroleum products to owners of vessels from which the discharge originates. Require immediate inspection of the bilge by the owner to determine if oil is leaking into the bilge. Provide contacts of names and numbers for a secure vessel to transport saturated pads to a suitable upland disposal site. If the boat owners are absent, the boat will be surrounded by containment booms and the owner notified of the problem. All cleanup will be at the expense of the boat owner. A limited supply of pads should be kept in the fuel spill container for sale to the boat owners.

VII. ENGINE REPAIR AND MAINTENANCE

ISSUE: Engine service and repair operations generate waste which, when handled incorrectly, can cause human hazards, endanger the environment and be costly to clean up.

GOAL: Avoid in-water vessel or engine repair at the facility.

BEST MANAGEMENT PRACTICES: In-water maintenance is prohibited at the docking facility. Maintenance shall be confined to the inner/dry portion of the vessel. No upland boat repairs or maintenance allowed. Please have your boat serviced at a local authorized marina.

VIII. BOAT CLEANING

ISSUE: Hard abrasives, such as stainless steel wool or similar cleaning pads, may drive chromium treatments into the water column during cleaning of boat bright work. Use of various soaps, detergents and cleaners are detrimental to the environment and degrade water quality. Excess nutrients can degrade water quality by promoting nuisance aquatic plant growth and reducing dissolved oxygen levels needed for aquatic life. Products used to wash boat hulls and decks often contain toxic ingredients such as ammonia, sodium hypochlorite, chlorinated solvents, petroleum distillates or lye. Additionally, scrubbing antifouling paints can release toxic metals into the water, which may also contaminate marina bottom sediments. The removal of contaminated sediments can be very costly.

GOAL: For both in-water and out-of-water boat cleaning, use cleaning methods that prevent or contain the release of pollutants to surface waters.

1. When possible, the boat is to be removed from the water and cleaned in an approved boat washing area, there are some local marinas that offer this service (both boat removal service and cleaning service).
2. In-water pressure washing for boat cleaning is prohibited at the facility.
3. The facility requires the use of approved biodegradable boat cleaning materials for deck cleaning and encourages you to use only the amount necessary to clean the boat, as well as using the minimum amount of water. No pressure washing of boats is allowed.
4. The dock facility manager shall monitor for boat cleaning at the docking facility daily and provide non-compliant boaters with information from the Management Plan, including emphasis for non-compliant boaters.

IX. ORGANIC ACCUMULATIONS: Biological Oxygen Demand (BOD)

ISSUE: Sea grasses, leaf litter, and other organic detritus and manmade products can float into the boat basin and settle to the bottom. The decomposing process extracts oxygen from the

water column, driving dissolved oxygen to lower levels, possibly below state water quality standards.

BEST MANAGEMENT PRACTICES: The facility manager shall be responsible for the collection of floating debris from the marina on an as-needed basis. Organic materials will be deposited in an upland composting pile or designated vegetation disposal container isolated from water of the state and manmade products will be recycled.

X. SEWAGE PUMPOUT

ISSUE: Overboard discharges of domestic sewage from marine heads or holding tanks, including gray water from showers and sinks, contribute significantly to water quality degradation and introduce dangerous pathogens into the water. Poorly maintained pumpouts, pumpouts in inaccessible locations, and waste dump receptacles limit pumpout use and encourage the improper disposal of sanitary wastes.

GOAL: Avoid an event whereby wastewater effluent is discharged into waters within the facility. Ensure that all vessels connected to the hard-line connected wastewater collection system are secure and properly functioning. Require the proper use of sewage pumpout facilities by boaters. Ensure that sewage pumpout facilities and waste dump receptacles are maintained and in good operational and sanitary condition to encourage their use.

BEST MANAGEMENT PRACTICES: All vessels moored in the facility will be connected to the hard-line connected wastewater collection system in the marina by marina staff. Individual vessel owners will not be permitted to make connections; only trained marina staff will make system to vessel connections. The connections to the boat slips are via a heat fused HDPE poly force main pipe system that is connected to the City of Key West sanitary sewer collection system. This configuration eliminated holding tanks and over-water pumpout connections that pose a hazard to the marine environment.

