

Memorandum



Date: November 14, 2023

Agenda Item No. 2(B)(8)
December 12, 2023

To: Honorable Chairman Oliver G. Gilbert, III
and Members, Board of County Commissioners

From: Daniella Levine Cava
Mayor

A handwritten signature in blue ink that reads "Daniella Levine Cava".

Subject: Report Related to the Establishment of Additional Anchoring Limitation Areas in Miami-Dade County - Directive No. 221350

Executive Summary

On July 19, 2022, the Board of County Commissioners (Board) adopted Resolution No. R-722-22, directing the County Mayor or County Mayor's designee to take action conduct a study and make recommendations regarding the establishment of additional anchoring limitation areas in Miami-Dade County pursuant to Florida Statute; to identify legally available funds for such study or, to the extent that there are insufficient legally available funds within the Fiscal Year 2021-2022 County budget to fund such study, to include funding in an amount sufficient to complete the study in the County Mayor's proposed Fiscal Year 2022-2023 County budget; and to provide a report to the Board. Since the adoption of R-722-22, Board members have proffered other ordinances and resolutions that consider increased activity on the Bay and how floating structures and vessels impact it as well as quality of life for those in surrounding areas. Currently, the Board is considering at least four items pertaining to Biscayne Bay. However, the attached report is responsive to Legistar No. 221350 that more strictly contemplates regulations to long-term mooring as was provided for in the 2021 session of the Florida Legislature which amended section 327.4108 of the Florida Statutes to authorize counties to establish anchoring limitation areas within their waterways under certain conditions.

The attached report was prepared by staff of the Department of Regulatory and Economic Resources, Division of Environmental Resources Management (RER-DERM). As a brief overview of the findings of the report, some key points that are brought up include the following:

- The establishment of Anchoring Limitation Areas targets the minimization of impacts to sensitive natural resources and reinforces the numerous existing federal, state, and local regulations related to the anchoring of vessels in Biscayne Bay that are analyzed in the attached report.
- Florida Statute 327.4108 allows local governments to establish Anchoring Limitation Areas within their jurisdictions for the purpose of managing and regulating vessel anchoring. These limitation areas are typically designated in specific waterways or zones to address various concerns, such as safety, environmental protection, and navigation.
- Eleven locations throughout the County are put forth for consideration as Anchoring Limitation Areas due to the presence of sensitive environmental resources such as seagrasses, inadequate water depths, and historic documentation of long-term vessel storage and vessel abandonment.

- The enforcement of Anchoring Limitation Areas is strictly the purview of law enforcement, not code enforcement, pursuant to Section 327.4108, F.S. The effective enforcement of Anchoring Limitation Areas, especially on a substantial basis, is expected to be challenging in Miami-Dade County.
- RER-DERM proposes moving forward with two Anchoring Limitation Areas within the Pelican Harbor and 79th Street Causeway area to serve as a pilot project to determine the efficacy, costs, timeline, and enforcement capabilities prior to the establishment of additional Anchoring Limitation Areas.
- Should the report be accepted, and the Board wish to proceed with the recommended pilot project, RER-DERM will move forward, in coordination with law enforcement, with implementation of the pilot project. Note that the Board proceeding with the pilot project would not preclude municipalities from proposing additional Anchoring Limitation Areas within their boundaries.

In accordance with Ordinance No. 14-65, this report will be placed on the next available Board meeting agenda. If additional information is needed, please contact Lisa Spadafina, Assistant Director, Division of Environmental Resources Management in the Department of Regulatory and Economic Resources, at Lisa.Spadafina@miamidade.gov.

Attachment - Report on the Establishment of Additional Anchoring Limitation Areas in Miami-Dade County

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Report on the Establishment of Additional Anchoring Limitation Areas in Miami-Dade County

Background

The anchoring of vessels and floating structures in Miami-Dade County is primarily regulated under Chapter 327 of the Florida Statutes and is the purview of marine law enforcement. While not defined in Chapter 327 Florida Statutes (F.S.), anchoring is the act of securing a vessel or floating structure in navigable waters by means of an anchor and attached line, chain, or cable that is cast or dropped temporarily overboard and later retrieved from the water to allow the vessel or floating structure to get underway. Mooring is the act of tying or affixing a vessel or floating structure to an object (i.e., a “mooring”) that remains, or is intended to remain, in place regardless of whether a vessel or floating structure is attached to it. Section 327.02(14), F.S., defines a floating structure as “a floating entity, with or without accommodations built thereon, which is not primarily used as a means of transportation on water, but which serves purposes or provides services typically associated with a structure or other improvement to real property.” Floating structures include, but are not limited to, such structures as floating docks, boatlifts, vessel platforms, helipads, and work platforms. Section 327.02(47), F.S., defines a vessel as “synonymous with boat as referenced in s. 1(b), Art. VII of the State Constitution and includes every description of watercraft, barge, and airboat, other than a seaplane on the water, used or capable of being used as a means of transportation on water.”

