

BISCAYNE BAY WATERSHED MANAGEMENT ADVISORY BOARD

October 25, 2022

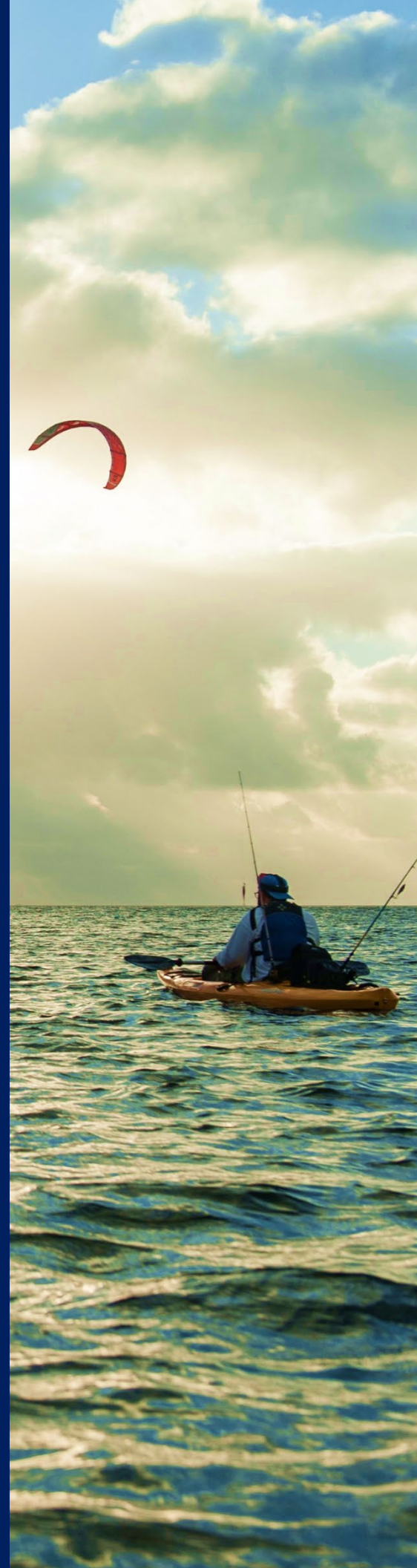


Biscayne Bay Watershed Management Advisory Board

Board Package

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AGENDA (DRAFT)

BISCAYNE BAY WATERSHED MANAGEMENT

ADVISORY BOARD (BBWMAB) MEETING

October 25th, 2022 - 9:00am – 12:00pm

LOCATION – Stephen P. Clark Government Center, Commission Chambers, 2nd Floor

111 NW First Street, Miami, FL 33128

1. **Roll Call**
2. **Reasonable Opportunity to be Heard**
3. **Approval of Agenda – *Actionable Item***
4. **Approval of Minutes for June 10th, 2022 – *Actionable Item***
5. **Reasonable Assurance Plan Update**
BBWMAB Chair, Commissioner Danielle Cohen Higgins
6. **Biscayne Bay Commission Update – (Requested by Commissioner Rachel Streitfeld)**
Chief Bay Officer, Irela Bagué
7. **Miami-Dade Back Bay Coastal Storm Risk Management Study (Requested MDC Office of Resilience)** Chief Resilience Officer, James Murley
8. **Future Agenda Items**
BBWMAB Chair, Commissioner Danielle Cohen Higgins
9. **Adjournment**
BBWMAB Chair, Commissioner Danielle Cohen Higgins

Biscayne Bay Watershed Management Advisory Board

Stephen P. Clark Government Center
Commission Chambers, 2nd Floor
111 NW First Street
Miami, FL 33128

MINUTES June 10, 2022, 9:00 am

MEETING CALLED BY	Roll call was taken – Quorum established. Twelve members were present, and seven members were absent. Absent Members: Vice-Chair Vince Lago, Commissioner Jean Monestime, Commissioner Rebeca Sosa, Erik Stabenau, T. Spencer Crowley, III, Esq., John Alger, Gene Duncan, and Dr. Diego Lirman.	
MEMBER ATTENDEES	Chair - Commissioner Danielle Cohen Higgins Councilmember Crystal Wagar Commissioner Rachel Streitfeld Mayor Tim Meerbott Brett Bibeau Dr. Todd Crowl	Julissa Kepner Jannet Cederberg Gerald McGinley Dave Doeblar Roberto Torres Dr. Joan Browder
	Staff support for Biscayne Bay Watershed Management Advisory Board in attendance: Chief Bay Officer (CBO), Irela Bagué; Pamela Sweeney (RER DERM), Mildred Waxman (OOR Intern), Marie Bell (RER DERM), Larissa Aploks (RER), and Ana Fiotte (CBO-OOR).	

AGENDA TOPICS

REASONABLE OPPORTUNITY TO BE HEARD

Commissioner Danielle Cohen Higgins - Chair

DISCUSSION	<ol style="list-style-type: none"> 1. Elvis Cruz - Spoke against planting mangroves in public waterfronts and parks. 2. Emilio Lopez – a Representative from SOP technologies, offered to answer questions on stormwater technology and noted that Miami-Dade County is using their product in a pilot project. Monroe County has also used their products. 3. Scott Polowitz – A member of Friends of Biscayne Bay. Spoke in support of the stormwater legislation and the Cutler Bay 8.5-acre restoration. 4. Omar Jimenez - Miami Beach resident and President of Park View Island Sustainable Association. Spoke about protecting the public access to the Bay for enjoyment, especially in public parks. 88% of the year, Park View Island water is not safe for recreating. Residents are getting sick and had to be hospitalized for skin lesions and infections. The Chair noted that he should connect with the Chief Bay Officer's office.
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APPROVAL OF AGENDA

Commissioner Danielle Cohen Higgins - Chair

DISCUSSION	Chair Cohen Higgins thanked Mr. Doeblar for hosting the Biscayne Bay Marine Health Summit and bringing many stakeholders together. The Chair thanked the County departments participated, including CBO, DERM, and WASD. The Chair asked Mr. Doeblar to say a few words about the summit. He stated the summit was a success beyond their imagination and their goals. He added that the summit was founded by Mr. Luiz Rodrigues five years ago. He thanked the County for supporting and sponsoring the event.
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DISCUSSION	Moved by Eric Stabenau and seconded by Dr. Crowl. Adopted unanimously.
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OVERVIEW OF IMPACTS FROM POTENTIAL TROPICAL CYCLONE ONE

Rashid Istambouli - Interim Director of RER-DERM
and Roy Coley - Director of WASD

DISCUSSION	<p>Mr. Rashid Istambouli, RER-DERM Interim Director, presented how the County prepares for upcoming storm events. The secondary canals are opened 48 hours before a storm to alleviate flood waters. The pump stations move the water into the C-4 retention basin. The primary canals are managed by SFWMD, the secondary canals by DTPW, and the tertiary systems are managed by the municipalities.</p> <p>He provided an overview of post-storm event information estimates at 5-7 inches of rain inland and 8- 10 inches in the coastal areas, the equivalent to a ten-year rain event.</p> <p>RER-DERM received 94 flood complaints and no documented cases of water in homes. However, there were sanitary sewer overflows with half a million gallons of sewage and over 200,000 gallons discharged into the surface waters. RER DERM sampled and identified four areas of concern: Miami River, Hialeah, Morningside Park, and Center District Treatment Plant Virginia Key. The areas exceeded acceptable Florida State criteria on levels of bacteria.</p> <p>Mr. Roy Coley, WASD Director, presented a review of four areas: 1. Wastewater System, 2. Impacts of Tropical Storm Alex, 3. Sanitary Sewer System Performance, and 4. Wholesale Customers Contributions.</p> <p>Mr. Coley stated that Miami-Dade County has 80,000 manholes (where the lids can be removed to directly access the sewer system). The rain caused flooding that entered the sanitary sewer system. WASD staff reported residents on flooded streets opened many manholes, and the sewer collection system is designed to only handle 4.5 inches of rain in a 24-hour period. The system reached approximately 800,000,000 gallons of wastewater and overwhelmed the system with three times the volume. The system worked as it is designed to perform with over 1,000 pump stations working. WASD staff prepared before and during the storm to mitigate impacts but experienced overflows due to exceeded inflow capacity. WASD is spending \$35M per year to upgrade pump stations.</p> <p>Mayor Meerbott (Cutler Bay) stated that in Cutler Bay, the engineers measured 21 inches of rain.</p> <p>Ms. Marina Blanco-Pape (RER DERM) explained that there was localized rainfall and clarified it was a 25-year event according to South Florida Water Management District (SFWMD).</p> <p>Mayor Meerbott commented that according to their consultants, it was a 100-year event and requested coordination to get the data right.</p> <p>Mayor Meerbott continued 589 homes affected in the Cutler Bay area with residents unable to leave home for 2-3 days.</p> <p>Chair Cohen Higgins recognized Board Member Jannek Cederberg.</p> <p>Mr. Cederberg commented that the tide was two feet lower in Virginia Key and asked what would have been the scenario if it were to happen during a King Tide event in September or October.</p> <p>Mr. Istambouli (RER DERM) stated it was a long rain event and occurred at the end of the dry season, the groundwater was very low, so it was able to replenish the aquifer. He continued to explain that there will be longer dry periods and longer rain events, and it is important to segregate and keep the water out of the sewer system.</p> <p>Mr. Coley (WASD) responded that plants should not be expected to be built for these scenarios as the cost would be a four-to-five-billion-dollar investment and require several hundred acres of land to build. He stated that it would not be the responsible thing to do.</p> <p>Mr. Istambouli agreed and stated the County would need to explore ways to hydraulically manage stormwater and keep it out of the sewer system.</p> <p>The Chair thanked Mr. Istambouli and Mr. Coley for compiling the information quickly. The Chair</p>
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	<p>continued that there were homes impacted in Cutler Bay, and for the residents of the area, it was a large event. She further added that there seems to be a disconnect on the level of the storm. For example, was it a 10-year event, a 25-year event, or a 100-year event? Residents want to know what will be done to prevent this from happening again.</p> <p>The Chair stated it would be helpful to develop a messaging campaign for the residents not to open the manholes.</p> <p>Mr. Coley agreed and stated that Mayor Levine Cava had assigned a working group led by Mr. Pete Gomez from Emergency Management Operations for all parties to convene and make policy recommendations.</p> <p>The Chair recognized Board member Doeblner who asked how long it took for the water to recede.</p> <p>Mr. Istambouli responded approximately 24 hours, except for the areas in the south. Mr. Doeblner asked if people opened manholes - why didn't the storm drains evacuate the water quicker?</p> <p>Mayor Meerbott answered that most of the water was evacuated within 5-6 hours except for some areas.</p> <p>Mr. Istambouli responded that it is a fragmented system with primary, secondary, and tertiary systems and the primary and secondary systems worked. The issues were found in the tertiary systems that are not connected to the secondary system. The water in the lake in Saga Bay had nowhere to drain, therefore the water ponds.</p> <p>Mr. Doeblner asked whether the storm drains not having an aggressive cleaning schedule would have had an impact.</p> <p>Mr. Istambouli shared that the RER DERM teams were in the field monitoring and cleaning stormwater systems before the event.</p>
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UPDATE ON REASONABLE ASSURANCE PLAN