The docking facility strictly prohibits the discharge of pumpout materials into area waters. Any discharge into the boat basin is a violation of the Management Plan and shall constitute a violation and require enforcement action. The facility manager may have the boat owner's right to dock at the facility revoked and the owner may have to pay a fine and/or penalty assessed by the State. The boat owner will be responsible for all cost associated with the cleanup operations, including the costs of cleanup supplies, equipment, and labor costs. Further, the boat owner will be responsible for paying any attorney fees or consultant fees incurred by the docking facility as a result of the sewage discharge. All facility staff will be trained regarding the potential for a sewage spill and measures that need to be taken in the event of one occurring.

WASTEWATER SPILL CONTINGENCY PLAN:

In the unlikely event of a wastewater spill from a vessel or the collection system, the following measures will be implemented:

- On-site floating boom will be deployed immediately by marina staff;
- Coffin Marine, the facility emergency response contractor, will be notified immediately and deployed to the site;
- Spill containment and clean-up will be implemented;
- The City of Key West Utilities Department and the Florida Department of Health will be notified of the event and all remediation efforts immediately;

XI. Project Information

Facility Information

Facility Name	Richard C. Walker Marina (“Walker Marina”)
Physical Address	2407 North Roosevelt Boulevard, Key West, Florida 33040
Mailing Address	2407 North Roosevelt Boulevard, Key West, Florida 33040
Phone Number	(305) 294-1068

Navigational Information

Latitude: 24° 33' 49.10"	Longitude: 81° 46' 35.80"	NOAA CHART # 11441
Reported Depth: Varies -4 to -6 feet MLW	Approach: -4 to -6 feet MLW	Tidal Range: 1.0 foot

Marina Facilities

Total # of slips	# of slips on sovereignty submerged lands	# of slips on private submerged lands	# of slips open to the public	# of live aboard slips
74	0	74	74	74

Dock Type	Fixed
Sewage pump-out	Vacuum sanitary sewer connected to the Key West municipal sewer system
Dockside Power	120 V municipal supply

Docking Facility Boat Slip Restrictions

Boat Slip #	Type of Vessel	Vessel Length	Vessel Draft
1-74	power boats or sail boats	45' (max)	3.0' (max)

Exhibit 1 – Sign Plan



SITE DATA	
TOTAL MARINA PROPERTY AREA	4,889 Acres (212,100 SF)
PROPOSED NO. OF WET BOAT SLIPS	74
IMPACTS	
PILE SUPPORTED DOCK OVER SUBMERGED LANDS	0.247 Acres (10,741 SF)
NO. OF 4½ INCH ALUMINUM PILES	594

**WALKER
MARINA**
2407 N. ROOSEVELT BLVD
KEY WEST, FLORIDA 33040

**C-3.0
SITE PLAN
EXPANDED VIEW**

Project No:	Scale:
CAD File:	Date:
Walker ACOE (10-22-14)	10/22/2014

Revisions:

Meridian Engineering LLC
201 Front Street, Suite 203
Key West, Florida 33040
AUTHORIZATION #29401
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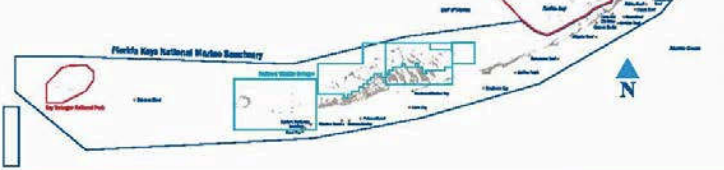
NOT VALID FOR CONSTRUCTION UNLESS
SIGNED AND SEALED IN THIS BLOCK
RICHARD J. MILELLI
PE #58315



Florida Keys

NATIONAL MARINE SANCTUARY

For more information on specific regulations visit <http://floridakys.nmss.gov> or a local marine retailer.



Keys' Treasures

Coral reefs contain more varieties of life than any other marine environment. They exist as part of a complex ecosystem that includes mangroves, herbivores, and seagrasses found in the shallow waters of the Keys and Florida Bay.



For centuries, thousands of ships have wrecked along the Keys' coral reefs. Together they tell the story of the rich maritime history of the Florida Keys. Like the natural resources, the cultural resources are also protected.



KNOW YOUR BUOYS!



Yellow Buoy

- They "float" on a white or orange plastic or rubber cap.
- Mark the lower reaches of the outer harbor (or leading to harbor) in the "100-300" depth.
- Mark the lower reaches of the inner harbor.
- Mark the buoy to mark the location of these areas.