The distinction between anchoring and mooring and between vessels and floating structures are important ones. Vessel mooring is regulated under Chapter 7 of the Code of Miami-Dade County (County Code) and the installation of a mooring is subject to the Class I permitting requirements of Section 24-48 of the County Code, whereas dropping an anchor, and vessel anchoring, are not currently regulated under County Code. While placing or maintaining a floating structure in, on, over, or upon tidal waters of the County requires a Class I permit issued by the Department of Regulatory and Economic Resources, Division of Environmental Resources Management (RER-DERM), vessels are not subject to these requirements.

Note that Section 327.4109(4), F.S., prohibits anchoring, mooring, tying or otherwise affixing a vessel or floating structure to an “unpermitted, unauthorized, or otherwise unlawful object that is on or affixed to the bottom” in State waters with the exception of a private mooring on privately owned submerged lands. Such unlawful objects would include any mooring installed in tidal waters of Miami-Dade County without the required regulatory permit(s), including a DERM Class I permit. Except in an emergency, Section 327.44(2), F.S., also prohibits the anchoring or mooring of a vessel “which unreasonably or unnecessarily constitutes a navigational hazard” or interferes with another vessel. The section further states that “anchoring or mooring under bridges or in or adjacent to heavily traveled channels constitutes interference if unreasonable under the prevailing circumstances” but offers no guidance on what constitutes anchoring or mooring that is unreasonable or unnecessary.

Despite the above, the general lack of limits on the location and duration of vessel anchoring in Florida waters, and the effective absence of any statutorily required minimum water depth for anchored vessels, have contributed to a number of issues adversely affecting public safety and marine and fiscal resources statewide. Vessels that are anchored and left unattended for long, often indefinite, periods frequently deteriorate to the point where they meet the definition of a derelict vessel as described in Section 823.11, F.S. Vessels may remain anchored in one location for months or years before sinking, breaking loose

from their anchor, colliding with other vessels or structures, or grounding themselves in sensitive habitat. Vessels anchored in water that is too shallow relative to their draft can destroy large areas of benthic habitat, including seagrass, due to shading and bottom scouring from the anchor chain and rope as a vessel swings on its anchor or repeatedly grounds itself at lower tide stages. Marked examples of this exist near Dinner Key and in the Miami Marine Stadium, Rickenbacker, and Julia Tuttle basins, where water depths are relatively shallow, and the amount of marine vegetation is substantial.

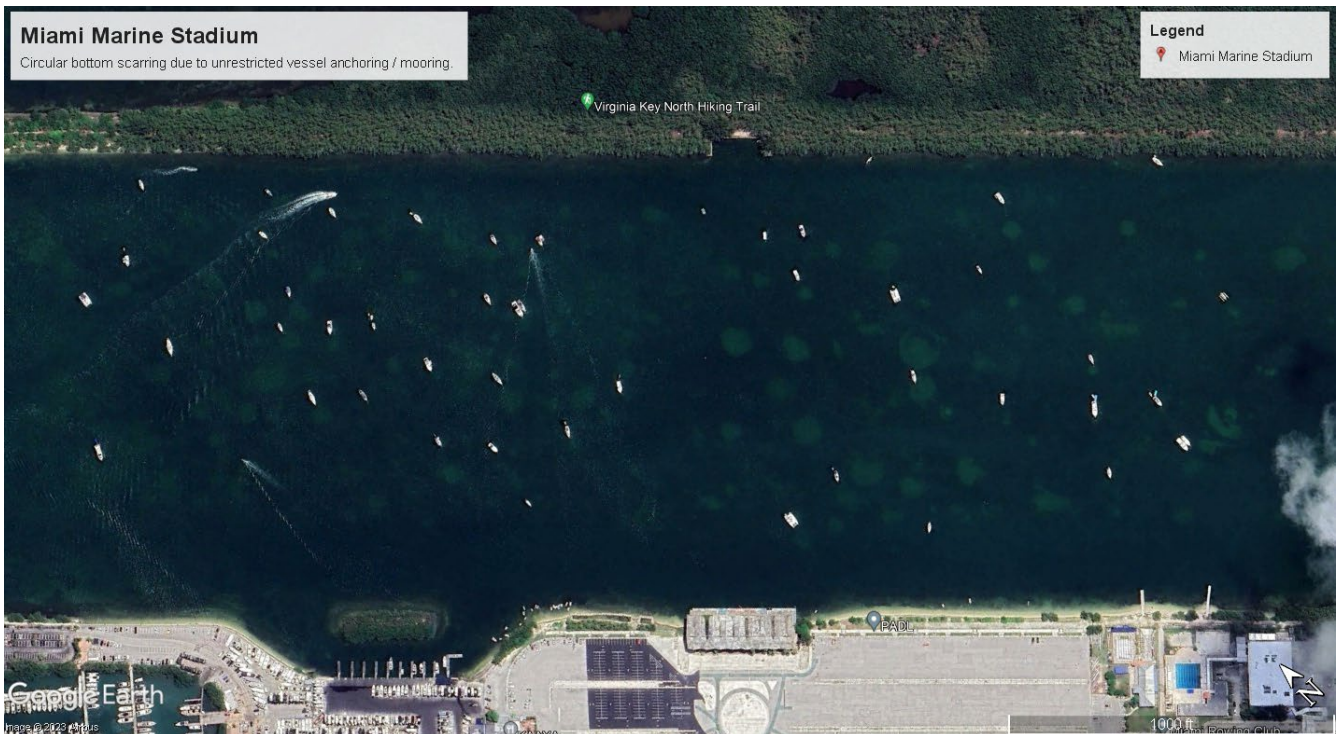


Figure 1: A portion of the Miami Marine Stadium showing 48 vessels anchored on a given day, including those illegally tied up to or grounded upon the vegetated shoreline.

