# WATERFRONT RECREATION ACCESS PLAN

A VISION FOR MIAMI-DADE COUNTY'S WATERWAYS

**EXECUTIVE SUMMARY** 

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Waterfront Recreation Access Plan | A Vision For Miami-Dade County's Waterways



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"Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone be a living thing, asserting itself with ever-growing insistency."

Daniel Burnham, Architect and Urban Planner



#### MISSION

The mission of the Florida Inland Navigation District is to perform the functions of the "local sponsor" of the Atlantic Intracoastal Waterway project in Florida, a State/Federal navigation project. In this capacity the District provides all lands required for the navigation project including rights of way and lands for the management of dredged materials removed from the waterway channel during dredging activities. The District is the local navigation sponsor of the Okeechobee Waterway (OWW) in Palm Beach and Martin County.

The Florida Inland Navigation District was created by the Florida Legislature in 1927, by Chapter 12026 Laws of Florida to be the state sponsor of the Atlantic Intracoastal Waterway in Florida. This law authorized the Navigation District to purchase the existing East Coast Canal that had previously been constructed by private interests and which ran from Jacksonville to Miami. The Navigation District purchased the Canal in 1928 and it became the public waterway known as the Atlantic Intracoastal Waterway in Florida.

Today, the Navigation District's responsibilities can be found under Chapter 374 of the Florida Statutes. This law states that the principal function of the Navigation District as the state sponsor of the Waterway is to furnish to the United States of America, the federal sponsor of the waterway, all lands required by them to construct, operate and maintain the Waterway. Additionally, the Legislature authorized the Navigation District to perform Waterway projects on behalf of the United States as well as working with other governmental agencies to provide waterway access for our mutual constituents.

The Navigation District consists of the twelve counties along the east coast of Florida from Nassau through Miami-Dade County. The Governor appoints a commissioner from each county to serve on the Navigation District's Board of Commissioners. The Board levies a real property tax on all property within the District's boundaries to generate the funds necessary to fulfill the District's responsibilities.







#### MISSION

#### Connecting People and Parks for Life.

The Miami-Dade County Parks, Recreation and Open Spaces Department (MDPROS) operates as both a countywide park system serving 2.8 million residents and as a local parks department for the unincorporated area serving approximately 1.2 million residents. Serving the seventh largest county in the U.S., the Department acquires, plans, designs, constructs, maintains, programs and operates County parks and recreational facilities; provides summer camps, afterschool and weekend programs for youth; manages 44 competitive youth sports program partners; provides programs for active adults, seniors and people of all abilities; and provides unique experiences at Zoo Miami and seven Heritage Parks: Crandon, Deering Estate, Fruit and Spice, Greynolds, Haulover, Homestead Bayfront and Matheson Hammock Park. MDPROS provides various community recreational opportunities including campgrounds, nearly 17 miles of beaches, 305 tennis, volleyball, and basketball courts, 200 athletic fields, an equestrian center, picnic shelters, playgrounds, fitness zones, swimming pools, gold courses, recreation centers, playgrounds, sports complexes, a gun range, an archery range, skating rinks, and over 172 miles of walking, hiking, and bicycle trails.

The Department manages over 26,000 acres of environmentally endangered lands and natural areas. In addition, MDPROS offers environmental experiences through five nature centers, preserves and Eco-Adventure programs. The Department provides education in agriculture, sustainable gardening, marine science, food and nutrition through Agriculture and Cooperative Extension services. MDPROS is the single largest provider of waterway access for boating and shoreline enjoyment in Miami-Dade County. With six full-service marinas designated as "Clean Marinas" by the Florida Department of Environmental Protection and six certified Marina Managers through the Association of Marine Industries, the MDPROS Marina Enterprise includes:

- 2 rack dry storage (600 space capacity)
- 4 surface dry storage areas (272 space capacity)
- 4 restaurants
- 6 public boat ramps (653 space capacity)
- 6 fuel docks and bait and tackle operations
- 32 commercial charter slips
- 87 moorings
- 1,068 wet slips
- 1,459 marina boat slips

MDPROS also maintains 55.25 miles of recreational waterfront shoreline along beaches, canals, and lakes for swimming, fishing, nature watching, meditation, and other non-boating water activities. With 14 canoe, kayaking, and paddleboard launches, the Department offers a variety of opportunities to access Miami-Dade County's waterways. In addition, MDPROS plans for 500 miles of greenways with more than 75 miles of corresponding South Florida Water Management District and Miami River waterways connecting from Biscayne Bay to the Everglades.