¿CONOZCA SUS BOYAS!

- De color amarillo: "flotan" sobre un casaca blanca o naranja en la parte inferior del puerto exterior (o de la zona que conduce al puerto).
- Marcan las profundidades inferiores del puerto exterior y las profundidades inferiores del puerto interior.
- Marcan la ubicación de estas áreas.



Moor Buoy

- Located at the end of a mooring line.
- To mark a mooring area.
- To mark the end of a mooring line.
- To mark the end of a mooring line.

Boyas de amarre

- Ubicadas al final de una línea de amarre.
- Para marcar un área de amarre.
- Para marcar el final de una línea de amarre.
- Para marcar el final de una línea de amarre.



Orange Buoy

- Mark the upper reaches of the outer harbor (or leading to harbor) in the "100-300" depth.
- Mark the upper reaches of the inner harbor.
- Mark the buoy to mark the location of these areas.

Boyas de aguas

- Marcan las profundidades superiores del puerto exterior (o de la zona que conduce al puerto).
- Marcan las profundidades superiores del puerto interior.
- Marcan la ubicación de estas áreas.



WHAT YOU DO (OR DON'T DO) CAN MAKE A DIFFERENCE

- Don't dump anything overboard. Use the pump-out station.
- When fishing, use the right lures.
- Do not use lead or brass sinkers.
- If you use a marker buoy, do not use a pump-out.
- Do not use a pump-out.
- Do not use a pump-out.
- Do not use a pump-out.

LO QUE USTED HAGA O DEJE DE HACER PUEDE MARCAR LA DIFERENCIA

- No tire nada al agua.
- No tire nada al agua.
- No tire nada al agua.
- No tire nada al agua.
- No tire nada al agua.
- No tire nada al agua.
- No tire nada al agua.



Florida Friendly Boating



Be friendly to wildlife

- **Never feed wild animals.** It is illegal, unhealthy, and trains wildlife to seek out boats, increasing the risk of injury. Avoid dumping leftover bait overboard.
- **Reduce disturbance.** Stay quiet and be aware of accidentally separating manatee mother and calf pairs, disrupting mating herds, or blocking a manatee's path if it moves towards you.
- **Avoid injuries.** It is illegal to chase, hold, ride, jump on, or hit manatees or other wildlife. Never try to "fish" or attempt to catch birds, dolphins, manatees or sea turtles.
- **Avoid high manatee use areas.** Manatees can suffer from cold stress in the wintertime. If disturbed or chased out of warm water areas, it may cause death, illness or affect their ability to reproduce.

Look out below

Collisions with boats can cause injury and death among manatees, sea turtles and dolphins.

Manatees are an endangered species native to Florida, and are designated as the State's official marine mammal. They live in fresh, brackish and salt water areas, and eat aquatic vegetation such as seagrass. Because they must surface to breathe, many of these slow-moving creatures are injured or killed by boats each year.

- How to recognize a manatee's presence:**
- Look for a swirl on the water's surface
 - Look for a tail or nose (usually the only parts of the manatee's body that break the surface of the water)
 - Listen for their breath

Five species of **sea turtles** are found in Florida waters; all are either endangered or threatened. Sea turtles rest at or just below the surface of the water and must raise their heads out of the water to breathe.

- How to recognize a sea turtle's presence:**
- Look for a sea turtle's head or top portion of shell at the surface of the water.

What boaters can do

- **Wear polarized sunglasses.** Polarized lenses reduce reflected glare from the water and make it easier to see people, wildlife or objects underneath the surface.
- **Know the zones.** Abide by the speed regulations as posted. Idle speed no wake - minimum speed needed to maintain steerage. Slow speed minimum wake - fully off plane and settled in the water.
- **Use marked channels.** Greater water depth protects you, seagrass and wildlife.
- **Post a lookout.** Designate a person to watch for wildlife, other boaters, swimmers, or obstructions when the vessel is underway.
- **Save a life.** Properly discard or recycle fishing line and plastics, and use circle or non-stainless steel hooks to prevent wildlife injury or death due to ingestion or entanglement.

Wear a life jacket



Wildlife Alert:
1-888-404-FWCC (3922)
 cell *FWC or #FWC

Report sick, dead, or injured manatees or sea turtles, and any wildlife or boating law violations.
 For more information go to MyFWC.com