C. Land Development

Land development in <u>Miami-Dade County</u> can adversely impact manatees. Only shoreline and submerged land development is addressed in this Plan, although other development may cause impacts, including stormwater runoff, wastewater discharge, and an increase in overall users of natural systems.

Potential impacts to endangered species and their habitats shall continue to be considered in the review of all activities requiring a Miami-Dade County Class I coastal construction permit. Projects or facilities whose construction or operation results in adverse impact to manatees or their essential habitats should not be permitted, except as necessary to protect the health and safety of the public. Essential manatee habitat includes portions of natural and man-made waterbodies used by manatees for feeding and drinking, refuge from extreme cold, shelter for resting and sensitive behavior, and travel or migratory corridors.

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Permitted projects or activities in any waterbody accessible to manatees shall be required to avoid (or minimize) impacts to the animals or their habitat that arise as a consequence of construction or operation of the facility.

Although some of the subsections under this "Land Development" section may recommend general areas for specific types of development, other regulations such as those for state-owned submerged land, may preclude this development.

1. Shoreline Development Standards

Natural shoreline vegetation shall be maintained. Non-water dependent structures shall be constructed on the upland above the mean high water line, landward or away from wetlands or other natural areas. All new or replacement structures accessible to manatees shall be designed to prevent entrapment of or injury to the animals.

Manatees may attempt to enter submerged storm water drainage pipes and culverts. Any culvert that is closed at one end so that a manatee cannot pass through to a natural waterway may cause an animal to drown. Those outfalls which are greater than 7 and less than 60 inches in diameter, shall be covered with grates or screens with spaces less than 7 inches wide in order to prevent entrapment; these shall be maintained to prevent upland flooding. New culverts installed in areas not previously accessible to manatees shall be covered with flap gates or other devices designed so as not to cause injury to manatees, and prevent the animals from entering the outfall.

DERM currently issues a Class I Coastal Construction Permit for wet slip marinas, but does not regulate construction of dry storage facilities where in-water work is not required Therefore, the Miami-Dade County Code shall be modified to include DERM plan review and approval for the construction, expansion, replacement or major repair of all dry storage facilities, including those in municipalities. An existing dry storage facility shall meet the definition of an "existing marine facility" indicated below under III.C.2.a. Marine Facility Siting Criteria. New dry storage facilities should be sited according to Commercial Marina Sites noted on pages 89-93. A state ERP may be required for stormwater runoff treatment of a dry storage facility).

2. Development Standards for Submerged lands

Standards and policies related to the development of submerged land shall address the preservation of non-nuisance submerged vegetation, placement of dredge and fill material, and the size and design of structures below the mean high water line. Destruction or alteration of shallow water habitat used by manatees shall be prohibited unless necessary for the protection of the public or for restoration and enhancement of environmental resources. Blasting in or adjacent to habitat regularly used by manatees (see Essential Manatee Habitat map Figure 3, pages 12-15) shall be prohibited.

a. Marine Facility Siting Criteria

The Marine Facility Siting Criteria in the Manatee Protection Plan generally apply to review and permitting of applications for new or expanded marine facilities for use by multiple boats, including boat ramps, wet and dry berthing, and transient or courtesy docks of all types. The siting criteria do not apply to docks associated with detached single-family residences. The siting criteria are guidelines that are intended to apply prospectively, to assure that the additional vessel docking and storage to meet future needs are accommodated so as to minimize and avoid impacts to manatees or their habitat associated with construction or vessel traffic generated by use of the facility. These criteria do not replace or supplant other permitting requirements, such as those related to water quality, aquatic or wetland vegetation, navigation or other environmental factors.

Criteria Relating to Continuing Use, Repairs and Maintenance of Existing Facilities

It is not the intention of the Plan to impose new limitations on the number of wet or dry berths or types of vessels at facilities that are lawfully in use at the time of Plan approval, even if the facility occurs within sensitive manatee habitat. It is assumed that the reconstruction, repair, or reconfiguration of a facility that has been lawfully in use does not constitute a new or increased impact on manatees, provided that the number and types of vessels using the facility and frequency of vessel activities remains substantially the same. Therefore, with respect to manatee protection guidelines, AN EXISTING MARINE FACILITY SHOULD BE PERMITTED TO CONTINUE OPERATION OR UNDERGO REPAIRS AND RENOVATION SO LONG AS THE NUMBER AND TYPES OF VESSELS USING THE FACILITY ARE EQUIVALENT WITH PAST VESSEL USE. Berthing configuration or facility design may be modified, provided that the types of vessel uses and number of vessels remain consistent with past vessel uses. It is also recognized that there may be circumstances, such as natural disasters, fire, or financial matters, that temporarily render a facility inoperable, even though it has been in use in the recent past.

For the purposes of application of Marine Facility Siting Criteria for manatee protection to permitting of such facilities, Aan "existing marine facility" for the purposes of the remainder of this Manatee Protection Plan, is one which was is legally operating and is currently producing boat traffic, or has recently produced boat traffic that is still affecting manatees. Facilities that have all required local, state, and federal permits, authorizations and approvals that are still valid, but not yet built, can also be considered existing. in use on October 28, 1984 or later, and if constructed after 1980, must have appropriate DERM permits. Facilities that have not been in use at any time since October 28, 1984 will not be considered existing and will be considered a new facility. An existing marine facility may be reconstructed with at least the maximum number of slips that were in use at one time since October 28, 1984. ALL EXISTING MARINE FACILITIES SHOULD BE ALLOWED TO CONTINUE WITH THE EXISTING USE, AND MAY RENOVATE (according to permitting guidelines) as long as there is no change in facility size, including

in the number of wet or dry slips (unless the facility meets the expansion eriteria addressed below). Reconstruction or renovation of older facilities that are legally constructed and permitted, but do not have authorizations that clearly specify the number of slips, including facilities that pre-date permitting programs and have been in continuous use, should be evaluated on a case by case basis. The case by case review will determine the existing number of slips by taking into account the use of the slips by vessels (including motorboat and sailboat). Documentation of vessel use history and documentation showing the facility's highest single day use must be provided by historical aerial photographs. If facilities are vacated as a result of unforeseen circumstances (such as hurricanes, fires, etc.), they could be considered "existing" for a period not to exceed five years prior to the application for a permit. Facilities that have not been in use at any time for five years prior to the application, or where vessel uses are not substantially the same as those that occurred previously, will not be considered existing and will be subject to manatee protection criteria for new or expanded facilities. Existing facilities with valid operating and construction permits that did not include specific limitations on the number of power vessels, may continue to operate without such limitations on use of the existing slips or berths.