Dear Residents, Visitors, and Partners,

Perhaps the single most important element that drives Miami-Dade County's identity and quality of life is our access to and enjoyment of the waterfront---Biscayne Bay, the Intracoastal Waterway, rivers, canals, lakes, and our beaches. These represent the most recognized recreational, environmental and economic resources found anywhere in the world!

Miami-Dade County and its waterways are home to two national parks, a national marine sanctuary, a state aquatic preserve, and a host of other national, state, and locally managed areas which require balancing public access with vigilant resource protection. The effects of sea level rise, flooding, and coastal storm surge continues to heighten Miami-Dade County's awareness of the three-pronged threat to Biscayne Bay's shoreline and inland waterbodies.

In recognition of our community's reliance on a water-based quality of life, the Florida Inland Navigation District (FIND) has partnered with the Miami-Dade County Parks, Recreation and Open Spaces Department (MDPROS) to develop the Waterfront Recreation Access Plan, a strategic waterways master plan built upon Miami-Dade County's Parks and Open Space System Master Plan (OSMP) that unifies in a single document the balance for recreational waterfront access that reflects a robust marine-related economy, environmental protection and climate resilience.

In the following pages you will find a series of recommendations, research and case studies that prioritize our collaborative efforts on behalf of our waterways and the waterfront. The planning process included public workshops, focus groups, stakeholder interviews, and a public needs assessment survey supported by a multidisciplinary planning and design team under the direction of MDPROS and PROS Consulting and guided by a diverse 20-member Steering Committee, to understand the history, current features, existing projects, challenges and opportunities related to recreational waterfront access.

The Waterfront Recreation Access Plan is a living document that provides a blueprint and implementation plan for the future of our waterfront. We wish to extend our sincere thanks to residents, professionals, stakeholders and the marine business community for your help in producing this exceptional waterfront plan--thank you for joining us in this transformative work.

Sincerely,

Maria I. Nardi, Director, MDPROS and T. Spencer Crowley III, Commissioner, FIND





## INTRODUCTION

## MASTER PLAN?

Throughout the nation and especially in Florida, the last twenty years has seen local governments and private interests slowly conceded access points to non-water dependent and restricted private interests. Essentially, many existing publicly and privately owned accessible marinas, boatyards and boat ramps in Florida have ceased operation or were simply displaced by non-water dependent private land uses for housing and commercial development. Unfortunately, this reduction in supply has come at a time of increasing demand by increased resident and tourist populations in coastal counties and an everincreasing number of registered recreational boats, both resident and transient, leading to a growing conflict between waterfront access demand and supply. Add to this a declining marine environment, the impact of sea level rise and storm surge risk, and Miami-Dade's need for a strategic, enduring, and comprehensive plan of action is unambiguous.

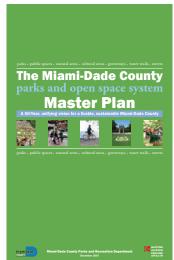
Understanding the value and delicate balance of an environmentally resilient, economically competitive, and equitably accessible system of waterways and waterfront, the Florida Inland Navigation District (FIND) partnered with the Miami-Dade County Parks, Recreation and Open Spaces Department (MDPROS) to develop the Waterfront Recreation Access Plan (WRAP). The WRAP is a visionary waterway system plan that unifies, harmonizes, and inspires strategic action to improve and enhance public recreational access for all to the County's waterfront. The development of the plan was guided by public input, best practices, and a diverse steering committee composed of public, private, and non-profit members.