There are multiple locations within Biscayne Bay where long-term anchoring of vessels is commonplace, and which are notorious “hot spots” for derelict and abandoned vessels. These locations tend to be those that are easily accessible from land and close to upland amenities, including public boat ramps and marinas. Examples include the areas of Dinner Key and Miami Marine Stadium, east and north of Watson Island, the west side of Miami Beach north and south of the Venetian Causeway, surrounding Pelican Harbor, and between FIU North Campus and Oleta River State Park. Of the approximately 158 derelict vessels removed by RER-DERM between 2019 and the present, well more than half were located within one of these areas.

Long-term anchoring is also problematic in other areas of Miami-Dade County, such as in the shallow and environmentally sensitive areas of Barnes Sound and Manatee Bay, and particularly north and south of the Julia Tuttle Causeway. The latter areas are favored by commercial personal watercraft liveries, the operators of which frequently anchor vessels for extended periods, effectively using them as bases of operations for their businesses, without securing the requisite regulatory permits and proprietary authorizations typically required for land-based vessel docking and storage facilities. This area is of high

environmental sensitivity as multiple fish kills, a multi-basin seagrass die-off event, and bird rookery collapse have all occurred within this particular basin in the past decade. Any additional stressors to this sensitive area, and many others like it in the County, can elicit additional environmental emergencies if comprehensive and long-standing protective actions are not implemented.

In recognition of the deleterious effects of long-term anchoring, the Florida State legislature approved the passage of Section 327.4108(2)(a), F.S., which allows for Florida counties to establish “Anchoring Limitation Areas” (ALAs) in which anchoring is limited to a specific duration.

This report contains an analysis of applicable federal, state, and local regulations as it relates to the anchoring of vessels, evaluation factors for establishing an ALA, general areas within Biscayne Bay recommended for the establishment of ALAs, the resources needed for the effective implementation and enforcement, and the potential fiscal impacts. Furthermore, this report puts forth a recommendation for a pilot study location to determine the effectiveness of ALAs.

Review of existing regulations as it relates to ALAs

As part of this evaluation, RER-DERM conducted an analysis of existing federal, state, and local regulations and policies that may relate to the anchoring of vessels, including but not limited to the County’s Comprehensive Development Master Plan, Manatee Protection Plan, and the County Code.

327.60, F.S. – Local regulations; limitations

Until the passage of new State legislation in 2021 allowing Counties to establish anchoring limitation areas, Section 327.60, F.S., severely limited County and municipal governments from establishing local ordinances that regulate the anchoring of vessels (but not floating structures) outside the marked boundaries of permitted mooring fields, with the exception of liveaboard and commercial vessels (not including commercial fishing vessels).

State regulations regarding vessel anchoring in Florida have historically been quite liberal and, with some exceptions, generally have allowed the anchoring of vessels nearly anywhere and with no time limit. Exceptions include anchoring and mooring prohibitions within 150 feet of any public or private marina, boat ramp, boatyard, or other public vessel launching or loading facility; within 500 feet of a superyacht repair facility; and within 100 feet outward from the marked boundary of a public mooring field. Section 327.4108, F.S., currently prohibits anchoring between one-half hour after sunset and one-half hour before sunrise in the following areas of Miami-Dade County: Sunset Lake and the areas of Biscayne Bay lying between Rivo Alto and DiLido Islands, between San Marino and San Marco Islands, and between San Marco and Biscayne Islands. Vessels owned or operated by the government, construction and dredging vessels on an active job site, and commercial fishing and recreational vessels actively engaged in fishing, are not subject to these anchoring restrictions.

327.4108, F.S. - Anchoring of vessels in anchoring limitation areas

Florida Statute 327.4108 allows local governments to establish anchoring limitation areas within their jurisdictions for the purpose of managing and regulating vessel anchoring. These limitation areas are

typically designated in specific waterways or zones to address various concerns, such as safety, environmental protection, and navigation.

Key provisions of the statute include:

1. **Local Authority:** The statute grants local governments, including municipalities and counties, the authority to establish and enforce regulations related to vessel anchoring within their boundaries.
2. **Anchoring Time Limit:** Local authorities may impose the defined time limit of 45 consecutive days in any 6-month period for an established ALA. This means that boaters may be restricted in how long they can anchor their vessels in these designated zones. Exceptions can be made for vessels undergoing mechanical failure allowing for a maximum 3 day anchoring while under repair; under imminent or existing weather conditions posing an unreasonable risk of harm to the vessel or the person; actively engaged in fishing with persons onboard tending lines; anchoring during permitted special events, as defined in Section 327.48, F.S.; undergoing active, permitted construction or dredging projects within the ALA; and governmental vessels in operation of their duties.
3. **Boundary Size:** Local authorities may define ALAs up to a maximum of 100 acres in footprint, excluding navigable channels, vessel exclusion zones, and mooring fields. The total aggregate of all ALAs in a county may not exceed 10 percent of the county's delineated navigable-in-fact waterways.
4. **Citations and Vessel Removal:** Law enforcement may require documentation and/or electronic evidence that the vessel has not exceeded ALA requirements. If a vessel fails to provide sufficient documentation or evidence a citation of violation may occur. If the cited vessel refuses to leave or returns to the ALA after notice of violation, an officer or agency or law enforcement directed contractor can remove and impound the vessel.
5. **Environmental Protection:** The statute allows local governments to establish anchoring limitation areas to protect sensitive marine ecosystems, such as seagrass beds or coral reefs. Anchoring restrictions in these areas aim to minimize damage to the environment.
6. **Safety and Navigation:** Local authorities may use anchoring limitation areas to ensure safe navigation, prevent congestion, and maintain waterway access for emergency vessels and other boaters.
7. **Public Access:** The statute encourages local governments to provide reasonable access to anchoring for the public while still enforcing regulations in the ALAs.
8. **Signage:** The statute requires that ALAs be clearly marked with both signs that identify the duration of time beyond which anchoring is limited and the county ordinance by which the ALA was created along with buoys marking the boundary of the ALA.

Note that Section 327.4108(3)(a), F.S., established all of Monroe County as an ALA and requires that vessels anchored in Monroe County within 10 linear nautical miles of a public mooring field or a designated anchoring area be moved at least one-half nautical mile at a minimum of once every 90 days. Future coordination with Monroe County may be warranted to ensure the most effective establishment of ALAs near the county line and to educate the public on similar and differing regulatory requirements in these areas.

327.4107, F.S. - Vessels at risk of becoming derelict on waters of this state

Florida Statute 327.4107 is intended to prevent vessels from becoming derelict and posing hazards to the environment and navigation. Derelict vessels are abandoned or neglected vessels that are wrecked, junked, or substantially dismantled and which typically pose a hazard to navigation and/or the environment. The statute aims to prevent vessels from becoming derelict by giving owners an opportunity to correct deficiencies and, if necessary, to allow for the pre-emptive removal and disposal of vessels that are at-risk before they become significant hazards.

Key provisions of the statute include:

1. **Notification:** The statute allows law enforcement officers to identify vessels that are at risk of becoming derelict based on certain criteria and to warn / cite vessel owners so that they correct deficiencies related to vessel maintenance and proper anchoring.
2. **Compliance Period:** Upon notification, vessel owners have a specified period to take corrective action and bring their vessels into compliance with state laws and regulations. This typically includes addressing issues like seaworthiness, buoyancy, and maintenance.
3. **Vessel Removal:** If the vessel owner fails to take the necessary corrective actions within the provided compliance period, the statute allows law enforcement agencies to remove or cause to be removed a vessel for which three or more citations have been issued for at-risk violations within an 18-month period. Citations that result in acquittal or dismissal do not count.
4. **Environmental Protection:** The statute emphasizes the importance of preventing environmental damage by ensuring that derelict vessels are properly managed and removed from the water to prevent pollution and habitat destruction.
5. **Public Safety:** Removing derelict vessels from the waters of the state helps maintain public safety by eliminating navigation hazards and potential dangers to other boaters.
6. **Notification Process:** The statute outlines the procedures and requirements for the notification process, including the content of the notice, the means of delivery, and the legal obligations of vessel owners.

Overall, 327.4107, F.S., aims to address the issue of derelict vessels by giving owners an opportunity to rectify the situation and, if necessary, allowing for the removal and disposal of vessels that pose a risk

to the environment and public safety. It provides a legal framework to manage and prevent vessels from becoming derelict on Florida's waterways.

Chapter 18-18, F.A.C. & 258.397, F.S. – Biscayne Bay Aquatic Preserves Act

The Biscayne Bay Aquatic Preserves Act does not regulate anchoring within the waters of the Biscayne Bay or the Cape Florida to Monroe County Line Aquatic Preserves.

62D-2.014, F.A.C. - Operation of Division Recreation Areas and Facilities - Activities and Recreation

Within State Park submerged lands, vessels shall not “moor, anchor or tie up to any buoy, marker, bank or any wharf, dock, tree, building or other object or structure on the bank, any watercraft of any kind in waters within or contiguous to park areas within one hundred feet of the shoreline, in areas designated by the Division as closed for such purposes.”, 62D-2.014(8)(c), F.A.C. Similarly, in 62D-2.015(2)(e), F.A.C., “no person operating passenger launches or excursion boats from outside the parks that are for rent or hire or carrying passengers for money shall land or anchor or tie up in any park without first having applied for and received a permit from the Division.” Violations of the provisions will result in a Level One noncriminal infraction with an increasing fine schedule for repeated offenses.

These rules exist within the waters of Miami-Dade County along the shorelines of Oleta River State Park and Sandspur Island, Barnacle Historic State Park, Bill Baggs Cape Florida State Park, and John Pennekamp Coral Reef State Park.