Criteria for Siting of New Facilities and Expansion of Facilities

In order to protect manatees and manatee habitat, Florida Statutes 379.2431(2)(t) requires that counties identified by Governor and Cabinet policy must develop area specific manatee protection plans (MPPs) consistent with FWC criteria. These criteria require that boat facility siting elements are necessary components of MPPs. Boat facility siting must address marinas with wet slips and dry storage, boat ramps, and port facilities. Statutes require that boating facility siting elements of MPP's must be incorporated within respective comprehensive plans.

FWC's Boat Facility Siting Guide (August 2000) states that the main goal of boat facility siting components of MPP's will be to minimize the amount of interaction between manatees and boats. In evaluation of the required types of data on manatees, their habitat, and boating facilities and patterns, FWC directs that areas should be identified where boat use patterns show minimal overlap with manatee use patterns, and these may become preferred locations for future marina expansion. In areas where the manatee and boat patterns do converge, an assessment of overlap and the potential negative impacts of vessels on manatees and their habitat must be undertaken. FWC offers the following factors or criteria for consideration of marina and boat facilities:

- Proximity to inlets and/or the ICW
- Existing water depths adequate for clearance beneath vessels
- Presence of seagrass beds
- Proximity to popular boating destinations
- Amount of manatee use, and
- Distances of boat/manatee use pattern overlap
- Expansion of existing facilities may be preferred over new facilities if environmentally sound

Comment [1]: This language is copied from FWC's August 2010 letter.

- There should be no impact to seagrass, and mitigation for seagrass destruction should not be allowed (as a means of justifying impacts)
- Areas with adequate depth and good flushing which require no new dredging are preferable
- Locations near inlets and popular destination are preferable
- Piling construction is preferred over dredge and fill techniques
- Marinas should not be sited in essential manatee habitats; and
- Marinas should not be situated in areas with high manatee mortality occurrence

These factors and approaches were considered in the development of guidelines identifying recommended sites for new or expanded marine facilities, and recommended sites for limited expansion or selected types of facilities. These guidelines address both commercial and residential facilities, other than single-family docks associated with detached single-family residences (for more information on single family docks, please see Revised Draft Page 17).

When reviewing proposals for new or expanded marine facilities, the draft of vessels and water depth must be considered for adequate clearance over manatees. In waterbodies which may be too narrow for the animals to avoid vessels by moving aside, water depth must be at least 3 feet deeper than the average draft of vessels using the facility. A boat slip_along a marginal dock or bulkhead is generally considered to be 20 feet wide by 40 feet long, in this Plan. The docking of motorized vessels (other than sailboats) along bulkheads in excess of the number of approved slips shall be restricted through a covenant associated with the Class I permit or through the DERM marine facility operating permit. All Class I permits for project sites accessible to manatees should contain pertinent special conditions from Appendix F.

A Class I permit is currently required for wet slip marinas and any in-water work related to dry storage facilities, but not for the upland dry storage buildings. All new marine facility sites and marina expansion sites in Dade coastal waters should meet the following criteria:

- 1) cause minimal or no manatee/boat travel pattern overlap
- 2) cause minimal or no wetland or benthic community disturbance or similar environmental impact
- 3) be compatible with surrounding land use

In order to comply with criterion 1), the marine facility may not be situated so that a travel route through areas of heavy manatee use would be more likely than a route through areas used less by manatees, in order to travel to popular destinations. If only sailboats with minimal horsepower auxiliary motors (allowing the vessels to travel at a maximum speed of 8 knots) or without motors are permitted to be moored in a marina, only criteria 2) and 3) must be met. Criterion 1) was primarily considered in choosing the following sites because criteria 2) and 3) are extremely site specific. Existing land use (zoning) was not always considered when developing this "recommended marine facility site" map (Figure 19a-c).

Each category of vessel facility addressed below may impact manatees differently from another type of facility. For example, a large number of powerboats may be launched at boat ramps (the number launched varies with the number of ramps and parking space at the location, how quickly users get their boats into and out of the water, and other factors), while a single-family residence launches a relatively small number (generally one or two). Transitory slips, such as those at a fueling facility or waterfront restaurant where many boats may use the facility during a day, could generate more boat trips per slip than another type of facility such as a freight terminal or boat yard, where fewer vessels enter or leave the facility daily. Large full service commercial marinas with dry storage may generate more boat traffic than a small multi-family residential marina.

All vessel storage and launching facilities should be required to post manatee informational displays and manatee signs on site as noted in section "III.D.2. Awareness" of this document.

Commercial Marina Sites

For the purpose of this section of the MPP, "commercial marina" refers to publicly or privately operated marine facilities that are not associated with an adjoining residential development and that provide wet or dry berthing. For the purpose of this section, a trailerable boat is considered to be a boat less than 26 feet in length. This description is based upon "nontrailerable boat" as defined in 50 CFR 86, Boating Infrastructure Grant Program: "Nontrailerable recreational vessels mean motorized boats 26 feet or more in length manufactured for and operated primarily for pleasure, including vessels leased, rented, or chartered to another person for his or her pleasure."