Miami-Dade County's regional challenges include:

- Population growth supply/demand of waterfront access;
- Loss of publicly accessible waterfront;
- Insufficient watercraft launch and watercraft storage facilities;
- Environmental and coastal resiliency at the shoreline;
- Balancing sustainable economics and environmental protection; and
- The need for unified waterfront policy, governance, and systems master planning.

## WHY DO WE NEED A UNIFIED WATERFRONT CONNECTING MIAMI-DADE: PARKS AND OPEN SPACE SYSTEM MASTER PLAN

Miami-Dade County provides opportunities for health, happiness and prosperity for residents and visitors through the vision and implementation of the Parks and Open Space System Master Plan (OSMP), consisting of a connected system of parks, public spaces, natural and historic areas, greenways, blueways and complete streets, guided by the principles of access, equity,



beauty, seamlessness, sustainability, and multiple benefits. The OSMP's Greenways, Trails and Water Trails Vision is for an interconnected system that provides transportation alternatives and reduces traffic congestion; creates new recreational opportunities; increases property values; protects natural resources; and encourages tourism and business development. These paths strengthen connections across the County, from Broward to Monroe Counties, from the Atlantic Ocean to the Everglades. Strategic support for this effort is found in the Recreation and Open Space Element ROS-8 and the Coastal Element of the Comprehensive Development Master Plan (CDMP) in CM-5E found below:

ROS-8 The Miami-Dade County Parks and Open Space System Master Plan (OSMP), through a 50-year planning horizon, shall guide the creation of an interconnected framework of parks, public spaces, natural and cultural areas, greenways, trails, and streets that promote sustainable communities, the health and wellness of County residents, and that serve the diverse local, national, and international communities.

CM-5E The use of causeways, road rights-of-way and canal easements at shorelines shall be expanded wherever possible and additional sites sought to provide public access for existing and proposed boating-related launch and storage facilities and other water-related activities.

We have to treat water like we do land-commit to the Blueways like we have our Greenways, building a strong network of Waterway partners and nonprofits to ensure a culture shift to good stewardship. The OSMP vision builds



upon the corridors described by the North Dade Greenways Master Plan and South Dade Greenway Network Master Plan, and goes farther in linking these green fingers into a holistic, seamless system. Its corridors weave through new parks, tie into bike lanes, and act as verdant channels that draw people into natural resource areas. In the WRAP, Water Trails that have already been identified by previous plans are incorporated into the Vision, but greatly expanded upon. All major canals and waterways are accessible for recreation and strengthen physical and visual connections between the east and west edges of the County. Canals and levees managed by the South Florida Water Management District are converted into greenways and trails corridors, and provide an opportunity for public education on Everglades Restoration.

## WRAP OVERVIEW

Miami-Dade County's Biscayne Bay and the Intracoastal Waterway (ICW) together are the most important economic, recreational, and environmental resources that make Miami one of the most desirable places to live, work and play. Biscayne Bay and the ICW connect 20 of the County's 34 municipalities including unincorporated Miami-Dade and represent access to thousands of waterway-related businesses, residential neighborhoods, recreational and eco-tourism activities and restaurant and entertainment destinations. In a community with 2.8 million residents (30,000 new residents each year) and 16 million annual visitors, economic impact of waterway related spending exceeds \$7.5 Billion annually and supports more than 65,000 jobs.

The WRAP provides a strategic framework and implementation plan for:

- Improving public access for boating, canoeing, kayaking, shoreline fishing, walking, wading, paddle boarding, swimming, and other recreational opportunities;
- Creating an interconnected system of publicly accessible waterfront destinations that includes expanded waterbased transportation;
- Increasing and enhancing nature-based recreational and eco-tourism opportunities;
- Promoting the sustainable economics of equitable access, resource protection and public/private partnerships;
- Solving environmental and coastal resiliency at the shoreline;
- Promoting responsible use and citizen stewardship of Miami-Dade County's waterways; and
- Mapping the OSMP's "Blueways" water trail system, creating new access points in the County's canal system to connect the Bay with the Everglades.