Commissioner Danielle Cohen Higgins - Chair

DISCUSSION	<p>The Chair stated that the CBO and RER DERM staff have been working with the County's consultant and meeting regularly with Florida Department of Environmental Protection (FDEP) staff on the development of the RAP for Biscayne Bay phase 1. The map of the initial area of the northern first phase of the RAP was presented, and it was stated that the FDEP and County staff agreed to start in the northern area. The final RAP for the first phase will be presented to FDEP for final review and adoption by secretarial order.</p> <p>The CBO stated that Pamela Sweeney (RER DERM) was available to answer questions virtually.</p> <p>The CBO shared information on the plan's development and stated the process allows the County to work with stakeholders and municipal partners within the first phase in the northern boundary area to present a plan to reduce nutrient loads. The deadline to submit the plan is September 2022. In addition, the Governor has announced that the State water quality grants opened.</p> <p>The CBO reiterated that the plan is the first phase for Biscayne Bay and will include the entire watershed within a few years.</p> <p>The CBO shared that the Biscayne Bay Commission meets on July 27 and will provide another opportunity to present an update of the RAP to the public and receive input.</p> <p>The Chair stated that on June 8, the Governor announced that the State of Florida had surpassed their four-year goal for Everglades restoration and the protection of water resources.</p> <p>Dr. Crowl added that the RAP map is consistent with the parts of the Bay that are most vulnerable and the area registering the highest-level inputs of nitrogen and phosphorous.</p>
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DISCUSSION	<p>The Chair recognized Cutler Bay Mayor Meerbott, who thanked the Chair for adding the item to the agenda.</p> <p>Mayor Meerbott provided an overview of the Town of Cutler Bay Wetlands Restoration Project. He explained that development threatened the 8.4 acres of sensitive lands, and the Town decided to protect the green space and purchased the land.</p> <p>Mayor Meerbott continued the land was purchased for \$8.5M and would like support from the State and the County to help with the purchase cost. Mayor Meerbot mentioned the land had been identified on the Environmentally Endangered Lands (EEL) program B List. The Chair asked the County Attorney's Office (CAO) to comment on what action the BBWMAB can take.</p> <p>Mr. Christopher Wahl (CAO) asked for clarification on the Board's intention. The CAO stated the BBWMAB could make the recommendation to the BCC to direct the Mayor or her designee to seek funding.</p> <p>Mayor Meerbott made a motion to recommend the BCC request funding for the \$250K requested. Seconded by the Chair.</p> <p>Discussion: Board member Eric Stabenau (Biscayne National Park) asked to abstain from the vote because he represents the federal government.</p> <p>The CAO clarified the rules of the BCC, all board members must vote on items if they are present but can leave the room. Mr. Stabenau left the room.</p> <p>Vote called: motion passed. The Chair asked the CAO how they would work procedurally. The CAO stated that the directive could either be expedited and transmitted to the BCC or they could draft a resolution for the Chair to be brought to the BCC. The Chair asked Mayor Meerbott what he would prefer. The Chair suggested that it would be best to transmit the \$250k to the BCC and draft a resolution for the \$4 million which could come back to the BBWMAB. Mayor Meerbott agreed.</p> <p>Dr. Crowl made a motion seconded by the Chair to recommend to the BCC to recognize the Town of Cutler Bay/Mayor Meerbott for the purchase of land and environmental restoration. Motion passed unanimously.</p> <p>The CBO added she is working with Cutler Bay, the Office of Resilience, and SFWMD on an application for a federal grant from National Fish and Wildlife for \$330K.</p>
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DISCUSSION OF DRAFT STORMWATER LEGISLATION AND COUNTY BUDGET PROCESS

Dave Doeblar

DISCUSSION	<p>The Chair recognized Mr. Doeblar to present the stormwater item. Mr. Doeblar explained the resolution calls for updates to the current guidelines. The resolution took input from RER-DERM, the CBO, other County staff, and stormwater experts. It addresses the following:</p> <p>Section 1. While the County currently issues permit for sewer but does not issue permits for stormwater therefore, the County has no regulatory authority over the 32 municipalities that are on the MS4 permit – the policy would amend Chapter 24, creating standards.</p> <p>Section 2. The public works and stormwater manual was last updated in the 1980s, and technology and pollutants have changed considerably.</p> <p>Section 3. Focuses on a clean neighborhood community engagement program with volunteer cleanups and teaches citizens what happens on the street impacts the Bay.</p> <p>Section 4. Addresses many municipalities that do not know what stormwater assets they have, and while the County issues sewer permits, it does not issue stormwater permits; and</p> <p>Section 5. States that DEP standard requirements for pollution control are insufficient for a County as large as Miami-Dade. Therefore, the County should request that FDEP strengthen the design, maintenance, and auditing requirements.</p>
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	<p>The Chair asked for discussion and comments.</p> <p>Bibeau suggested an amendment to include increased maintenance.</p> <p>Mr. Doeblner commented that the standards need to be set first.</p> <p>Mayor Meerbott disagreed with Mr. Bibeau's recommendation because all municipalities perform differently.</p> <p>RER Director Lourdes Gomez stated the work of the BBWMAB helps the community recognize the difference between flood management and water quality management. The drainage and stormwater infrastructure previously focused solely on moving water quickly off the streets to address flooding. RER DERM has been working on incorporating water quality with stormwater management and upgrading infrastructure for some time.</p> <p>RER Director Gomez thanked Mr. Doeblner for incorporating the work of the department into the resolution and shared what was stated earlier that jurisdiction of the water management system is fragmented: the primary (SFWMD), secondary (County), and tertiary (municipalities).</p> <p>The Chair asked if RER supported the legislation, and RER Director Gomez agreed.</p> <p>Dr. Crowl asked about plastics. Mr. Doeblner explained there is a size specification for plastics modeled after states with a TMDL.</p> <p>Bibeau asked the CAO if a change in the County code automatically changes a city code like Cutler Bay. The CAO replied in the affirmative.</p> <p>Commissioner Streitfeld (North Bay Village) commended Mr. Doeblner for bringing the item to the BBWMAB, asked to see the proposal, and fully supported the effort. She continued that North Bay Village is in the process of redesigning its stormwater infrastructure and added she would like to see septic failure incorporated in the resolution.</p> <p>Mr. Doeblner responded that he had originally looked at septic tracing in the original scoping of the resolution.</p> <p>RER Director Gomez explained the legislation is focused on the stormwater system separated from the sewer system. As previously explained by RER DERM, water quality sampling is conducted following every rain event or accident.</p> <p>Mr. Cederberg asked if design conditions for the one-inch storage requirement and sea level rise would be included.</p> <p>Mr. Doeblner explained the decision would be up to RER DERM as they modify Chapter 24 and update the public works manual to include design criteria.</p> <p>The Chair stated she would gladly sponsor the legislation, co-sponsored by Commissioner Monestime and bring it to the BCC. She will bring back the administration's recommendation to the BBWMAB for review.</p> <p>Councilperson Crystal Wagar asked if the BBWMAB could be notified when the legislation comes to the BCC so that the board members could make themselves available to speak in support. CBO volunteered to inform the Board. Motion made by Dave Doeblner -Seconded by Brett Bibeau. Item passed.</p>
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INNOVATION PRESENTATIONS – DEFERRED FROM APRIL 20TH AGENDA

Brett Bibeau

DISCUSSION	<p>Mr. Bibeau introduced Sophie and Marc Mastriano, owners of the Scavenger 2000 Decontamination Vessel. Ms. Mastriano, President of Water Management Technologies, Inc., played a short news clip and presented how the vessel worked and described how it removes surface debris, injects oxygen into the water, and destroys other contaminants in the water without leaving residue or byproducts.</p> <p>Mrs. Mastriano shared that the company is a small family-owned Florida corporation with over twenty years of experience and a proven track record working with FDEP.</p>
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The company further presented the work they provide for the City of Miami and Miami-Dade County, covering the areas that include 27th Avenue, Miami River Bridge to Grove Key Marina, and 79th Street.