Wet and dry boat storage facilities contribute to the number of boats entering Miami-Dade County waters. The information on page 94 applies only to facilities storing power boats. Sites recommended for marina development and expansion with no restriction on the number of slips from a manatee protection perspective include the following areas as shown in Figure 19a-c.

FIGURE 19A RECOMMENDED MARINE FAC. SITES

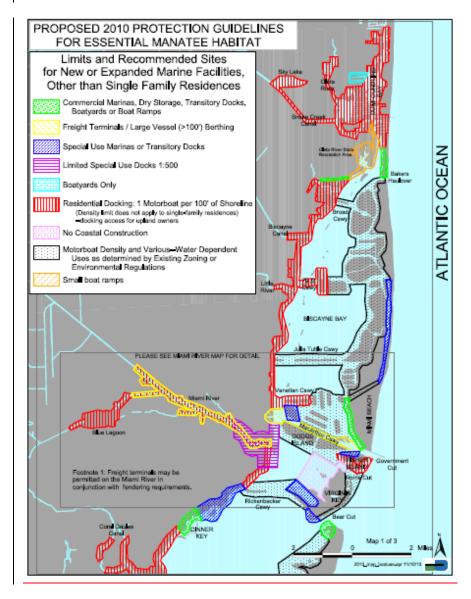


FIGURE 19B RECOMMENDED MAR. FAC. SITES

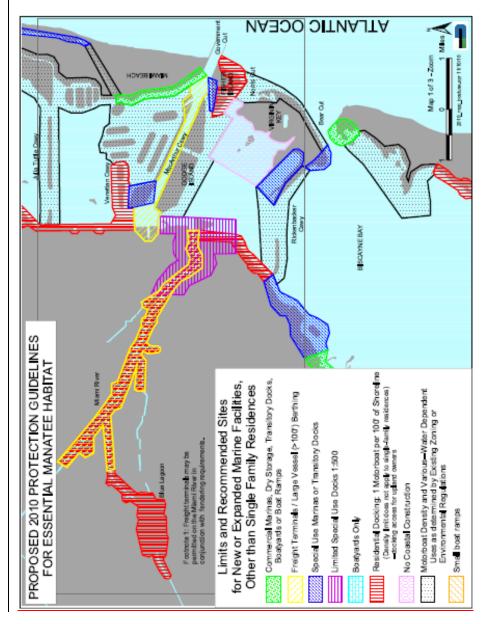


FIGURE 19CB RECOMMENDED MAR. FAC. SITES

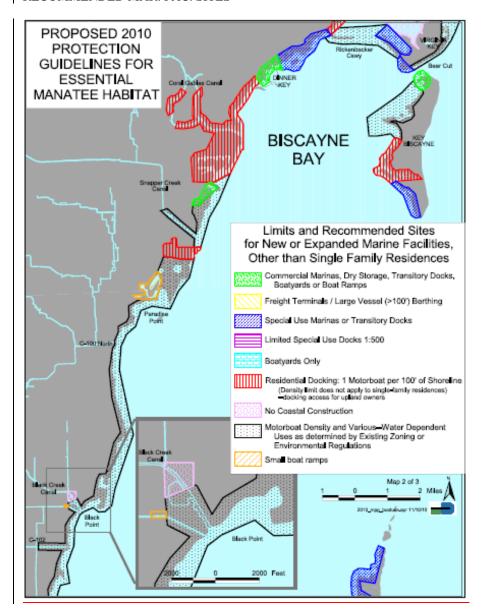
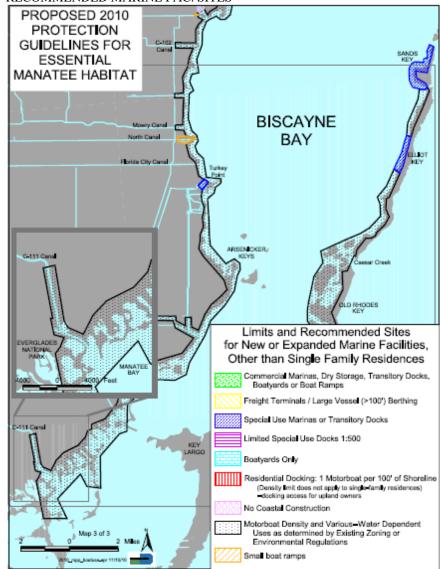


FIGURE 19DC





- Since the number and frequency of manatee sightings has been relatively lower on the east side of Biscayne Bay along Miami Beach <u>between_near</u> Haulover and Government Cuts, and most boats using a facility constructed in this area would be likely to travel along Meloy channel and exit to the Atlantic Ocean through either of these inlets, marina development <u>should be considered is recommended</u> in this area. Expansion of Crandon Marina on Key Biscayne <u>could be considered is also recommended</u> due to its nearby ocean access which excludes designated manatee habitat.
- 2) The Keystone Point area located east of Biscayne Boulevard between NE 135 and NE 125 Streets is due west of Haulover Cut. Boats using a marina in this area would be expected to go to the ocean through this inlet, traversing through a very small portion of the Bay, which although used by manatees, is protected by vessel speed limits. Boaters whose destination is south Biscayne Bay have direct access to the Meloy Channel at Broad Causeway.
- 3) FIU/Oleta State Park shorelines (not including the Oleta River) are recommended as locations for public marinas, boat ramps, and transient or courtesy docks for shallow draft boats of a size that can typically be stored and launched by trailer (less than 26 feet in length), provided that no dredging or filling of seagrass would be required to construct or operate the facility.
- 4) Marina expansion at Dinner Key and at Matheson Hammock Park is recommended due to less frequent manatee sightings in the immediate area, and the improbability of boats using the facility to travel through areas of heavy manatee use. Although manatees have been observed in the nearshore areas, vessels travel mainly in marked channels within speed zones until reaching open water destinations in south Biscayne Bay, where the risk of conflict with manatees is relatively low.
- 5) Some <u>currently operating</u> marinas south of Rickenbacker Causeway may be considered suitable sites for expansion of facilities available for use by the general boating public, especially for launching of smaller boats (less than 26 feet in length) that are generally stored on trailers or in dry berths, provided that no dredging or filling of manatee habitat would be required to operate or construct such a facility. sSince boaters using these facilities generally are heading to south Biscayne Bay or offshore destinations that do not require extensive travel through essential manatee habitat, opportunity for conflict between vessels and manatees is limited. Manatees near shore should be protected from high-speed vessel impacts by the approved speed zones. Recommended locations for expansion or new facilities are:
 - Chapman Field/Deering Bay is recommended for a public-access ramp or upland dry storage for shallow draft boats that can be trailered (less than 26 feet in length), provided that vessels use existing basins and marked navigation channels in Deering Bay vicinity, and no dredging or filling of habitat currently