Bill Sadowski Critical Wildlife Area

The Bill Sadowski Critical Wildlife Area (CWA) was established by the Florida Fish and Wildlife Commission (FWC) in 1992 to protect areas of critical shorebird nesting and marine wildlife by minimizing “the adverse impact on wildlife due to man-caused disturbance or destruction”, 68A-1.004, F.A.C. The CWA is the largest in the state at 700 acres of submerged, mangrove wetland, and island habitat. As a year-round “No Entry” area, the CWA protection restricts all vessel operations, including anchoring.

Biscayne National Park

Pursuant to Title 36 Section 1.5 of the Code of Federal Regulations, and the Superintendent's Compendium of Biscayne National Park (BNP), vessel mooring in the waters of Biscayne National Park is limited to no more than 14 consecutive days, and no more than 30 days in a calendar year, without a permit issued by the Park's Superintendent. This regulation is enforced by National Park Service law enforcement and permit issuance for long-term vessel storage is solely within the Park's purview and at its discretion.

There are areas within the National Park that allow active boating, but restrict anchoring. As defined in the BNP General Management Plan, the Legare Anchorage area (bounded by latitude 25°30 N and 25°29

N and longitude 80°08 W and 80°07 W) is defined within Biscayne National Park for the long-term protection of submerged cultural resources. Therefore, anchoring any vessel within the area is prohibited at any time, except in the case of emergencies. Vessels are allowed to enter and motor through or float through the area. Additionally, active hook and line fishing with a drifting vessel is allowed.

Seasonal No Entry Areas

The County's Manatee Protection Plan (MPP) implements residential "No Entry" areas during the winter manatee season from November 15 - April 30 within portions of Biscayne Canal, Little River, and the Coral Gables Waterway (MPP – page 100). These no entry areas restrict vessel movements by only allowing residents to boat through the waterway to access their single-family dock. Within these areas, non-emergency construction activities are held to the manatee summer season from May 1 - November 14. While these residential "no entry" areas were primarily established for manatee protection and residential access in waterways where protection of resources and riparian rights with dock access must be balanced, they indirectly protect against anchoring within their boundaries since these areas serve to allow motor through access but restrict activities from vessels that aren't underway.

Miami-Dade County Comprehensive Development Master Plan

The County's Comprehensive Development Master Plan (CDMP) expresses the County's general objectives and policies addressing where and how it intends development and the conservation of land and natural resources to occur, as well as the delivery of County services to accomplish the expressed objectives. Two adopted components of the CMDP that are applicable to the establishment of ALAs include the Conservation, Aquifer Recharge and Drainage Element and the Coastal Management Element. Both Elements provide for the conservation, environmentally sound use, and protection of natural resources in the County. The Coastal Management Element requires, in part, that impacts of man-made structures and activities on coastal resources, including seagrasses, be minimized. The long-term storage and abandonment of vessels has the potential to result in adverse and cumulative adverse impacts to the County's coastal resources and water quality. With sufficient enforcement to ensure that vessels at-risk of becoming derelict are appropriately removed, ALAs could reasonably be anticipated to minimize the potential impact of vessels on areas of sensitive natural resources.

Miami-Dade County Manatee Protection Plan

The County's Manatee Protection Plan (MPP) was adopted by ordinance in 1996 with the purpose of providing county-wide protection for the manatee and its habitat by including criteria for vessel speed zones, marina/boat facilities and their siting, law enforcement, shoreline and submerged land development, education programs, habitat protection, human manatee interactions, and governmental coordination. Pursuant to the MPP, the protection of existing manatee habitat is essential to the survival of the species. Incompatible human activities, including impacts from derelict vessels and irresponsible anchoring, can result in the degradation of habitat resulting in a reduction of manatee food supplies, elimination of natural areas for sensitive activities such as mating, birthing, and nursing, and a general reduction in the capacity of the ecosystem to support manatees. Derelict vessels and vessels at-risk of becoming derelict may negatively affect manatees and their habitat by obstructing manatee movements

along shorelines or across seagrass beds, providing a source of contaminants, and physical impacts to seagrass beds as the result of grounding or scouring.

Of the eleven recommended ALA locations, four are located within areas identified by MPP as essential manatee habitat. Essential habitat is used by manatees for sensitive activities such as feeding, resting, mating, nursing, cold shelter, and travel. Protecting rare, threatened, or endangered species such as manatees involves preserving important habitat that the species rely on for survival and minimizing certain human activity that can be disruptive to important behaviors that are also necessary for the species survival.

In addition to providing guidelines for the siting of new or expanded marine facilities to help reduce the risk of impacts from vessel traffic, the MPP outlines measures necessary for the protection of manatee habitat. The establishment of ALAs within areas of sensitive environmental resources could further the recommendations of habitat protection as outlined in the MPP.

Section 24-48 of the Code of Miami-Dade County

Section 24-48 of the County Code provides for the protection of resources, including seagrass beds, hard bottom, mangrove communities, and coral and sponge communities, by requiring that appropriate County authorizations be obtained prior to performing work in, on, over, or upon tidal waters or coastal wetlands of Miami-Dade County. Pursuant to section 24-49.2(I)(A)(12) of the County Code, the installation of any new, non-exempt aids to navigation shall be processed as an administrative short form Class I permit application. As part of the Class I permit application review, the placement of markers and signage would be evaluated to minimize impacts to benthic resources. Once permitted, the County Code allows for the replacement or repair of waterway markers to be exempt from Class I permitting requirements. Note that legislation is currently being proposed to amend section 24-48 of the County Code to allow for the installation of new waterway regulatory markers to be processed as an Expediated Administrative Authorization in lieu of a Class I permit. Should the ordinance be adopted, aids to navigation, such as signage and buoys required pursuant to Section 327.4108, F.S., would qualify for this expediated review process.