Mr. Bibeau commented he had previously provided the Board with five independent analyses of the vessel's work. There are currently two vessels servicing the Bay and Miami River, and the City of Miami and Miami-Dade County each pay for 40 hours per week of service. He requested Miami-Dade County fund a third vessel for an additional 40 hours per week.

The Chair explained that the BBWMAB could not direct the BCC to purchase another vessel and asked if Mr. Bibeau if he wanted to make a motion to ask the BBWMAB to make a recommendation to the BCC to look at the feasibility of contracting additional services from the Scavenger Vessel.

Councilperson Wagar commented she would support the motion as a representative of the League of Cities. Still, she also represents Miami Shores, and her city is overloaded with trash from the Bay.

Mr. Doeblar added that the technology is needed to pick up the debris and oxygenate the water and suggested the Board engage in a future discussion about the spoil islands.

Commissioner Streitfeld stated she was uncomfortable with the Board dealing with procurement and would support increasing the budget for these kind of services, but there are many other similar technologies and vessels that provide the similar services.

Mr. Cederberg suggested that before the Board recommends additional funding, they review the scientific data to determine the return on investment. He also asked if the company would be able to recommend strategic areas of need. Waste Management Technologies offered to provide a list of their recommendations to the BBWMAB.

Board member Torres asked if the technology could be used to clean up fish kills. The company stated they participate in the Fish Kill Prevention Program with Miami Waterkeepers.

The Chair asked how long Water Management Technologies had been contracted by the City of Miami and Miami-Dade County.

Waste Management Technologies stated they began a pilot project with the City of Miami in 2003 and have had a contract with Miami-Dade County on and off since 2008, 09, or 10 and consistent for the past few years.

The Chair inquired regarding the cost of purchasing a vessel. Waste Management Technologies stated manufacturing costs are approximately \$1.5M.

The Chair requested a report on the contract with the County and asked what department managed their contract.

RER-DERM Director Istambouli clarified they are under contract for trash pickup only. The Chair asked if she could be provided a report on the effectiveness of the vessel since 2008.

The Chair welcomed Mayor Levine Cava to the BBWMAB meeting. The Mayor clarified the relationship with Waste Management Technologies is not contractual. However, there is an existing agreement with the Miami River Commission, which contracts directly with the company and manages the work.

RER Director Gomez further explained it is a board directive to reduce trash and debris on the Miami River. RER DERM will provide a report on the efficacy of the aeration technology. Director Gomez offered to provide a future report.

Mr. Bibeau made a motion for a resolution to the BCC to direct the administration to consider increased funding for increased services of this nature either from the Scavenger Vessel or otherwise. Mr. Doeblar seconded.

The CAO asked for clarification, the Chair asked that the item be brought back in written form to the Board for review. Vote called and motion adopted.

The Chair officially welcomed and introduced Miami-Dade County Mayor Daniella Levine Cava.

The Mayor stated she had followed the work of the Board closely and is pleased with the accomplishments to date.

The Mayor discussed the recent storm and how it demonstrated some of the vulnerabilities in the system. She mentioned Pete Gomez, the new director of the Office of Emergency Management, who

	<p>worked around the clock during the storm coordinating with the many departments that prepared and responded.</p> <p>The Mayor mentioned she spent time in Cutler Bay with Commissioner Cohen Higgins and Mayor Meerbott during the flooding event.</p> <p>The Mayor commented on the importance of working with municipal partners and mentioned a workshop being hosted by the CBO and RER that afternoon. The purpose is to improve storm preparations and cooperation. The Mayor stated that we all need to work better, harder, faster, and more collaboratively to do the best job possible with stormwater and protecting our Bay.</p> <p>The Mayor thanked CBO Irela Bagué, One Water Czar Hardeep Anand, Office of Resilience, and Jimmy Morales Chief Operating Officer coordinating with all departments focused on infrastructure to forge a comprehensive approach that can later be formed into legislative proposals.</p> <p>The Chair thanked the Mayor for her attention, immediate response, and resources to the South Dade area.</p> <p>The Mayor shared a few recommendations from the internal team, including working on a regulatory framework for stormwater that would be analogous to the sewer system, enhanced enforcement of illicit discharges, regular testing, certification of private laterals, evaluation of pump stations, and developing legislation to accelerate permitting for County inflow.</p> <p>The Chair Cohen thanked the Mayor for her comments.</p>
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BISCAYNE BAY TASK FORCE RECOMMENDATION 5A - MARINE DEBRIS PROGRAM

Brett Bibeau

DISCUSSION	<p>Mr. Bibeau stated that a core group has been identified by RER DERM to work to make recommendations on reducing marine debris and requested to be part of the group of stakeholders. Director Gomez agreed to invite Mr. Bibeau.</p> <p>Mr. Bibeau inquired about the derelict vessel removal program.</p> <p>The CBO stated the information was provided in the BBWMAB packet and introduced Lt. Michael Barrios (MDPD) Marine Patrol Unit.</p> <p>Lt. Barrios stated Florida Fish and Wildlife (FWC) are the point of contact for derelict vessel removals in coordination with MDPD and RER DERM.</p> <p>Mr. Bibeau inquired about the number of vessels currently tagged on the list managed by RER DERM.</p> <p>Mr. Istambouli reported four derelict vessels on the current list, and RER DERM is working on them through the State process. He mentioned the State recently released additional funding of \$150K for derelict vessel removal. To date, there have been fourteen removed and there will be more at-risk vessels to be tagged.</p> <p>The CBO added that an At-Risk Vessel Interagency Task Force was created under County Commissioner Heyman's leadership, including the City of Miami.</p> <p>The CBO further reported that the County has provided weekly trash removal services for decades weekly for the spoil islands. The islands are owned by the State of Florida (DEP), and some have been deeded to cities (City of Miami, City of North Miami, and City of Miami Beach) since the 1960s.</p> <p>The CBO stated she has been working with State Senator Ileana Garcia, who is working directly with the State to identify ownership, maintenance, and management responsibilities for the islands and derelict vessels. The CBO offered to set up a meeting with the State Senator and Mr. Bibeau so that he could offer his recommendations and solutions.</p> <p>Mr. Bibeau asked if the CBO would consider increasing the spoil islands clean-ups.</p> <p>The Chair stated that the question went out of the Board's purview and the CBO is not in charge of funding.</p> <p>The Chair asked Mr. Bibeau to make a motion so she can move forward with the rest of the agenda.</p>
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	<p>Mr. Bibeau made a motion for a resolution from the BBWMAB to recommend to the BCC immediately increase funding for marine debris pickup.</p> <p>Mr. Doeblner stated that although he agreed that maintenance of the spoil islands is insufficient, the County is generously providing a service that the individual deed holders (cities and State) should be paying for.</p> <p>The CBO reiterated that there are ongoing discussions with the State and cities.</p> <p>Director Gomez stated legislation should not be imposed on a municipality without discussion with partners. Everyone has budget constraints. The issues are important, and the CBO is currently working on messaging to get the individual buy-in.</p> <p>Mr. Bibeau retracted the motion.</p> <p>The Chair opened the discussion on future agenda items.</p> <p>Commissioner Streitfeld requested that the BBWMAB receive an update on the work of the Biscayne Bay Commission. Chair agreed.</p>
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BISCAYNE BAY TASK FORCE RECOMMENDATION 5C - MARINE PATROL ENFORCEMENT

Brett Bibeau

DISCUSSION	<p>Mr. Bibeau made a motion for the BBWMAB to recommend the BCC request to increase State funding for marine patrol.</p> <p>Lt. Barrios reported that marine patrol is working the best they can within the budget.</p> <p>The CBO reported that MDPD has recognized the need for increased law enforcement on the water and the County's marine patrol is working in coordination with all other agencies for increased enforcement on the water.</p> <p>Mr. Bibeau requested the BBWMAB ask for increased funding from the City of Miami.</p> <p>The Chair stated that urgings are made to the State and not to a municipality.</p> <p>Mr. Bibeau restated his motion for the BBWMAB to make a recommendation to the BCC requesting the State increase its funding for marine patrol.</p> <p>The CBO clarified that The Boating Safety Act of 2022 is currently on the Governor's desk. It includes a substantial increase in funding for FWC and for increased State officers for Biscayne Bay. The BCC did act on an urging last year to support the legislation.</p> <p>The Chair asked if there was a second to Mr. Bibeau's motion. No second. Motion failed.</p> <p>The Chair reminded the BBWMAB of their roles and responsibilities. The primary role of the board is to work with the county, stakeholders, CBO, and departments for improvements of the Bay. The Chair reiterated on board best practices as some board members and all questions should be directed to the CBO and all agenda items should be made during the BBWMAB meetings in the sunshine.</p> <p>The BBWMAB agendas are finalized the week before the meetings and any items submitted after are not considered in the sunshine and will not be included. She shared the next meetings dates are September 30th and December 9th.</p> <p>The Chair summarized discussion items for the next meeting and asked if there are any others.</p> <p>Dr. Browder (NOAA) requested information on opening causeways to circulate the water in the Bay, discussions with the department of transportation in response to storms and sea level rise are needed.</p> <p>Mr. Doeblner suggested the need to expand mangrove planting on Julia Tuttle Causeway to be included with a FDOT presentation. Commissioner Streitfeld asked if 79th Street Causeway could also be added.</p> <p>Commissioner Streitfeld continued, her city is working with the Army Corps of Engineers for a local preferred plan and would like the BBWMAB to be part of that discussion. CBO offered to discuss with the Office of Resilience and bring back a report.</p>
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	<p>Mr. Doeblar stated that the County's Department of Transportation and Public Works is working on pilot projects and would like to hear from the technology companies.</p> <p>The CBO reminded Mr. Doeblar the updates would be brought to the board in October of 2023 as the projects are in the implementation phase and will require time to receive the data on results.</p> <p>Mr. Doeblar asked if DEP could bring the updates, they are considering for the MS4 permit application.</p>
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ADJOURN