- being used by manatees (including seagrass habitat) would be required to construct or operate such a facility.
- Homestead Bayfront Park/Convoy Point is recommended for expansion of public marina, ramp, or transient or courtesy docks, for shallow draft boats that can be trailered (less than 26 feet in length).

The installation of new or additional boat lifts should be permitted in the suitable areas noted above.

Areas south of Rickenbacker Causeway that are NOT SUITABLE for marina expansion or development in which moderate to heavy manatee use, mortality or sensitive manatee behavior is documented, include the following:

- a portion of west Key Biscayne from Crandon Marina to the south shore of Pines Canal,
- the Coconut Grove shoreline from the south side of Dinner Key Marina to Coral Gables Waterway,
- all of Coral Gables Waterway located east of SW 57 Avenue and all other canals in Coral Gables (excluding the Matheson Hammock Marina area),
- the Kings Bay/Deering Bay waterways located between theoretical SW 140 Street and SW 160 Street.
- the Black Point area waterways, and the Black Point Marina basin and canal "No Entry" zone
- the Homestead Bayfront Park/Biscayne National Park marina basin areas.

Boating activity studies have documented high levels of vessel traffic and remarkably poor compliance with existing vessel speed zones in Black Point channel and adjoining seagrass meadows used by manatees. Until this problem is addressed, expansion is not recommended. However, if compliance is improved to acceptable levels, through management actions such as but not limited to targeted enforcement, boater education, and improved signage, limited upland, ground-level public storage for trailered boats (less than 26 feet in length) is recommended on the south side of Black Point Marina, at the site of the former "Pirates Spa", provided that access to the Bay is through Goulds Canal. Expansion proposals could be considered in the future on a case-by-case basis, pending approval of enforcement and education plans and compliance improvement, subject to approval by FWC and FWS.

4) Marina expansion at Matheson Hammock Park could be considered due to infrequent manatee sightings in the immediate area, and the improbability of boats using the facility to travel through areas of heavy manatee use.

The installation of new or additional commercial boat lifts should be permitted in the suitable areas noted above.

Fuel and Transitory Docks

For the purpose of this plan, a "transitory slip" means docks, slips or other shoreline structures used for the temporary mooring of vessels (less than one day, but may include overnight or multiple day use if camping), including docks at non-fee public facilities (eg. public parks or ramps), facilities used for water-dependent public transportation, designated day-use slips at restaurants and hotels, and staging docks, piers, seawalls, and/or slips required for the operation of dry storage facilities or boat ramps. Transitory slips cannot be used for the permanent or extended storage of vessels. Slips used for boat rentals or slips rented to patrons for extended use are not considered transitory.

Expansion of marine fuel facilities and transitory (transient)_ boat slips should be permitted in those areas listed above under Commercial Marina Sites, numbers 1, 3 and 4 only. Transitory docks are also recommended along Indian Creek in Miami Beach, Vizcaya, the north shoreline of Fisher Island, the south shoreline of Virginia Key and Marine Stadium basin along Rickenbacker Causeway, Sands Key, and Elliott Key, without limit in number solely related to manatee protection (however, other factors, such as water depth, seagrass or other sensitive habitats may affect number of slips that can be accommodated). These areas are not near habitat frequently used by manatees.

Fuel dispensers should be located on the upland if feasible. In order to aid in maintaining water quality, secondary containment shall be required on any fuel line extending over water along a dock. Fueling facilities shall meet the following criteria contained in state rule 16N-16.035, effective July 1, 1993:

- 1) All equipment used for transferring fuel shall be kept and maintained in good repair and excellent operating condition.
- 2) Hoses used for a transfer of fuel shall be in good condition with no cracks or bubbles in their outer cover material. Hoses shall be maintained so that the inner lining or core is not exposed to damage from external forces. Hose and nozzle connections must be in good condition and not leaking. The fittings, clamps and bands must be compatible to the fuel being transferred, and must be in good condition and securely attached to the hose. These fittings, clamps and bands shall be used only for the purpose for which they are designed.
- 3) All systems will be equipped with hard connections or delivery nozzles. The nozzles shall hang vertically while not in use and will not be lying on the ground or dock. The transfer equipment shall be equipped with an emergency shutdown device unless gravity fed. The person in charge, or his designee, must be in the proximity and have immediate access to the emergency shut-down device during all fuel transfers.
- 4) Any fuel remaining in a hose after a transfer shall not be drained onto the ground or into the water.
- 5) Dispensers located in such a manner that they are subject to being damaged or destroyed by impact, shall be equipped with safety valves. These safety valves shall stop the flow of fuel if the dispensers are damaged or destroyed by impact.