## WRAP VISION, GUIDING PRINCIPLES AND GOALS

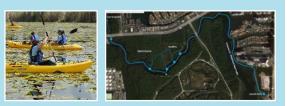
### VISION

"Provide an interconnected blueways system with improved public access and recreational opportunities to Biscayne Bay and Miami-Dade County's waterways in order to encourage residents and visitors to enjoy, responsibly use and protect these unique natural ecosystems."

## **GUIDING PRINCIPLES TO UNIFY THE WATERFRONT:**



EQUITABLE, AND SAFE ACCESS FOR ALL



CONNECTIONS THROUGH A SYSTEM OF WATER TRAILS



SEAMLESS, COORDINATED GOVERNANCE AND SOUND PUBLIC POLICY



"NO NET LOSS" POLICY FOR RECREATIONAL ACCESS



COMPATIBLE, SHARED USES



MARINE ENVIRONMENTAL HEALTH AND CLIMATE RESILIENCE



SUSTAINABLE ECONOMIC VITALITY



DESIGN EXCELLENCE AND NATURAL BEAUTY



A CULTURE OF CITIZEN STEWARDSHIP

## GOALS

- 1. Ensure responsible, balanced, and equitable access to Biscayne Bay and to Miami-Dade County's waterways.
  - Creating opportunities that balance recreation, economics, environmental protection, mobility, infrastructure, location, distribution, affordability, management, quality, and connections. Equitable access also means providing inclusive and healthy opportunities for all people of varying abilities and across the full economic spectrum.
- 2. Create an ethic of respect for wildlife and environmental responsibility. The Biscayne Task Force is an objective to accomplish the goal.
  - By highlighting improved land management, wildlife and habitat restoration, climate resilience, and by taking steps to reduce waste, damaging runoff, and conserve water resources, Miami-Dade residents can enhance their understanding of both the ecological and the economic health of the community.
- 3. Promote economic vitality and balanced growth.
  - Through better planning, consistent safeguards and enforcement, and effective cooperation among diverse interests, decision-makers can better balance the community's needs for a thriving economy and a healthy and resilient marine environment.
- 4. Identify design, maintenance, and funding best practices to ensure functionality, coastal resilience, and beauty.
  - A commitment to best practices across the spectrum of design, operations, and maintenance creates a culture

of public respect and care for waterfront infrastructure and the marine environment.

- 5. Develop a connected water transportation system.
  - The Bay offers a good opportunity to diversify Miami-Dade's transportation networks and increasing Bay access for all residents and visitors. A coordinated approach to land and water transportation will encompass issues related to the use of boats, bicycles, pedestrians, cars, buses, and public transportation.
- 6. Increase and enhance naturebased recreational and ecotourism opportunities.
  - This includes mapping and developing the OSMP "Blueways," water trail system for recreational, nature-based and eco-tourism programs that inspire citizen engagement in stewardship.
- 7. Ensure safety and consistent enforcement of protective measures.
  - Safety on our waters is integral to enjoyment and access. A fundamental goal of the access plan is "more enforcement, less exclusion" to support marine patrol and code compliance efforts while providing broader public education on waterway recreational uses, boating safety, environmental protection, and overall community resilience.









- 8. Create an informed citizenry committed to Biscayne Bay conservation and advocacy.
  - Amplify broad-based public communication campaigns to promote knowledge and appreciation of Bay resources, including media coverage, digital resources, public education, events and activities, research and publications, and by nurturing effective coalitions of community organizations, neighborhoods and individuals. A strong grassroots constituency for the Bay, increases the community's sense of stewardship of its resources, and encourages strong advocacy for responsible access and preservation.
- 9. Establish a system of coordinated governance and sound public policy.
  - Over the long-term, improving public access to the Bay will depend on the way this community – from decisionmakers and business leaders to public agencies and local residents – addresses issues of policy, administration and management of land and water resources.