Commissioner Danielle Cohen Higgins - Chair

DISCUSSION	<p>The Chair thanked the BBWMAB for their service. The meeting was adjourned the meeting at 11:59 am.</p>
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BISCAYNE BAY COMMISSION MEETING – July 27th, 2022

[Click Here to Watch the Recording](#)

BISCAYNE BAY COMMISSION MEETING
COMMISSION MEMBERS

**Noah Valenstein**
Brightwater Strategies

**Danielle Cohen Higgins**
Miami-Dade County
Commission, District 8

**Adam Blalock**
DEP

**Jean Monestime**
Miami-Dade County
Commission, District 2

**Tim Meerbott**
Town of Cutler Bay

**Dr. Thomas Reinert**
FWC

**Rebeca Sosa**
Miami-Dade County
Commission, District 6

**Charlie Martinez**
South Florida Water
Management District

**Spencer Crowley**
Florida Inland
Navigation District

Members Present:

Noah Valenstein - Chair
Adam Blalock - Vice-Chair
Charlie Martinez
Mayor Tim Meerbott,
Jean Monestime
T. Spencer Crowley III
Dr. Thomas Reinert

CHAIR. VALENSTEIN: Welcomed members of the Commission and thanked staff for making hybrid meeting work with technology. He asked for the public's patience to allow for comments for people

attending live and to take comments from folks online.

SUMMARY OF PRESENTATIONS

OVERVIEW MIAMI-DADE COUNTY REASONABLE ASSURANCE PLAN (RAP) FOR BISCAYNE BAY - Presented by: Irela Bagué, Miami-Dade County Chief Bay Officer

- Recommendation #1 of the Biscayne Bay Taskforce is the restoration of the natural ecosystem of the Bay, which starts with bringing back seagrass meadows.
- Provided an overview of the draft RAP linking it to the Biscayne Bay Report Card, which tracks our nutrient loads and our key areas which are impaired.
- Following the data, it is clear we need to focus on the northern portion of Biscayne Bay; we must start somewhere and the northern bay is the most critical.
- The RAP will encompass several key areas and will be carried out in Phases over the next few years. So, while the area encompassed in Phase 1 may look small it is our critical starting point but not the end.
- We are accepting public comment to our RAP and are working with DEP to include their comments. Final RAP will be submitted to the State on September 30, 2022.

Pamela Sweeney, Senior Manager of Water Resources Section, Miami-Dade County (RER -DERM)

- Explained the RAP process and how it differs from the TMDL and BMAP process.
- Process starts with an assessment of water quality which happens every two years.
- We have identified levels of impairment, and the state and federal regulations could prioritize us to go through the TMDL and BMAP process, which can take 10+ years. Or go through the RAP process (known as Category 4b pollution reduction plan in the Clean Water Act).
- Both processes share the same goal, but the RAP is stakeholder driven and allows for more local input and control of how we achieve our targeted goals.
- With the RAP the stakeholders set targets to reduce of nutrients level entering the Bay. The State will then approve the RAP by secretarial order, which the EPA will also adopt.

PRESENTATION ON WATER QUALITY TRENDS IN RAP'S PROPOSED FOCUS AREA – Presented by: Ken Weaver, Deputy Director DEP Division of Environmental Assessment and Restoration (DEAR)

- Update to a presentation made to the Commission in April this year. Focus on two basins, C-7 (Little River) and C-8 (Biscayne Canal) which are the areas included in the Miami-Dade County RAP, Phase 1.
- Showed existing impairments as well as newly identified impairments. Both basins had fecal TDML previously as well as dissolved oxygen. A newly identified impairment for both basins is an increase in total phosphorous.
- Since we don't have source/cause identified, this triggers a study list and allows us to do the RAP.

- Given urban land uses in both basins including industrial and an airport we should focus on stormwater as likely culprit.
- Provided map of 3,100 known septic tanks in the two basins also likely source of excess nutrients.
- Noted that nearly all the septic tanks and discharges are on the eastern side of the two basins, which is the focus area for the RAP, Phase 1.

PRESENTATION ON FUNDING AND PROJECTS TO IMPROVE THE WATER QUALITY IN BISCAYNE BAY: ALEX REED, Director DEP Office of Resilience and Coastal Protection

- Gov. DeSantis promised \$2.5B over first term in water quality initiatives and he has met and exceeded that goal.
- Water quality initiatives around the State also include \$800m in federal dollars.
- Focus on resilience and nutrient reduction. 65 different projects alone in Miami-Dade County, valuing \$42m this year.
- DEP quantifies the impact of these grant dollars; with the projects funded, we will be able to reduce nitrogen levels by 26,000 lbs; and phosphorous by 5,000 lbs annually.
- \$20M was appropriated in this current fiscal year for Biscayne Bay water quality projects. The deadline to apply for these grants is August 15, 2022.

COMMISSION DISCUSSION HIGHLIGHTS

Spencer Crowley (FIND) – Mentioned all the great success stories and how often we hear from local government officials and other stakeholders about projects being funded or finalized. Suggests that all stakeholders work together to update these achievements and communicate them in a coordinated fashion hopefully using the BBC to assemble and elevate. We're making big impact collectively on improving the Bay.

Chair Valenstein – Links between MS-4 stormwater permit process as one element of RAP implementation. Good to see in a short period of time action and movement as he knows Commission members are interested in seeing improvements. Gave shout out to DEP staff for excellent work on improving grants website. Emphasized how helpful and user-friendly the Protecting Florida Together website is and recommended that key stakeholders go into grant portal ([link here](#)) and answer questions as the site is designed to help applicants get connected to appropriate funding source.

Vice Chair Blalock – The RAP and BMAPs proactively identify projects helping us to identify funding requirements ahead of time. Working in this way we can create a road map for projects which when planned and implemented in a coordinated fashion lead in their sum to a much bigger impact than they would if carried out individually or in silos.

Commissioner Monestime (County) – Grateful for focus on the Little River in the RAP and excited to see the emphasis on a minority community and correcting wrongs from the past. We don't always see that and it's inspiring to see the work County colleagues and state partners are carrying out.

Dr. Thomas Reinert (FWC) – Highlighted mangrove restoration project for the Oleta River; happening now and should be completed Fall 2022.

COMMISSIONS ITEMS DISCUSSED FOR NEXT MEETING

- Stormwater as important source of nutrient load and trash could to hear from regulatory side, DEP planned changes to permits and how this process including design, maintenance and oversight can make a big difference in a relatively short amount of time.
- Challenges to implementing projects especially septic to sewer conversions with a special emphasis on funding. How to knit together State, local and homeowner funding in such a way to overcome obstacles to implementing this important project.
- Florida Department of Transportation (FDOT) and other transportation projects and their impact on Biscayne Bay. Requested by Commissioner Cohen Higgins; could be presentation or perhaps separate conversation.
- Success stories and how we can continue to promote all the projects being undertaken collectively to restore Biscayne Bay.
- Next meeting will be planned for October 2022.

PUBLIC COMMENT: ([REVIEW RECORDING HERE: 1:15:40 START TIME](#))

Marcos Peña, Greenplanet Waterways Restoration

Audrey, Miami Waterkeeper + Everglades Law Center

Dave Doeblar, BBWMAB Commissioner and Volunteer CleanUp.Org

Steve Leightner, Miami Sierra Club

Rachel Streitfeld, North Bay Village and BBWMAB Member

STAFF COMMENTS AND UPDATES:

Alex Reed, DEP – Mentioned Living Shoreline Inventory that DEP is carrying out now. Focusing first on statewide data and review illustrating the value of Living Shorelines for water quality and resilience. We need more time to fine-tune the inventory to the regional level to include local challenges and conditions. Thanked Laura Eldridge for all her years of service as Aquatic Preserve Manager and wished her well in her new position with Miami-Dade County. Welcomed Griffin Alexander as the new Aquatic Preserve Manager.

Irela Bague, Miami-Dade County – Thanked the DEP team for all their work removing tons of debris from the Spoil islands.