Freight Terminals and Large Vessel Docking Facilities

Due to the necessity of deep dredged channels and existing regulations restricting new dredging in Biscayne Bay, opportunity for expansion of freight terminal and cruise ship terminal

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construction is limited. Manatee use is heavy in the Miami River and on the southwest side of the Port of Miami. Therefore, expansion of freight or large vessel terminals shall be limited to the north shore of Fisher Island, the east portion and north side of the Port of Miami, existing boat basins along the City of Miami shoreline between NE 6 and NE 9 Street, and the south shoreline of MacArthur Causeway. Upon implementation of the recommendations in this section noted below, expansion of large vessel docking facilities within appropriately zoned areas, such as the Miami River, may be approved. Large vessel docking facilities shall not be expanded within state designated manatee protection "No Entry" zones. All existing freight terminals and other facilities mooring vessels greater than 100 feet in length shall be retrofitted with fender systems or other design which provide at least 4 feet of standoff from the bulkhead or wharf **under maximum operational compression**. This standoff is required in order to prevent manatees from becoming crushed between a vessel and bulkhead or other structure. Fenders shall be installed entirely above the mean high water line, and maintained.

A minimum of 3 feet of standoff at maximum compression (fenders, cantilever docks/bulkheads, or other system) is acceptable in the Miami River. However, an exemption to this requirement in the Miami River applies to a 1,600 linear foot narrow area bordered by the Bernuth and Universal terminals on the south and the Antillean and the former Hyde terminals on the north sides of the River. This area may be allowed to remain without fendering as a reasonable option in compromise as long as there is no development or expansion of berthing for terminals to the west of this passage beyond what are already existing facilities (as defined at the top of page 89). This exemption means that there will be no new slips or mooring facilities for large vessels approved within or west of this 1,600 linear foot area. Any takeover of an existing facility by new or different operators will not be considered as new development provided new slips are not created. Further improvement of an existing facility will not be prohibited, provided berthing area is not expanded. Replacement or major renovation of any large vessel berthing in a manatee habitat, including this portion of the Miami River will require standoff. If the 3 foot standoff is achieved in the future, the development and expansion of large vessel docking facilities may be permitted on the River.

Within 6 months after approval of this Plan by the Florida DEP or Governor and Cabinet, DERM shall notify all affected property owners of this standoff condition and their need to comply, including options acceptable for compliance. The affected property owners have 12 months after receipt of this information to comply with the standoff requirement or inform DERM of intent to construct a cantilever dock or bulkhead, or any other type of standoff requiring permit approval. In the latter case, a complete permit application shall be submitted to all permitting agencies within 12 months of receipt of the DERM information, and construction of the permitted standoff project shall be completed within 12 months of receipt of all required permits.

The study of prop guard technology is encouraged. The Manatee Protection Plan Review Committee is unaware of a feasible prop guard in existence for tug boat or freighter use. If a prop guard or similar device is recommended for use on tug boats in the future, the requirement of the device should receive public review and must receive county commission approval prior to implementation. Should such a recommendation come to pass, economic incentives should be considered for retrofitting tugs with the device for manatee protection.

Special Use

Areas designated for mooring vessels for special uses such as commercial fishing, charter fishing boats, and ocean-going luxury yachts (including "mega-yachts") include those noted above under "Commercial Marina Sites" on page 89 and "4. Freight Terminals, etc." on page 94 in addition to the entire—shoreline of Watson Island (located on MacArthur Causeway).

Limited Special Use in Downtown Area

There is a recognized interest in accommodating expansion of certain water-dependent uses in the downtown Miami area, to complement traditional uses and create opportunities for boating recreation, while still providing for protection of an area with consistent manatee use and human-related manatee mortality issues. To help seek a balance, limited expansion is recommended for special types of marine facilities in a portion of the downtown area. "Limited special use" dockage includes courtesy docks, water dependent public transportation dockage and commercial/charter fishing boat docks with a maximum density (including existing boat slips) of 1 vessel slip per 500 feet of shoreline, or one slip per parcel, whichever is more restrictive. This applies to the west Biscayne Bay shoreline from the Port of Miami I-395 bridge south to SW 15th Road including Bayside and the Miami River from the mouth, upstream to the NW 5th Street bridge, and including Watson Island. Sites or additional slips in sensitive manatee habitats may even be considered for transitory docks if such proposals are government-owned, government operated, non-revenue generating, and there is demonstrated need for this type of public access.

Boat Yards

In any Miami-Dade County coastal waters with vessel speed restrictions of "Slow Speed" year-round, renovation or expansion of an existing boat yard (including waterfront boat building facilities) is preferred to the construction of a new facility. New boat yards, including waterfront boat building facilities, should be permitted at the Port of Miami,—and along the eastern (Miami Beach) shoreline of Biscayne Bay and in the two canals located in northwest Dumfoundling Bay between NE 185 and NE 190 Streets, where compatible with the surrounding land use and other permitting and zoning requirements. Elsewhere along the Biscayne Bay shoreline or in small dead end canals on Biscayne Bay, the construction of any new boat yard should generally be prohibited.

Boat Ramps

Boat launching facilities greatly contribute to the number of boats entering Miami-Dade County tidal waters. These ramps should meet the criteria noted above in III.C.2.a. Marine Facility Siting Criteria. In addition, at all boat ramps located in essential manatee habitat, parking should be limited to the existing spaces (including existing overflow parking both on and off paved areas) only during the winter manatee season, November 15 through April 30. Excess parking should be prohibited and enforced by Miami-Dade County (through a fine, and revocation of the MOP where applicable, if not in compliance).

Comment [2]: Suggested by FWC

Comment [3]: Language suggested by FWC.

For the purpose of this section, a trailerable boat is considered to be a boat less than 26 feet in length. This is based upon "nontrailerable boat" as defined in 50 CFR 86, Boating Infrastructure Grant Program: "Nontrailerable recreational vessels mean motorized boats 26 feet or more in length manufactured for and operated primarily for pleasure, including vessels leased, rented, or chartered to another person for his or her pleasure."