## RECOMMENDATIONS

GOALS	TIMELINE	RECOMMENDATIONS
	Short-Term	Focus on maximizing existing marina land use and fund/finish existing marina master expansion plans.
	Short-Term	Reactivate park water assets.
	Short-Term	Strategically identify and pursue public / private partnership (P3).
Ensure responsible, balanced, and equitable access to Biscayne Bay and	Mid-Term	Explore new opportunities for negotiated access acquisition and expansion.
to MDC's waterways.	Long-Term	Enhance opportunities to connect to the Lake Belt and Western Greenway.
	Long-Term	Leverage shorelines, causeway bridges, and street ends for waterfront access.
	Long-Term	Develop and implement boating transitions around canal structures (salinity dam/culverts) including formal portage facilities and boat locks to connect salt and freshwater boating access points.
Create an ethic of respect for wildlife and environmental responsibility through support and implementation of the Biscayne Bay Task Force action plan.	Short-Term	Water quality.
	Short-Term	Governance.
	Short-Term	Infrastructure.
	Short-Term	Improve and expand spoil island recreational opportunities and maintenance to provide recreational alternatives to sandbars.
	Mid-Term	Watershed habitat restoration and natural infrastructure.
	Mid-Term	Marine debris.
	Mid-Term	Education and outreach.
	Mid-Term	Funding.

#### RICKENBACKER CAUSEWAY



SAMPLE CONCEPTUAL RECOMMENDATIONS FOR EXISTING PARKS AND MARINAS.



PUBLIC AWARENESS OF WILDLIFE AND ENVIRONMENTAL RESPONSIBILITY IS PARAMOUNT.

GOALS	TIMELINE	RECOMMENDATIONS
	Short-Term	Identify public funding and surcharge models for expanded water access consistent with stakeholder "Willingness to Pay" (WTP) data.
	Short-Term	Explore outcome-based private finance models such as Environmental Impact Bonds for capital improvements.
Promote economic vitality and	Mid-Term	Create a water industry vocational training and job placement program in parks and high schools.
balanced growth.	Mid-Term	Develop economic incentives to increase water access for projects that improve social equity and environmental quality through waterfront access.
	Mid-Term	Encourage widespread, low cost public access to non-motorized water activity concessions including subsidized "Library Card" access.
	Long-Term	Leverage public and private interest and funding to develop world-class events, ecotourism, and voluntourism offerings.
Identify design, operations,	Mid-Term	Support and participate in Resilience 305 efforts to update and adopt waterfront design guidelines to include new coastal resiliency standards and zoning ordinances.
	Mid-Term	Create an annual progress report for WRAP implementation and infrastructure evaluation.
	Mid-Term	Ensure design professionals have the Waterfront Edge Design Guidelines (WEDG) Associate certification issued by the Waterfront Alliance.
	Mid-Term	Update MDPROS Pattern Book and all Request for Proposals (RFPs) to include marine planning and design standards.
maintenance, and funding best practices to ensure high levels of	Mid-Term	Update the Leisure Interest Survey to determine public needs and wants for water recreation.
customer service functionality, coastal	Mid-Term	Review all marina and boat ramp facility master plans every five years.
resilience, and beauty.	Mid-Term	Adopt Association of Marina Industries (AMI) national best practices for Clean Marinas.
	Mid-Term	Maintain visual corridors to the Bay.
	Mid-Term	Establish boat ramp design standards.
	Mid-Term	Establish fishing-friendly standards for boat ramps, marinas and shoreline fishing facilities.
	Mid-Term	Reestablish the MDPROS Marina Enterprise and set aggressive business and customer service goals for county marinas.