MEETING ADJOURNED

Learn more about the Biscayne Bay Commission here: [Biscayne Bay Commission | Water Quality Dashboard \(protectingfloridatogether.gov\)](#)

Tentative Meeting Date: Late October

Miami-Dade Back Bay Coastal Storm Risk Management Study

- Mayor's Letter
- Response Letter
- Oct 12th – Public Meeting Presentation
- Back Bay Article



DANIELLA LEVINE CAVA
MAYOR
MIAMI-DADE COUNTY

December 1, 2021

Assistant Secretary Michael L. Connor
Department of the Army
108 Army Pentagon
Washington, DC 20310

Dear Assistant Secretary Connor:

Congratulations on your confirmation as the Assistant Secretary of the Army for Civil Works. I look forward to working with you on our strong partnership addressing a number of critical water resource and resiliency challenges, including Everglades restoration, protecting PortMiami and our coast, and defending our community from both coastal storms and inland flooding by improving the resiliency of the Central and Southern Florida (C&SF) Flood Control Project.

We appreciate the time and resources the USACE has committed to the *Miami-Dade Back Bay Coastal Storm Risk Management* study (Back Bay Study), which seeks to address a crucial component of our community's flood risk and complements decades of federal investments to protect the Atlantic coast.

The USACE Norfolk District is preparing a waiver request for the Miami-Dade Back Bay study, which will provide the time needed for the development of a Locally Preferred Plan (LPP). We fully support this and respectfully request your careful review and final approval. The extended timeline will enable the County to consider alternatives to the Tentatively Selected Plan to address local stakeholder strong support for greater incorporation of nature-based solutions to achieve maximum resiliency against future flooding events while also continuing to prioritize safety, integration with the existing C&SF Flood Control Project and enhancement of the urban and natural environment.

The County plans to continue the USACE's efforts to incorporate significant local stakeholder input to ensure that impacted frontline communities are included in the LPP process and to comply fully with all environmental justice objectives of the Biden Administration and Miami-Dade County's commitment to providing equitable solutions for our community. Local funding has been set aside to support the additional work, and the County is prepared to enter into an amended cost-share agreement with the USACE.

Miami-Dade County is highly vulnerable to hurricanes. The excellent work completed by the Norfolk District has clearly demonstrated a compelling national economic interest in proactively protecting the County's critical assets and communities from coastal storm damage.

The County is committed to continuing its partnership with the USACE to ensure that a revised and recommended LLP is in place in time for WRDA 2024 authorization. The County is also continuing its close collaborative work with USACE Jacksonville District on Coastal Storm Risk Management Study for the Atlantic coastline and the Resiliency study for the Central and Southern Florida Flood Control Project. To ensure these plans are aligned, it is essential that the Back Bay study continues to move ahead in concert with these complementary efforts.

Thank you in advance for your support and efforts to keep these critical projects moving forward. Please do not hesitate to contact my Chief Resilience Officer Jim Murley directly should you have any questions.

Sincerely,



Daniella Levine Cava
Mayor



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

August 3, 2022

The Honorable Daniella Levine Cava
Mayor of Miami Dade County
111 NW 1st Street
Miami, FL 33128

Dear Mayor Cava:

I am writing in response to your letter dated December 1, 2021, regarding the U.S. Army Corps of Engineers (Corps) Miami-Dade Back Bay Coastal Storm Risk Management study and specifically your interest in extending the study to ensure proposed recommendations complement other water related infrastructure projects and studies in the same area. It's my understanding the goal is to incorporate Natural & Nature Based Features (NNBF) and consider alternatives that would also enhance the natural environment and urban communities.

Given the risk and vulnerability of our nation's coastline from increasingly destructive storms associated with climate change, it is critical that any plan balance project performance while also preserving and protecting the environment and does so in an equitable manner for the community. This is especially true in the Miami area, which based on local tide gauge data has been experiencing rapid sea level rise. Sea levels rising an additional 2-5 feet over the next century can add to this risk. Based on the February 2022 NOAA technical report, predictions are an increase of 2 feet in sea levels within the next 30 years and potential for over 6 feet rise within 100 years. Along with Sea Level change the Corps' most recent modeling indicates for the Miami River a potential storm surge of more than 11 feet is possible. As described in the June 2020 Corps Feasibility Report, storms under these conditions could result in catastrophic consequences to much of the downtown area. This information warrants all of us to maintain a sense of urgency to address these risks and build resiliency into the Miami coastline.

I acknowledge your enhanced interest in the more robust inclusion of NNBF features in any of the leading alternatives for this important project. Accordingly, the Army is committed to working with you and your team on this additional analysis. The Corps has transmitted to my office a request for additional time and funding in order to assist with the additional analysis. It is anticipated that up to 60 additional months of time and additional funding up to \$8.2 million are needed to complete the feasibility study.

This important and complex project requires a large collaborative effort. The North Atlantic Division, which houses the Coastal Storm Risk Management Planning Center of Expertise will continue to lead this study effort. Norfolk District will work closely with

OFFICE OF THE MAYOR

2022 SEP -2 AM 7:14

RECEIVED

colleagues in the South Atlantic Division and the Jacksonville District to ensure the multiple ongoing studies along the coastline in the Miami-Dade area are complementary efforts leading to well-integrated solutions. The Corps will use its expertise from across the organization and, in consultation with all our partners, actively coordinate with other Federal and State Agencies. I respectfully request your assistance to ensure local communities and affected stakeholders maintain their engagement as we jointly continue this feasibility study and further refine an acceptable range of alternatives.

Your December letter indicated to me that local funding has been set aside to support the continued analysis and that the County is prepared to enter into an amended Feasibility Cost Share Agreement (FCSA) providing for the Corps acceptance of these contributed funds. As stated above, we must all maintain a sense of urgency in completing this analysis to meet your implementation goals and reduce risks before the next major storm. Therefore, I am requiring the Corps conduct a milestone meeting with me, no later than one year after the exemption is approved. At this meeting, we will discuss the progress on plan recommendation, verify the scope for completion, and ensure continued alignment of our objectives.

Miami-Dade County is a valued partner, and the Army looks forward to working together to provide greater resiliency to the communities along the Miami coastline.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael L. Connor", with a stylized flourish at the end.

Michael L. Connor
Assistant Secretary of the Army
(Civil Works)

RE-INITIATION OF THE MIAMI-DADE BACK BAY COASTAL STORM RISK MANAGEMENT FEASIBILITY STUDY

PUBLIC WEBINAR

[Click here to watch the video recording of the Public Webinar](#)

Jim Murley
Chief Resilience Officer
Miami-Dade County

Re-initiation of the
Miami-Dade Back
Bay CSRM Public
Webinar
Branch U.S. Army

Corps of Engineers, Norfolk District
12 October 2022



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<https://www.saj.usace.army.mil/MiamiDadeBackBayCSRMFeasibilityStudy/>



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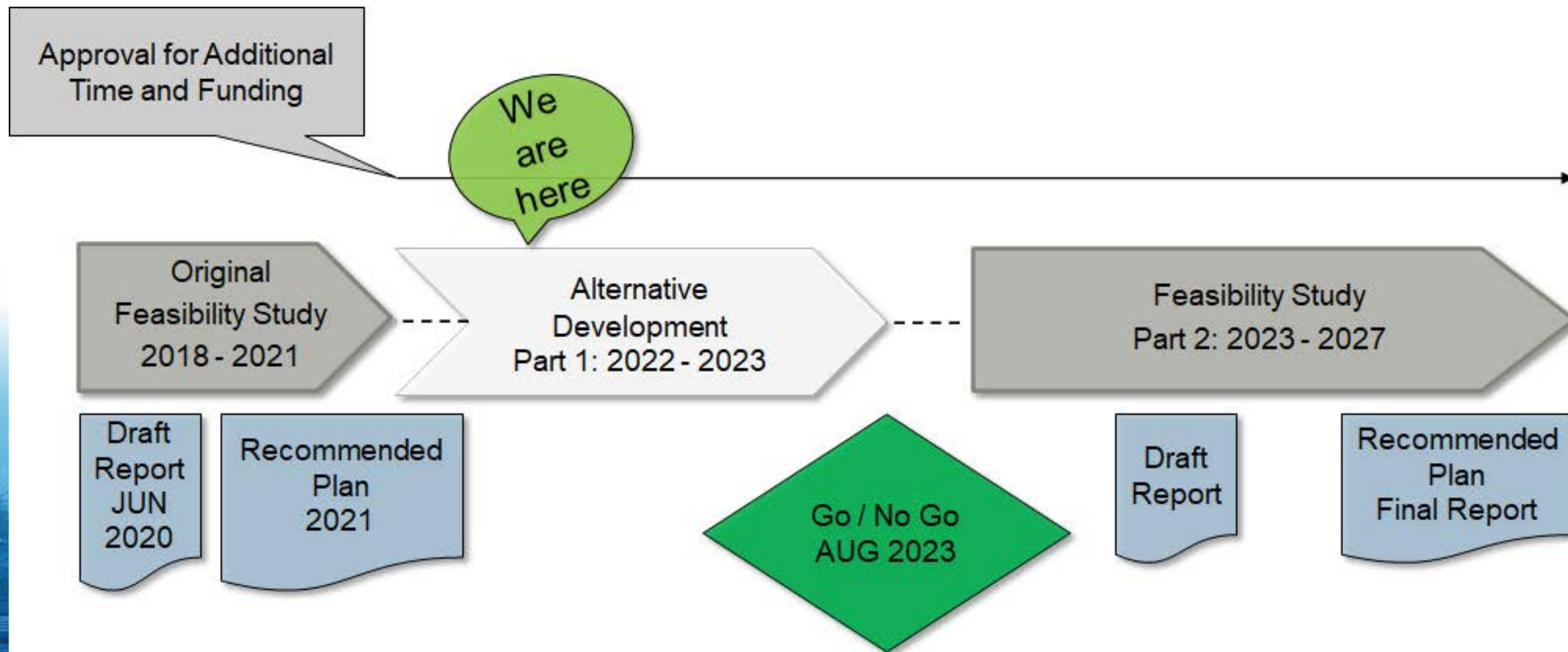
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MIAMI-DADE BACK BAY CSRM FEASIBILITY STUDY: PAST TO PRESENT