Suitable Boat Ramp Sites

Sites suitable for boat ramp development or expansion, including the installation of new or additional boat launches or parking spaces, are located in <u>previously dredged portions of</u> the following areas:

- The east side of Biscayne Bay in the vicinity of Haulover Cut, Government Cut, and Bear Cut
- South Biscayne Bay including southwest Key Biscayne, the Dinner Key area, Matheson Hammock Park, and Turkey Point.
- Chapman Field/Deering Bay is recommended for a public-access ramp for shallow draft
 boats less than 26 feet in length provided that vessels use existing basins and marked
 navigation channels in Deering Bay vicinity, and no dredging or filling of habitat
 currently being used by manatees (including seagrass habitat) would be required to
 construct or operate such a facility.
- Homestead Bayfront Park/Convoy Point is recommended for expansion of public marina, ramp, for shallow draft boats less than 26 feet in length.
- FIU/Oleta State Park shorelines (not including the Oleta River) are recommended as locations for boat ramps for shallow draft boats less than 26 feet in length, provided that no dredging or filling of seagrass would be required to construct or operate the facility.

New boat ramps located in other areas than those listed above may be considered provided they comply with the <u>Variance Pperformance eriteria-Measures</u> for docking facilities noted under <u>Section 2b.(1)</u> on <u>Revised Draft Page 19-2098</u>.

<u>Miami-</u>Dade County Park and Recreation personnel should supervise parking in trailer spaces at County-owned marinas on weekends and holidays to ensure that only vehicles with trailers use the spaces.

c. Residential Dock Density

For the purpose of this plan, "residential dock facilities" are those associated with an adjoining residential land use, where the docks are occupied by vessels owned by persons residing at the adjoining property. Residential dock facilities may have a significant cumulative impact on manatees and their habitat. In this Manatee Protection Plan, a single family residence is considered to be a detached building having a roof and outer walls entirely separated from any other structure by space, and occupied by members of a single family with not more than three outsiders, if any, accommodated in rented rooms. A multifamily residence is a building occupied by more than two families, in which each family shares a roof and/or outer wall(s) with

at least one other family. The density of new coastal structures, including multifamily residential docks, should be limited in areas that are essential to the survival of the manatee. Figure 3 (page 12-15) indicates waterbodies and shorelines that have been determined essential habitat for the manatee. In waterbodies or shorelines that are not identified as "essential habitat" for manatees, limits on residential dock density or configuration will be determined or may be limited by other existing environmental, navigation or land use regulations.

Within Essential Habitat Areas:

Each single family residence shall be limited to two power boat slips, and vessels using those slips shall be registered to the upland property owners or residents. Single family dock construction is subject to local, state, and federal regulations and policies. Zoning, land use, building, and environmental standards, statutes, ordinance, or rule may determine or limit the size and configuration of a dock or number of slips that may be permitted at a particular location. It is not the intent to impose any additional restrictions on single family docks. Single family docks shall continue to be constructed according to the all existing DERM coastal construction applicable regulations and guidelines. Unless otherwise limited to a lesser number, single family docks that request more than four slips will be reviewed under provisions of the plan for multifamily facilities with five or more slips. Slips should be occupied by vessels owned by the residents of the single family home on the associated parcel.

For multifamily residential developments within essential habitat areas, multi-slip docking facilities with more than five boat slips should be permitted to construct no more than one powerboat slip per 100 feet of owned developable shoreline. Any additional slips (existing or newly constructed) may be occupied by sailboats. In no case should the number of new powerboat slips exceed the number of multifamily residential units approved and/or constructed. If a DERM Marine Facilities Operating Permit is required, it should specify that all vessels docked in a multifamily facility should be registered to individuals residing at the site.

Sites on tributaries or canals which are upstream of or flow into a water body designated as an essential habitat area, should be subject to the aforementioned essential habitat standards.

d. Residential "No Entry" Areas

Several areas heavily used by manatees during the winter have been designated "No Entry, Residents Only, November 15 - April 30". These include portions of Biscayne Canal, Little River, and Coral Gables Waterway (Figure 16a-g, page 54-60). Single-family dock construction should be limited to two boat slips with only the upland residents permitted to use the dock space in these areas on a permanent basis. Temporary docking by authorized –visitors should be allowed. Construction or renovation, other than emergency repairs required for the safety of the residents, shall be undertaken during the manatee summer season (May 1 - November 14).

e. No Coastal Construction

Undeveloped areas of extremely frequent manatee use are designated "no coastal construction or vessel access". These areas are designated "No Entry" in Figure 16a-g, pages 54-60, and include the northwest shorelines of Virginia Key, the north portion of the Black Point Marina basin, and

the area of Black Creek from the salinity control structure (S-21) south to the north shore of the entrance to the Black Point Marina basin. No construction, other than environmental restoration or work required to protect the health and safety of the public, shall be permitted in these areas.

f. Freshwater Lakes

The Miami-Dade County Commission should pass an ordinance to give DERM permitting authority in freshwater lakes and canals which have vessel speed restrictions established for manatee protection. The construction restrictions DERM should impose shall be the same as those for similar uses in tidal waters noted above in III.C.1 through III.C.2g.

b. Performance Measures and Standard Procedures for Projects Seeking a Variance from Marine Facility Siting Criteria

There may be circumstances when a new or expanded marina, dry storage facility, boat ramp, or other docking or mooring facility is proposed that is not consistent with Marine Facility Siting Criteria described in the preceding sections. Examples could include a proposal for more wet or dry powerboat slips than recommended at a location, or a proposal for a type of facility or operation that is not recommended at a particular location. Furthermore, types of facilities or vessel operations that were not specifically contemplated by this plan may be developed in the future. Also, technology or procedures may be developed in the future to mitigate or offset the potential impacts to manatees or their habitat that otherwise may have been caused by increased numbers of vessel trips associated with new or expanded facilities. It is recognized that in such situations, if it can be demonstrated that the non-conforming project and its operation does not adversely affect sensitive habitats and manatees, a process for consideration of a variance or exception should be available. This section of the MPP therefore provides performance measures and standard procedures for evaluation of requests for variances for non-conforming projects, with assurance that manatee protection requirements will still be met.