Authorizations may also be required from the U.S. Army Corps of Engineers (USACE), the State of Florida Department of Environmental Protection (FDEP) or the South Florida Water Management District, and the municipality in which the work is proposed. The installation of signage and markers would qualify under a Nationwide or Regional General Permit for the USACE and would be exempt for FDEP regulatory requirements under Section 62-330.051(8), F.A.C.

The establishment of ALAs within the areas identified by RER-DERM is reasonably anticipated to further the County's regulations and policies, decrease the prevalence of derelict vessel hotspots, and result in increased protections for sensitive, protected benthic habitat and species, including essential manatee habitat.

General areas recommended for the establishment of ALAs

RER-DERM recommend the below proposed ALAs, however the final orientation and acreage of the proposed areas is not finalized and would be determined after final review from the County Mayor or County Mayor's designee and the submerged lands owners have been consulted. Recommended locations suitable for the establishment of an ALA are between two to over 200 acres in size and may require one or more ALA to properly encompass the submerged lands to provide comprehensive benefits to the natural, bay resources and the reduction of 'at-risk' and derelict vessels.

Recommended areas within Northern Biscayne Bay:

- Oleta River State Park area
- Pelican Harbor area
- John F. Kennedy Causeway South, between Pelican Harbor and North Bay Island
- Marine Stadium area
- North and South of the eastern Venetian Causeway
- Crandon Park area
- Dinner Key area

Recommended areas within Southern Biscayne Bay:

- Barnes Sound area
- Manatee Creek area
- Manatee Creek Cove area
- Card Sound Road Canal

General illustrative depictions of the recommended ALA locations are included at the end of this report.

Factors considered in determining recommended ALAs

In determining which parts of the County should be included in ALAs, RER-DERM conducted an evaluation of known derelict and 'at-risk' vessel hotspots relative to the potential for increased environmental impacts. The proposed ALA locations recommended in this report were included due to the presence of sensitive environmental resources such as seagrasses, inadequate water depths, and historic documentation of long-term vessel storage and vessel abandonment. Consistent with the requirements of Section 327.4108(2)(a), F.S., the proposed ALAs are adjacent to urban areas that have residential docking facilities and significant recreational boating traffic. The proposed ALAs range in size from 1.7 acres to 100 acres and the aggregate total of the currently proposed ALAs would account for 0.35% percent of the County's navigable waterways, meeting the statute's criteria of cumulative ALA acreage remaining below 10% of the County's navigable waterways.

Additional factors for consideration of ALA establishment should be based upon data from all available sources. Several aforementioned considerations should include derelict and 'at-risk' vessel hotspots, areas of high natural resources and ecosystem services which require additional protections for conservation for aesthetic and biological values including essential fish habitat, water quality

improvements via nutrient and turbidity reductions, shoreline stabilization, and storm surge reductions provided by a healthy, thriving bay bottom. While the current list of proposed ALAs was evaluated based on the primary consideration for reducing and/or eliminating ‘at-risk’ or derelict vessels, additional ALAs could and should be established to benefit secondary considerations. Therefore, the ALAs proposed in this report are not an exhaustive list of potential areas. Additional ALA locations may be submitted by either the County or proposed by municipalities to the County for review and transmittal to FWC for approval. If a municipality requests an ALA adjacent to its urban area, it is recommended that the County require that the municipality install and maintain, at the municipality’s expense, the necessary signage and buoys. Furthermore, it is recommended that municipalities be responsible for enforcing the provisions of 327.4108, F.S., for ALAs proposed by the municipalities.

While Section 327.4108, F.S., does define the maximum size of individual ALAs to be no greater than 100 acres, it does not define a required minimum distance between separate ALAs. Therefore, establishing multiple ALAs could be a preferred solution to protect expansive environmentally sensitive areas, like seagrass beds, and large areas where ‘at-risk’ or derelict vessels are commonplace, like north and south of the eastern Venetian Causeway.

RER-DERM conducted multiple meetings and presentations to solicit input from other governmental entities with enforcement and proprietary authority over submerged lands. Marine patrol agencies consulted include FWC, Miami-Dade County Marine Patrol, City of Miami Marine Patrol, and City of Miami Beach Marine Patrol. These four on-water law enforcement agencies represent the largest marine patrols where ALAs are being proposed within Miami-Dade County. Additional consideration and engagement were conducted by speaking and presenting at the Maritime Area Security Team (MAST) meetings regularly coordinated by Miami-Dade County Marine Patrol. MAST meetings allow for representatives of all 18 federal, state, county, and municipal marine patrols and natural resource management agencies to discuss on-water coordination for all maritime-related activities and issues.