3





MIAMI-DADE BACK BAY CSRM FEASIBILITY STUDY: PAST TO PRESENT



Milestones	Date
Feasibility Study Began	Oct 2018
Tentatively Selected Plan	Jan 2020
Release of Draft Integrated Feasibility Report and Programmatic EIS (60-day comment period)	Jun 2020
Feasibility Study Paused and Formal Request received from Miami-Dade County to extend study timeline beyond 3-years and \$3 million	Aug 2021
3-year Study Timeline expired	Oct 2021
Subsequent formal request from Miami-Dade County Mayor Daniella Levine Cava to ASA(CW)	Dec 2021
Time and Funding Request approved by Assistant Secretary of the Army for Civil Works (ASA(CW))	Aug 2022



STUDY BACKGROUND AND OBJECTIVES

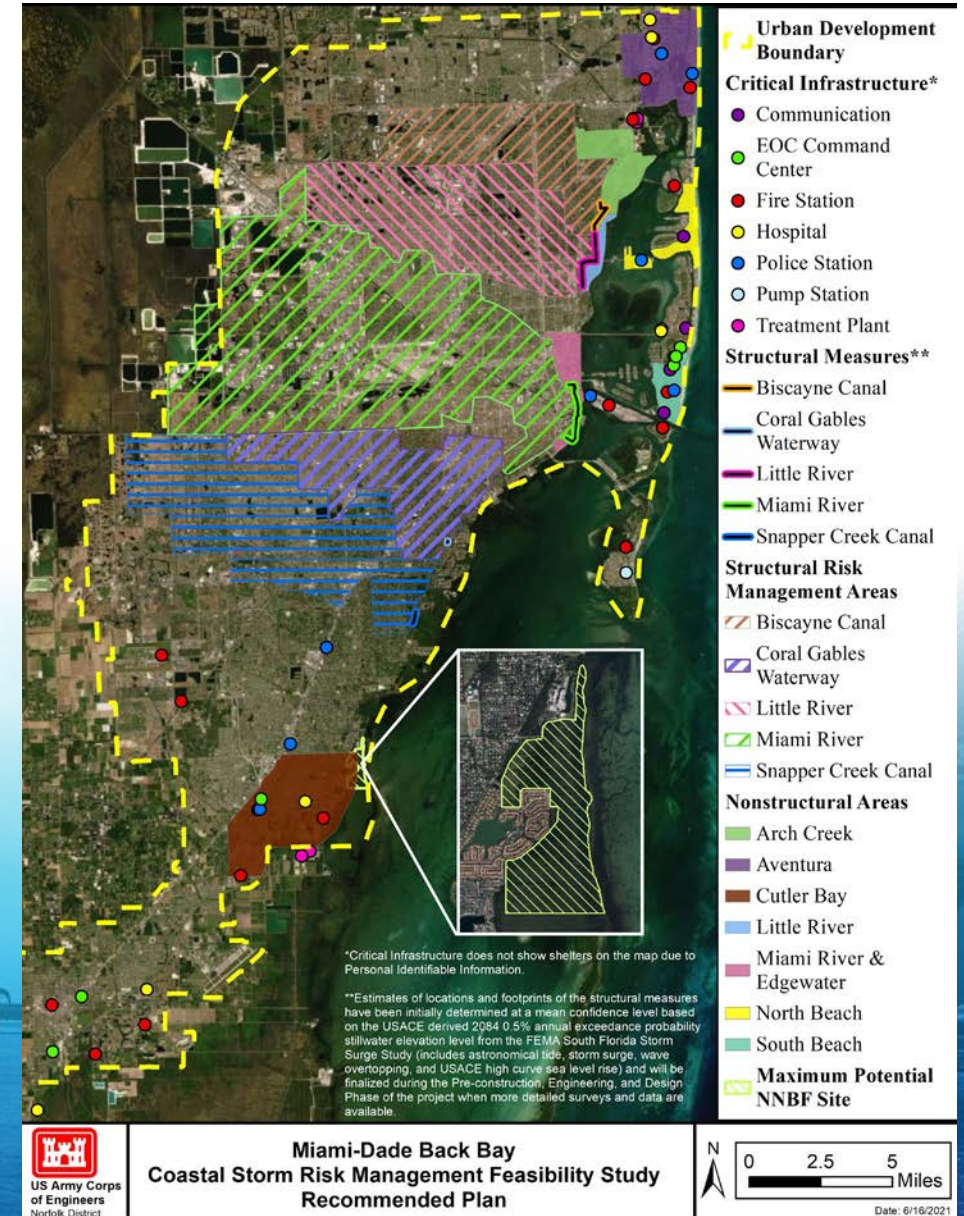


- *Study Purpose:* To reduce coastal storm risk through the implementation of coastal storm risk management (CSRM) measures designed to reduce potential damage caused by coastal storms, including preventing loss of human life. This study is a response to the study authority (Public Law 84-71, June 15, 1955) and will develop and evaluate CSRM measures for Miami-Dade County.
- *Study Objectives:*
 - Increase the resilience of Miami-Dade County to function effectively before, during, and after coastal storm events by decreasing the vulnerability of critical infrastructure to flooding damages from sea level rise and storm surge.
 - Reduce economic damages to structures in communities vulnerable to severe flooding damages from sea level rise and storm surge.
 - Incorporate natural and nature-based features (NNBFs) to reduce flood damages and complement the recommended nonstructural and structural measures
- Seven strategic focus areas were selected: Arch Creek, Aventura, Cutler Bay, Little River, Miami River, North Beach, and South Beach. Critical infrastructure included throughout the County.

RECOMMENDED PLAN (2021)



- **Structural Measures:** Storm surge barriers with associated floodwalls, pump stations, and tide gates at Biscayne Canal, Little River, Miami River, Coral Gables Waterway and Snapper Creek Canal.
- **Nonstructural Measures:** Elevating residential homes and floodproofing non-residential buildings
- **Dry floodproofing critical infrastructure** such as fire and police stations, medical facilities, evacuation centers, potable water facilities, and pump stations (250 locations)
- **Natural and Nature-Based Features (NNBFs):** Mangrove and coastal wetland restoration at Cutler Bay



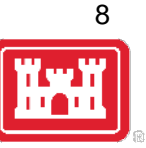


STAKEHOLDER COMMENTS

- General concerns with proposed structural measures: aesthetic concerns; environmental harm to Biscayne Bay; equity concerns and “winners and losers” associated with proposed structural measures; floodwalls would bisect communities, potential impacts to navigation and recreational access
- Limited inclusion of NNBFs and green infrastructure
- A need to assess flood risk more holistically and consider the existing Central and Southern Florida Flood Control System
- Critical Infrastructure List should be expanded



RE-INITIATING THE MIAMI-DADE BACK BAY CSRM FEASIBILITY STUDY: TWO PARTS



PART 1: 12 months

Objective: In coordination with Miami-Dade County, develop an additional alternative that supports the study objectives and sufficiently compares in performance to the Recommended Plan. The alternative would integrate and refine measures of the Recommended Plan that received broad support and modify/replace measures that raised local concerns.

The alternative may include the following:

- Hybrid structural/NNBF measures to reduce coastal storm surge risk at Miami River; more NNBFs in general
- Nonstructural measures in Biscayne Canal and Little River in place of structural measures (i.e. surge barrier/floodwall)
- An evaluation of additional areas of the community where nonstructural measures could be incorporated within the existing focus areas
- Additional critical infrastructure



RE-INITIATING THE MIAMI-DADE BACK BAY CSRM FEASIBILITY STUDY: THE NEXT 12-MONTHS



9

Milestones		Date
Public Meeting (Virtual)		Oct 12, 2022
Briefing to City of Coral Gables		Oct 13, 2022
Briefing to Village of Miami Shores		TBD
Briefing to Biscayne Bay Water Management Advisory Board		Oct 25, 2022
USACE Leadership Meeting with Mayor Cava		Oct 26, 2022
Charrette Overview (Virtual)		Nov 2, 2022
Charrette in Miami-Dade County		Nov 14-18, 2022
Monthly Interagency Meetings		Sept 2022 - July 2023
Quarterly Public Updates		Jan 2023 – Jul 2023
12-month check-in with ASA(CW)		Aug 3, 2023



DRAFT CHARRETTE AGENDA

NOVEMBER 14 - 18



	Monday	Tuesday	Wednesday	Thursday	Friday
Morning		Site Visit - Miami River	Site Visit - Miami Shores	Focus: Natural and Nature-Based Features - Cutler Bay	Wrap-up Meeting and next actions (Hybrid)
Afternoon	Kick-off Meeting (Hybrid), Leadership Opening Remarks	Charrette: Miami River Focused	Charrette: Nonstructural	Charrette: Natural and Nature-Based Features	
Evening	Public Meeting				



RE-INITIATING THE MIAMI-DADE BACK BAY CSRM FEASIBILITY STUDY: PART 2



Milestones		Date
12-month check-in with ASA(CW)		Aug 3, 2023
Feasibility Study Kick-off, additional analysis, public scoping, etc.	P A R T 2	TBD
Monthly Interagency Meetings		TBD
Tentatively Selected Plan		TBD
Published Draft Report		TBD
Agency Decision Milestone		TBD
Published Final Report		TBD
Chiefs Report		Aug 3, 2027



COORDINATION EFFORTS

- **USACE Engineering With Nature Program**

- Engineering With Nature® is the intentional alignment of natural and engineering processes to efficiently and sustainably deliver economic, environmental, and social benefits through collaboration.