In order to qualify for a variance or exception, the proposed project must be able to demonstrate that it meets a set of standards and measures intended to avoid or minimize potential impacts to manatees and especially sensitive habitats that could arise from the facility or the vessel trips that it may generate. As an alternative, a proposed increase in number of powerboats above what is recommended, or an increase in a type of vessel use that is not recommended, may be mitigated by removal and transfer of an equivalent number and type of slips or berths that are actively in use at a nearby location. Each of these procedures is described below. The measures and transfer procedure address only regulatory requirements related to manatee protection, and do not replace or obviate need for compliance with all other applicable environmental and land use regulations. In both cases, the proposed project must demonstrate that all other permitting and land use requirements can be met, before being considered for a variance or transfer procedure. Both variances and transfer requests must be approved by DERM, FWC, and FWS as part of the normal course of their respective regulatory reviews and consultations.

Comment [4]: FWC language

b.(1) Variance Performance Measures

Requests for higher ratios Ffor multi-family docking facilities subject to the 1 powerboat slip to 100 feet of shoreline restriction, and new boat ramps proposed at locations not approved under "Suitable Boat Ramp Sites" (page 96), higher ratiosor requests for uses proposed in a location not shown in the preceding narrative sections and maps as an acceptable site for that particular type of facility may be considered if the-it is demonstrated that the facility and its use can demonstrate that it will would not have an adverse impact on manatees. In no case shall the maximum total buildout of 5 powerboat slips per 100 feet of owned contiguous shoreline be exceeded. Uses proposed in a location not shown as an acceptable site for that particular type of facility on the map in Figure 19a c, p.90 92, may be evaluated according to the following listed criteria numbered 1.9. This demonstration would be satisfied if the facility met applicable Performance measures eriteria-from the following list. However, adherence to these criteria does not automatically ensure the applicant's ability to exceed the allowable powerboat restrictions as defined above. The plan restrictions will remain in effect, if at the time of review, additional information about manatees or the proposed facility indicates threats are not addressed by these criteria. Consideration can be given for additional site-specific factors or operating practices (e.g. seasonal operation, etc.) that may be proposed by either the applicant or the County, that may result in improved conditions for manatees or manatee protection. Any facility exceeding the allowable powerboat slip restrictions (1:100) or use according to the eriteria Performance Measures defined below, must agree to obtain and comply with an annual marina operating permit (MOP) and/or Class I Coastal Construction Permit if required, and proffer a covenant in favor of Miami-Dade County which records the number and types of slips or berths, even if the facility does not meet the threshold established in the MOP ordinance. The criteria Performance Measures are:

- 1. The facility may not be located within a cold-weather aggregation area or other area where sensitive manatee behavior occurs, or in a sole travel corridor from the area. The cold-weather aggregation, sensitive sites, and travel corridors include Biscayne Canal, Little River, the Miami River/Tamiami Canal, Coral Gables Waterway, Virginia Key "no entry zone", Black Point Marina basin, and the vicinity of cooling canals at the FPL Turkey Point power plant.
- 2. The waters adjacent and channels leading to the facility are designated "slow speed" or "idle speed" as <u>defined by state rule Ch. 68C-22.025 F.A.C.</u>, <u>as</u> authorized by <u>pursuant to</u> the Florida Manatee Sanctuary Act, Ch. <u>379.231(2) F.S.62N 22 (formerly 16N 22) F.A.C.</u> or <u>Boating Restricted Areas Ch. 62N 24 (formerly 16N 24), F.A.C.</u>
- The facility is not located within a cold weather aggregation area or other area where
 sensitive manatee activities occur, or in a travel corridor from these areas, as indicated on
 pages 22 and 27.
- 3. The facility must provide net benefit to manatees and/or their habitat above what would otherwise be required for the project. Mitigation needed to satisfy other local, state, or federal government permitting cannot be applied to this requirement. For example, facilities may include creation or enhancement of a manatee "refuge" space as part of the design, a conservation easement, restoration of adjacent wetlands habitats or hydrology such as mangrove or seagrass restoration to increase the net coverage ecological value of

- the nearby area, reduced nutrient input to receiving waters, requiring prop guards on any high traffic vessels such as water taxis or dive boats or rental boats, etc.
- 4. The marina <u>facility and channel</u> construction and subsequent uses will neither destroy nor negatively impact <u>mangrove-coastal wetlands</u> and benthic (seagrass, hard bottom, etc.) communities and the water quality.
- 54. The facility must have sufficient water depth (as defined herein) in the marina basin and in any marked or unmarked access—channel or waterway typically used for access to or egress from the basin, and does not require any new dredging or filling that would degrade shallow water habitat (this may exclude maintenance dredging, excavation into uplands or pile installation). Sufficient water depth shall be water depth, measured at mean low tide, of 3 feet greater than the draft of vessels occupying the slips on a permanent basis, and/or 3 feet greater than the draft of vessels typically using the facility on a transient basis. Vessel drafts shall be obtained by using best available data. Entrance/exit channels near marinas shall be adequately marked, in accordance with state regulations, if marina repairs or expansion are proposed.
- 65. The site shall contain appropriate <u>site-specific informational</u> signage (above and beyond the standard information sign requirements for all facilities) (including vessel speed and manatee information signs), and provide educational material to tenants advising boaters of essential manatee habitats in the vicinity.
- 76. Multi-family residential docking facilities will require that all vessels moored at the site be registered to individuals residing at the site. Requests for more slips/berths than residential units at the site or at densities greater than 5 slips per 100 feet of shoreline shall not be approved.
- 7. The marina has adequate water circulation, tidal flushing, and meets State of Florida and local water quality standards.
- 8. In traveling to principal destinations or from principal origination or launch points determined by the boat study, vessels using the facility should not travel through manatee travel corridors, cold weather aggregation areas or other especially sensitive manatee habitats as described on pages 11-17.
- 89. Before expanding and exceeding the allowable powerboat slips defined above, an existing facility must demonstrate not less than 85% occupancy over the previous 2 years of operation. New facilities should be able to demonstrate the need for additional boat slips in the vicinity based on occupancy of existing marina slips within the boater sphere of influence.