Coordination with natural resource management agencies and municipalities included FDEP; Miami-Dade County Parks, Recreation and Open Spaces (PROS); the City of Miami Beach, the City of Miami, North Bay Village, and Brevard County. Discussions with Brevard County allowed RER-DERM to discuss similar criteria to determine proposed ALAs and the process for establishment with another county agency. Consultation with the other management agencies and municipalities allowed RER-DERM to define more appropriate locations and criteria for consideration.

During the discussions with City of Miami Beach and City of Miami, RER-DERM staff were advised of the intent for each city to establish mooring fields or restrictions for ‘no anchoring overnight’ within some of the proposed ALAs. While RER-DERM does not consider a mooring field to be a substitute for an ALA, we recognize that each entity can determine which management action is preferred within the boundary of their proprietary authority. RER-DERM continues to recommend and propose ALAs within these waterways since the areas meet the defined criteria for ALAs, even if another management action is preferred and ultimately implemented.

Resources needed for the enforcement of the recommended ALAs

The enforcement of ALAs is strictly the purview of law enforcement, not code enforcement, pursuant to Section 327.4108, F.S., The general consensus among local marine law enforcement is that effective enforcement of ALAs, especially on a substantial basis, is expected to be challenging in Miami-Dade County. Reasons for this include, but are not limited to, the following:

1. There is a current lack of adequate marine law enforcement personnel on a municipal, County, and State level and enforcement of ALAs will have to compete with a number of higher priority issues for which they are already responsible.
2. The 45-day time period in which a vessel may remain anchored within an ALA is relatively lengthy. Tracking the consecutive number of days a vessel remains anchored within an ALA will require close monitoring and documentation by law enforcement in order for the anchoring time limit to be enforceable. There are no parking meters on the water.
3. Section 327.4108(6)(1), F.S., states that “upon an inquiry by a law enforcement officer or agency, a vessel owner or operator must be given an opportunity to provide proof that the vessel has not exceeded the limitations described in subsection (2). Such proof may include any of the following:
 - a. Documentation showing that the vessel was in another location at least 1 mile away within a period of less than 45 days before the inquiry.
 - b. Electronic evidence, including, but not limited to, navigational devices or tracking devices that show the vessel was in another location at least 1 mile away within a period of less than 45 days before the inquiry.
4. If a vessel owner or operator fails or refuses to provide proof that the vessel has not exceeded the limitations described in subsection (2), the law enforcement officer or agency may issue a citation for a violation of this section. A violation of Section 327.4108, F.S., is a non-criminal infraction for which the monetary penalty is relatively modest (maximum \$100.00 first offense, \$250.00 second offense, \$500.00 third and subsequent offenses) and the consequences for non-payment are equally modest, especially for those unable to pay. Additionally, a violation of Section 327.4108, F.S., is not listed under Section 327.70, F.S., as one for which a citation may be served by mail; therefore, violators must be served in person. This will prove difficult in many cases, particularly when vessel owners are seldom present or cannot be located. Furthermore, the options given to vessel owners/operators to demonstrate that their vessel has traveled at least one mile outside an ALA within the 45-day timeframe may be subject to manipulation/falsification and be difficult to verify.
5. There are large numbers of vessels present in most of the areas identified as potential ALAs. To be effective, and given limited resources, law enforcement may be able to target only a limited number of vessels deemed to be the most potentially problematic. These vessels may already be

addressed as ‘at-risk’ vessels under Section 327.4107, F.S., or as derelict vessels under Section 823.11, F.S.

6. The 100-acre limitation on the size of individual ALAs may not be adequate to encompass some areas, such as the Dinner Key or the eastern Venetian Causeway anchorage. It is unclear whether the statute allows separate ALAs to be established immediately adjacent to each other. If not, vessel owners may simply shift the location of their vessel just outside the boundaries of an ALA in order to comply. Our recommendation is to propose these larger areas become ALAs with final consultation of the orientation and number of ALAs to include the proprietary authority. This will allow for better enforcement capability across larger, priority areas.
7. Miami-Dade County marine law enforcement continue to hand-write their uniform boating citations, while several other law enforcement agencies have been able to successfully move over to a digital input system within the field. The lack of this functionality leads to issues with tracking repeat offenders for violations while engaging with them during the infield citation process. Resources are needed to build this electronic system to further allow increased efficiency, more comprehensive enforcement actions, and increased technology for the betterment of staff workload and the enforcement process.

Estimated fiscal impact of establishing, implementing, and enforcing the recommended ALAs

The following is an estimate of the expected fiscal impact of establishing, implementing, and enforcing the recommended ALAs, including the cost of permitting, installing, and maintaining the signs and buoys. Potential funding sources to address the expected fiscal impact are also outlined.

Permitting fees would only be required in association with the County’s Class I permit. Class I application and permit fees are calculated based on the cost of construction; for ALAs, fees would be calculated based on the cost of installing the required signage and buoys. Note there is also an additional 7.5% Miami-Dade County surcharge fee assessed for application and permit fees. The Class I permit fee may be waived pursuant to section 24-48.8 of the County Code, provided the work is performed by a federal, State, municipal or another local governmental agency. Should the proposed ordinance to allow for the installation of waterway markers as an Expediated Administrative Authorization in lieu of a Class I permit be adopted, the permitting fees would be a flat rate as determined by the amended fee schedule. There are no permitting fees for activities that qualify for a USACE Nationwide or Regional General Permit. While the installation of signage and buoys are exempt from State regulatory permitting, a request for verification that the work qualifies for the exemption would cost \$100.00.