- **Coordination with Other USACE Studies/Projects**

- Miami-Dade CSRM Study (Beach)
- Biscayne Bay and Southeastern Everglades Ecosystem Restoration (BBSEER) Project
- Biscayne Bay Coastal Wetlands (BBCW)
- Miami Harbor Navigation Improvement Study
- Central & South Florida (C&SF) Flood Resiliency Study

- **Public Engagement**

- Coordinating with Miami-Dade County over coming weeks/months for joint communication.
- Website update and draft public comment tool <https://arcg.is/0ub0Cf>



PUBLIC COMMENT OPTIONS



- **Email:** MDBB-CSRStudy@usace.army.mil
- **Public Crowdsourcing Reporter Tool:** <https://arcg.is/0ub0Cf>
 - Tool open until October 31, 2022
- **Written Comments:**

Environmental Analysis Section, Norfolk District
803 Front Street
Norfolk, Virginia 23510
- **For any accessibility issues that prevent written comments,** please call (757) 201-7728.
- Project Documents are Located:
<https://www.saj.usace.army.mil/MiamiDadeBackBayCSRFeasibilityStudy/>





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ENVIRONMENT

Miami-Dade said no to coastal wall. Feds agree to look at new hurricane protection options

BY ALEX HARRIS

UPDATED SEPTEMBER 06, 2022 4:19 PM



A rendering depicting what the Army Corps of Engineers' proposed flood gate designed to protect downtown Miami from storm-surge flooding might look like alongside a man-made island. *Curtis + Rogers Design Studio and the Miami DDA*

Only have a minute? Listen instead

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Miami-Dade has another shot at a government-funded solution to its storm surge flooding problem.

The federal government has agreed to take another look at its \$6 billion proposal to address Miami-Dade’s risk of hurricane-driven flooding after the county rejected the plan last year.

The original plan involved elevating thousands of homes, flood-proofing important buildings like fire stations and hospitals and even planting more mangroves in South Dade. Miami-Dade residents and politicians were mostly on board, especially with the promise of the feds footing most of the bill.

TOP VIDEOS

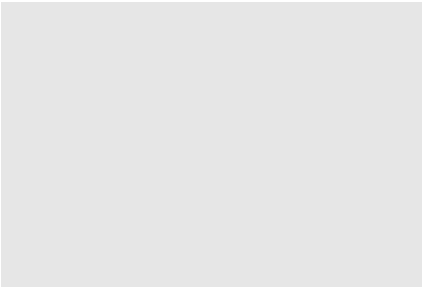


See photos of Columbus victory over Palmetto

But [the county ultimately rejected it](#) because of one crucial element — a proposed wall along the coast of Miami-Dade that topped 20 feet at some places and connected to a series of floodgates at the mouth of Miami rivers and canals.

The uproar over a view-blocking, Biscayne Bay damaging wall along the coast was intense. Miami’s Downtown Development Agency even commissioned renderings of the wall covered in graffiti and trash. [Developers and politicians suggested a prettier](#), more nature-based approach instead, like mangroves or man-made islands, but ultimately they couldn’t get the Corps on board.

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A rendering depicting what the Army Corps of Engineers’ proposed 10-foot high walls designed to protect downtown Miami from storm-surge flooding might look like at Brickell Bay Drive. *Curtis + Rogers Design Studio and the Miami DDA*

Now, the U.S. Army Corps of Engineers has agreed to reconsider that part of the plan, officially known as the Back Bay Coastal Storm Risk Management Study. And it will pay for the new study itself, at no cost to the county.

Miami-Dade Mayor Daniella Levine Cava’s administration has been pushing the Corps to consider a more nature-based approach to coastal protection for years, and she called the recent decision “a great accomplishment” for the county.



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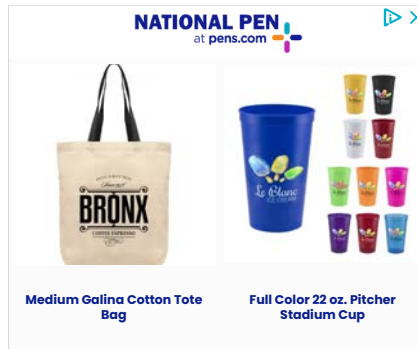
*As Shown \$35,595 MSRP 2022 Altima Platinum AWD with Premium Paint, Splash Guards, & Floor Mats, other optional equipment shown, see dealer for details

“The fact is that we were very persistent and persuasive and we also had public input that was very clear on the idea that the original plan of all hard or gray infrastructure would not be acceptable,” she said.

This time, she said, the Corps agreed to hold more meetings with the public and accept more comments on the proposed strategy. The study is focused specifically on the “structural” element of the plan, which used to be the wall and series of flood

gates. The other elements, [including home elevations and flood-proofing](#), will remain the same.

In an Aug. 3 letter to Levine Cava, Assistant Secretary of the Army Michael Connor called the study “an important and complex project” that “requires a large collaborative effort.”



He budgeted an additional \$8.2 million and 60 months for the study, double the original \$3 million, 3-year study. However, Levine Cava said the Corps expects to finish by 2024 and score government funding to start work as soon as 2025.



A rendering depicting what the Army Corps of Engineers' proposed 10-foot high walls designed to protect downtown Miami from storm-surge flooding might look like. *Curtis + Rogers Design Studio and the Miami DDA*

Part of the agreement includes a review at the one-year point by Levine Cava to ensure the Corps is on track for a solution that Miami-Dade residents will like.

Irela Bague, the county's chief bay officer, said the Corps got the message “loud and clear” that there was too much steel and concrete and not enough mangroves and sand in the original plan.

“I’ve never seen the Corps pivot like this for any local government in my 20+ career dealing with them,” she said. “It shows how important our region is.”


Jim Murley, the county's chief resilience officer, said the new study will also give the Corps the chance to come up with a plan that works alongside some of the other major Army Corps projects ongoing in the region. They include a restudy of how often the government should add sand to Miami-Dade's beaches, a restudy of South

Florida’s aging drainage system of canals and pumps and a fresh look at how Everglades restoration affects Biscayne Bay.

“They all relate to moving water or dealing with storms and that’s the essence of living in Miami, it’s understanding that balance,” Murley said.

[Army Corps Response Regarding Miami-Dade Back Bay Coastal Storm Risk Management Study - 3 Aug 2022](#) by [Miami Herald](#) on Scribd

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DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
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108 ARMY PENTAGON
WASHINGTON DC 20310-0108

August 3, 2022

The Honorable Daniella Levine Cava
Mayor of Miami Dade County
111 NW 1st Street
Miami, FL 33128

Dear Mayor Cava:



I am writing in response to your letter dated December 1, 2021, regarding the U.S. Army Corps of Engineers (Corps) Miami-Dade Back Bay Coastal Storm Risk Management study and specifically your interest in extending the study to ensure proposed recommendations complement other water related infrastructure projects and studies in the same area. It's my understanding the goal is to incorporate Natural & Nature Based Features (NNBF) and consider alternatives that would also enhance the natural environment and urban communities.

Given the risk and vulnerability of our nation's coastline from increasingly destructive storms associated with climate change, it is critical that any plan balance project performance while also preserving and protecting the environment and does so in an equitable manner for the community. This is especially true in the Miami area, which based on local tide gauge data has been experiencing rapid sea level rise. Sea levels rising an additional 2-5 feet over the next century can add to this risk. Based on the February 2022 NOAA technical report, predictions are an increase of 2 feet in sea levels within the next 30 years and potential for over 6 feet rise within 100 years. Along with Sea Level change the Corps' most recent modeling indicates for the Miami River a potential storm surge of more than 11 feet is possible. As described in the June 2020 Corps Feasibility Report, storms under these conditions could result in catastrophic consequences to much of the downtown area. This information warrants all of us to maintain a sense of urgency to address these risks and build resiliency into the Miami coastline.

I acknowledge your enhanced interest in the more robust inclusion of NNBF features in any of the leading alternatives for this important project. Accordingly, the Army is committed to working with you and your team on this additional analysis. The Corps has transmitted to my office a request for additional time and funding in order to assist with the additional analysis. It is anticipated that up to 60 additional months of time and

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This story was originally published September 6, 2022 2:23 PM.

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FEBRUARY 11, 2021 12:49 PM



ALEX HARRIS



305-376-5005

Alex Harris covers climate change for the Miami Herald, including how South Florida communities are adapting to the warming world. She attended the University of Florida.