b.(2) Removal of Slips or Berths in Use at a Location and Transfer to Another

Removal of dry or wet slips or berths in use at one or more locations may serve as a form of mitigation to compensate for the potential impacts to manatees from proposed new operations or expansion of marine facilities in sensitive habitats above the guidelines recommended for manatee protection. The transfer process requires a review and evaluation by DERM, in coordination with state and federal regulatory authorities, of the proposed transfer for potential adverse impacts to manatees as well as evaluation of other requirements of Chapter 24 of the Code of Miami-Dade County. The review will include an evaluation of the type of facility and

typical uses associated with both the historically existing slips at the donor property and the proposed use of the slips at the recipient property. To assure that the impacts from proposed new slips would not exceed the potential impacts from the slips that are to be removed for mitigation, this analysis must be site specific and be based on a consistent set of mitigation rules applied to all such projects. Furthermore, to assure that the impact of new powerboat slips remains fully mitigated, a suitable restriction (i.e. restrictive covenant) on the donor property is required to record that the historical use was transferred, and assure that the original slips would never be reoccupied by powerboats. This is similar to other forms of environmental mitigation, or conservation easements, intended to preserve the mitigation benefits in perpetuity. Transfer applications shall not be approved without concurrence of federal and state regulatory agencies with authority for manatee protection.

The transfer procedure has implications for the owners or future owners of donor properties. These owners have an expectation that continuing use or reconstruction of historical motor boat slips will be found consistent with manatee protection guidelines. This would no longer be the case if the historical use had been transferred to another parcel. For these reasons, both from an assessment of the biological merits of the mitigation for a proposed project, and in fairness to owners whose slips are sought for transfer, slips cannot simply be "reallocated" to another property without participation and consent of the "donor".

The following mitigation criteria will be used to evaluate requests for slip transfer.

- 1. Slip transfers only have the ability to offset potential impacts if they represent an actual reduction in use of equivalent slips at the donor site, and the slips from the donor site are not be reoccupied.
- 2. To assure no net increase in impact to manatees, the type and frequency of vessel use associated with the slips removed (transferred) from a donor site must be equivalent to the type and frequency of use at the receiving site. To qualify as a transferable slip, all donated slips shall be documented showing consistent, past use by motorboats. Documents would include records showing the vessel use and aerial photographs, based on the highest single day slip use by motorboats during the period not greater than five years prior to application for transfer.
- 3. Donor sites must be located in areas designated as essential habitat, as defined in the MPP. Slips located in areas recommended for expansion of commercial marinas, dry storage, transitory docks, boatyards, ramps, or large vessel (>100') berthing under the MPP do not qualify as donor slips.
- 4. To assure no net increase in impact to manatees, slips may only be transferred to a site that is a less sensitive or equivalent manatee habitat within the same tributary or geographic area. For example, for a project on a canal or river, both the donor and recipient sites should be located on the same waterway. Within cold weather aggregation areas and travel corridors to them, such as the Miami River, Little River, Coral Gables Waterway etc, slips may be transferred downstream or may be

Comment [5]: FWC language

Comment [6]: FWC language

Comment [7]: FWC language

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consolidated on one of several contiguous parcels. For a project in Biscayne Bay or adjoining bays and sounds, the donor and recipient sites shall be located within close proximity of each other. The goal is to set a distance between sites that would not create a significant difference in vessel traffic impacts.

Comment [8]: FWC language

5. Recipient sites shall not be located in state manatee protection areas designated as "No Entry" or "Limited Entry", as defined in 68C-22.025 F.A.C., including portions of the Little River, Virginia Key, Coral Gables Waterway, and Black Creek canal and marina basin.

Comment [9]: FWC language

6. There shall be an overall net reduction in slips from the donor site to the recipient site.

Comment [10]: FWC language

- 7. Only slips in compliance with all required environmental and land use approvals are eligible for transfer. For slips located in or over the water, documentation of approval of the submerged lands owner is required. Illegal or unauthorized docking is ineligible for transfer.
- 8. Transfers require the consent of the property owner(s) involved (donor and receiving properties) and restrictive covenants, in perpetuity, running with the land in favor of Miami-Dade County must be recorded on the donor and recipient sites.

Comment [11]: FWC language

9. Restrictive covenants on donor sites must prohibit additional structures or launching of motorboats. Restrictive covenants on recipient sites will 1) prohibit additional structures for launching of vessels beyond the number achieved with the transfer; 2) prohibit the donation of slips to other properties; and 3) specify the type of vessel use and prohibit any change of use of the slips from the type approved during transfer. Covenants must be included as requirements or conditions in permits and submerged land leases (if required), and recorded prior to commencement of construction.

Comment [12]: FWC language

10. In order to preserve riparian property rights and to prevent net reduction of waterfront access sites, not all existing slips can be transferred away from a given donor site. At least one existing power boat slip per 100 feet of shoreline, or one per parcel if less than 100 feet of shoreline is owned, shall be retained at the donor site and shall not be eligible for transfer.

Comment [13]: FWC language

11. Slip transfers may be allowed only if all federal, state, and local approvals at the receiving site are obtained for the proposed work and operations required for transfer.