GOALS	TIMELINE	RECOMMENDATIONS
Develop a connected water transportation system.	Short-Term	Support the current Miami River and City Commission Resolutions providing the appropriate delegation of authority to competitively solicit, procure, and award agreements to qualified private sector waterborne transportation providers for the Miami River and Bay Walks.
	Short-Term	Establish uniform Best Practices approach to permits and fees for charter landings, to accommodate public use of for-hire and on-demand watercraft.
	Mid-Term	Hire an expert from an existing, successful, world class ferry system and develop an intermodal connection between public transportation, the SMART Plan and water taxi/ferry boat operations, Bay walks and water experiences (culture, history, recreation).
	Mid-Term	Using compatible and shared-use facilities, integrate water taxi stops at designated waterfront destinations with a focus on the urban core initially, prioritizing activity centers where population bases are located to provide a built-in customer base.
	Mid-Term	Access federal funds that are available to support capital outlays to mobilize a fleet or retrofit seawalls and accommodate landing and boarding facilities.
	Mid-Term	Manage environmental constraints working with environmental regulators to properly site water taxi stops, schedule limitations, speed compliance and adherence to inspections and appropriate risk management tools.
	Long-Term	Consider scheduled ferry service to Virginia Key, Elliott Key or, via Miami Intermodal Center, Palmer Lake, to align with unique multi-day ecoadventure trips envisioned for international travelers.
	Short-Term	Map Blueways connection of Biscayne Bay to the SFWMD canal system and Lake Belt.
	Short-Term	Develop "real-time" snorkel, fishing and recreational activity map and activity calendar for online downloads.
	Short-Term	Connect history and culture to all parks along the water.
	Short-Term	Identify and empower lead entities in countywide stewardship education.
Increase and enhance nature- based recreational and eco-tourism opportunities.	Short-Term	Coordinate a "real time" centralized database and promotional calendar for all programs on the water county-wide.
	Short-Term	Develop and implement a comprehensive and inclusive "swim to sail" STEM+arts-based curriculum to serve as a programmatic guideline for marine environmental programming.
	Short-Term	Develop a merit-based program for volunteer stewardship action.
	Mid-Term	Increase fishing, snorkeling and scuba diving opportunities through best practices artificial reef development and management.
	Mid-Term	MDPROS should take the lead in developing and implementing Swim Central concept to ensure every child learns to swim.

GOALS	TIMELINE	RECOMMENDATIONS
	Short-Term	Create a countywide boater safety and education campaign.
	Short-Term	Begin an intergovernmental campaign with state legislators to expand the Boater Safety Education law requirements to boaters of all ages.
	Short-Term	Offer Boater Safety courses at all County and municipal marinas.
	Short-Term	Re-establish MAST waterway enforcement coalition.
	Short-Term	Provide additional funding for marine patrol enforcement activity.
Ensure safety and consistent enforcement of protective measures.	Short-Term	Develop safe operating guidelines and ordinances for operating in narrow waterways.
	Short-Term	Consider designating PWC Zones where operators are permitted to utilize vessels to their maximum ability.
	Short-Term	Create public service announcements (PSAs) campaign for BUI, reckless operation, conservation, and illegal charters/concessions.
	Short-Term	Update and Broaden June 9, 2009 Mote Technical Report to identify primary traffic corridors and popular boating destinations and assess boater compliance with posted regulatory zones at each location to serve as foundation of future Boater Exclusion Zone policy.
	Short-Term	Create an internal campaign to socialize the WRAP with elected officials and governing organizations.
	Short-Term	Create an external campaign for online, social media, printed and television to promote WRAP goals and objectives.
	Short-Term	Build a public campaign centered on specific citizen stewardship and education curriculum.
	Short-Term	Build a countywide, multi-jurisdictional "Boat Alerts" system.
Create an informed citizenry committed to Biscayne Bay	Short-Term	Develop interactive online mapping.
conservation and advocacy.	Short-Term	Coordinate and apply performance measures to CDMP elements and sub-elements.
	Short-Term	Create regular legislative program days designed to engage local, state, and federal legislators.
	Mid-Term	Coordinate long-range waterfront infrastructure planning (WIP).
	Mid-Term	Reinvigorate and enhance the Shoreline Review Committee.
	Mid-Term	Reduce complexity of waterfront permitting of non- motorized watercraft launch facilities.



## NOTES