The cost of manufacturing, assembling, and installing buoys will vary based on the bid price from an approved County vendor during an invitation to bid process and the current industry and manufacturing rate of marker components. The current per buoy conservative estimate is \$2,000.00 - \$4,000.00. Buoys demarking areas within Biscayne Bay and offshore waters are prone to disrepair, loss, and damage. Frequent replacement of buoys can lead to higher costs than installation of pilings. While pilings are more structurally sound, have longevity, and require less maintenance, they have higher upfront costs for production and installation, and sometimes cannot be installed in areas of extreme, shallow depths.

The cost of labor could be reduced if the quantity of buoys or pilings was increased for each installation contract.

Options for marking an ALA should be determined based on whether a buoy or piling is warranted, the upfront fiscal availability, and long-term maintenance funding availability. The various buoy components shall include a properly labelled buoy along with down, through, and pick-up lines, and steel hardware. Buoys can be installed to the hardbottom or sediment in three ways of varying costs: standard concrete anchor with stainless steel rods and eye bolt, or 'U' shaped stainless-steel anchor with associated concrete, or helical anchor. While securely anchored to the benthic habitat, buoys can still become detached, the rope lines can be cut by vessel propellers, and hardware can degrade over time. Piling options include wooden, concrete, or composite materials. Signage with associated attachment hardware and, if necessary, piling lighting components must also be printed, installed, and maintained.

As damage from weather related events, improper boating, and decay in a saltwater environment are expected to occur, regular, semi-annual maintenance costs will need to be covered. To ensure the longevity of the markers, regular inspections of the markers should be performed at quarterly intervals. It is estimated that these inspections could cost in excess of \$100.00 per marker. Additional emergency in-water and above-water inspections at the behest of the managing entity would occasionally occur at a cost of a couple hundred dollars per marker.

The costs of establishing ALAs by the County, including those associated with the permitting, purchase, installation, and maintenance of the required regulatory markers and signage may be eligible for funding using vessel registration fees collected by the Miami-Dade County Tax Collector. These include a State vessel registration fee collected pursuant to Section 328.72(15), F.S., that is currently apportioned to PROS and a County vessel registration fee collected pursuant to Section 328.66(1), F.S., that is currently apportioned to the Biscayne Bay Environmental Enhancement Trust Fund. Disbursement of the latter for use in establishing, implementing, and enforcing ALAs would require approval by the Board of County Commissioners consistent with the requirements of Section 24-40 of the County Code. Other potential funding sources may include grants from the Florida Inland Navigation District and FWC's Florida Boating Improvement Program; however, neither would be guaranteed.

With the authority established in Section 327.4108(2)(a), F.S., Miami-Dade County can establish and approve ALAs on behalf of municipalities. For ALAs requested by municipalities or within municipal owned submerged lands, it is recommended that the municipality be responsible for funding the installation, maintenance, and enforcement costs associated with the respective ALAs.

A general overview of anticipated costs associated with the enforcement of ALAs is provided below.

- Enforcement by a Miami-Dade County Marine Patrol Unit officer will cost on average \$55.56 per hour for on-water operations and off-water administrative processing. If overtime is required to complete the necessary enforcement actions, then a rate of \$83.34 per hour will be incurred.
- Enforcement by a Miami-Dade County Illegal Dumping Unit officer will cost on average \$42.15 per hour for on-water operations and off-water administrative processing. If overtime is required to complete the necessary enforcement actions, then a rate of \$63.22 per hour will be incurred.

- Enforcement by a Miami-Dade County Illegal Dumping Unit Sergeant will cost on average \$51.27 per hour for on-water operations and off-water administrative processing. If overtime is required to complete the necessary enforcement actions, then a rate of \$76.91 per hour will be incurred.

As the total cost and resources needed to establish one or more ALAs within a priority area is not yet determined, RER-DERM propose prioritizing one area within County waters to serve as a pilot project to determine the efficacy, costs, timeline, and process. Based on the proposed 11 ALAs, RER-DERM staff have determined that the two ALAs recommended within the Pelican Harbor and 79th Street Causeway area be prioritized as a test case.

It is recommended that should the County decide to pursue further research into the establishment of additional ALAs, funds should be set aside in the Fiscal Year 2024-2025 County budget for staff time related the review of proposals, their establishment, and coordination with enforcement and management agencies.

Conclusion

For the reasons stated above, RER-DERM recommends that a pilot project ALA be established to determine the efficacy, costs, timeline, and process necessary to further implement ALAs within Miami-Dade County. Should the County decide to move forward with establishing one or multiple ALAs, the County must provide notice to the FWC at least 30 days prior to the introduction of an ordinance to establish the ALA. Upon notification of the County's intent to proceed with an ALA, FWC will provide notice to the public on its website and through an e-mail distribution list of the proposed ALA.



Potential Northern Anchor Limitation Areas





Potential Southern Anchor Limitation Areas