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2022 Grants Submissions

Project Name	Project Goals	Funding Allocation: Phase 1 (\$10M)	Funding Allocation: Phase 2 (\$12.9M)	Phase 3: PROPOSED FUNDING REQUEST	Phase 3: PROPOSED PROJECTS
Water Quality Characterization	Identify, reduce or eliminate sources of water quality pollution in north Biscayne Bay watersheds -Miami River (C-6) -Little River (C-7) -Biscayne Canal (C-8)	\$2,150,000	\$2,250,000	\$1,250,000	1-Identify & verify hotspots in the groundwater (gw) dataset for P to ensure data aren't outlier (from C-6 to C-9 basins) a.Additional sampling as needed (Contractor- FIU) 2-Integrate existing Phase I and II data/Generate additional information in specific areas to address data gaps. Create comprehensive groundwater layers, contour maps, and descriptive models of P data (Contractor-FIU) a. Water Quality - DERM Bayrun; other gw data b. Models - groundwater models w/ direction/flow; seasonality c. GIS - land use type; elevation; type of facility; proximity to septic/density of septic system proximity to surface waterbody; overlap the areas of high concentration of phosphorus with permitted operators and septic tanks in those areas. This initial analysis will reduce number of "suspects" as a source of pollution. Our inspectors (PRD), could investigate as part of the scheduled routine inspections. 3-Investigate sources of phosphorus pollution by having DERM pollution control inspectors conduct informed, on-the-ground investigations to identify and document the potential source of P pollution
	DERM Staff (GIS, investigation, enforcement, file reviews)			\$500,000	a. Sampling within and inspections of: i. In gw wells (monitoring wells and also production wells) ii. In surface water iii. In stormwater systems iv. In septic- influenced and other wastewater systems b. Identify the P pollution sources and address to reduce/eliminate; Provide information and/or datasets that will help implementation of RAP mitigation strategies i. Inspections, surveys, enforcement, violations, historical file reviews, etc 4-Produce technical memorandum a. Serve to better inform RAP projects by MDC, state, and munis i. Identify issues and areas ii. Document solutions/action taken to address P pollution iii. Suggest solutions for other potential sources/next steps for additional P reductions and mitigation strategies
	Contractor (FIU- data review and integration; GIS, final report)			\$750,000	
Septic to Sewer Conversion	Prioritize conversion of parcels most vulnerable to failure	\$4,400,000	\$6,690,463	\$11,956,721	
(200 homes for \$11M; 100 for \$5.5M)	Connect 2 Protect: Priority Pump Station Basin - Sewer Expansion -			\$11,274,771	Expand the sanitary sewer system and connect approximately 200 properties. This project will target a future pump station basin with septic systems vulnerable to current groundwater level within a designated economically vulnerable population located directly adjacent to the C-7 canal. The scope of this project includes the public and private connection costs to realize complete connections in a timely manner.
	Connect 2 Protect: Priority Pump Station Basin - Playbooks			\$681,950	This project includes pre-design and property owner engagement work in vulnerable pump station basins. Activities include establishing pump station basin layouts to maximize nutrient reductions, identifying pump station sites, conducting workshops and surveys to determine readiness to connect, gathering neighborhood data including socio-economic data and other demographics to leverage all available funding sources, identifying all planned roadway work and developing a comprehensive "readiness to connect" playbook for these priority areas.
Innovative Technology	Install Smart Covers and Smart Rain Gauges to analyze, predict, and prevent Sanitary Sewer Overflows (SSOs)	\$1,150,000	\$2,000,000	\$1,665,146	
	(WASD) Real Time I&I Monitoring			\$665,146	Expand real time flow metering of the gravity sewer collection system to establish relationships between the capacity of the system and the condition of the infrastructure in order to address inflow and infiltration (I&I). WASD is using this data to characterize I&I in a basin to develop work orders to inspect areas for potential infrastructure issues or interference in the wastewater conveyance system. This proactive and real-time monitoring valuable complement to the video and inspections that are performed on a revolving basis.
	(W/WW) MDC-Wide Inflow Assessment			\$1,000,000	Miami-Dade County's Wastewater Collection and Transmission (WC&T) system is comprised sixteen (16) utilities that rely on three regional wastewater treatment plants. The entire WC&T system is subject to excess rain derived inflow and infiltration (RDII) during storm events exceeding a five (5) year return frequency. This RDII often causes Sanitary Sewer Overflow (SSOs) and in certain occasions overflows at the regional wastewater treatment plants; some of those overflows reach and pollute Biscayne Bay. A County-Wide assessment of RDII is required in order to identify system deficiencies and control or eliminate SSOs and improve water quality and overall health of Biscayne Bay. The proposed Sanitary Sewer Overflow Prediction and Prevention Plan will allow Miami-Dade County's sixteen sewer utilities and RER-DERM to have real-time information on the conditions/behavior of the WC&T system by means of monitoring technology installed at key manholes and pump stations. With that information and the prompt response from the sewer utilities and RER-DERM, potential SSOs can be prevented or minimized. Also, these monitoring data will allow detailed evaluation of the WC&T system performance and identification of needed improvements. Preventing the release of sewage into Biscayne Bay will improve its water quality and overall health. This by extension will support County's Economy, Public Health and Environment.
Stormwater Treatment	Design and implement engineering strategies including innovative Green Infrastructure and Low Impact Development	\$1,300,000	\$2,000,000	\$4,000,000	
	Pilot new technologies in C-6 and C-8 basins			\$2,500,000	Stormwater Treatment & Maintenance Optimization: Build on recommendations from the Biscayne Bay Task Force Report, Miami-Dade County Stormwater Master Plan, the Resilient Adaptation Area report, and other new technology pilot projects implemented by the County the municipalities to design and implement engineering strategies in priority areas; Provide technical support to city and county officials in Miami-Dade County to provide information and technical assistance to promote and accelerate implementation of new technologies and optimize maintenance cycles to reduce, mitigate, and to the greatest extent possible, eliminate land-based sources of pollution.
	Implement QR code tech to enhance maintenance			\$500,000	Implement innovative tools and optimization of maintenance cycles, with the goal of improving the water quality performance of stormwater management systems.
	Performance testing of SW pilot tech and QR code tech			\$1,000,000	Project-area level pre- and post sampling and analysis on effectiveness of new technologies

Grant Project	Submitted	EPA Grant	Date	OMB
MDC RER DERM Aquatic Habitat Restoration in South FL - Seagrass	Submitted	EPA-I-R4-SFL-2022-01	8/29/2022	Wall T Dan
Miami-Dade RER DERM Aquatic Habitat Restoration in South Florida	Submitted	EPA-I-R4-SFL-2022-01	8/29/2022	Wall T Dan
MDC DERM RER Addressing Climate Resiliency through Nature Based Infrastructure	Submitted	EPA-I-R4-SFL-2022-01	8/29/2022	Wall T Dan
Miami-Dade County RER DERM Environmentally Endangered Lands EE	Submitted	EPA-I-R4-SFL-2022-01	8/29/2022	Wall T Dan
Miami-Dade RER-DERM Community-Based Project to Protect Waterways and Aquatic Habitat	Submitted	EPA-I-R4-SFL-2022-01	8/29/2022	Wall T Dan
Biscayne Park Flood Protection, Water Quality Characterization, and Pollution Reduction Study (C-8/Biscayne Canal)	Submitted	EPA-I-R4-SFL-2022-01	8/29/2022	Wall T Dan
Development of Stormwater and Water Quality Management Strategies to Reduce Nutrient	Submitted	EPA-I-R4-SFL-2022-01	8/29/2022	Wall T Dan

FY22 EPA Grant Submission and FY22 NOAA Marine Debris Removal Grant under the Infrastructure Investment and Jobs Act Grant Submission as titles - and description for NOAA add: Application for removal of large-scale debris items, like derelict vessels, derelict fishing traps and pots, illegal structures, and illegally dumped debris items from the waters of Miami Dade County.



County Parks Results from the International Coastal Cleanup 2022 Miami-Dade and Survey from VolunteerCleanup.org

We are pleased to report out the results of the International Coastal Cleanup 2022 in Miami-Dade. We are grateful for your support of this high-impact event and look forward to future collaborations. Many thanks to Stacy at Parks and Recreation team for her assistance coordinating the event, aPlease forward this along to anyone else at the County who should receive it.

- Collectively across the entire Miam-Dade program, **22,125 pounds of marine debris** were removed from 55 locations by 2,976 volunteers! Scroll down below for find the **impact summary for Miami Dade Parks Locations**
- Thanks to our citizen science data collection, we've identified for the first-time that **BOTTLE CAPS** are now the top item collected during cleanups, where previously cigarette butts held that notorious position for many years. This data point is consistent with that of our neighbors in Monroe County, pointing to the importance of the Plastic Free 305 programs an plastic free vendor contracts.

While this was a great event, this is sounding huge alarm bells for us. There are 6-10 cleanups happening all over Miami-Dade every weekend, and these locations are regularly cleaned by volunteers, yet we still collected more trash than ever before? **We've identified a couple of significant sources that should be addressed immediately:**

1. Poor waste management on the spoil islands: Boaters are bringing too much material out with them and then leaving the trash on the islands in overflowing garbage cans only to be washed away when the tides come in. Government needs to rethink the trash bins on the islands and put dumpsters at the boat ramps. And boaters need to 'pack-it-out'.
2. Increasing (illegal) use of the Julia Tuttle Causeways: We are seeing a huge increase in people renting jet skis, fishing, partying, and religious ceremonies in an area not set up for visitors - and leaving all their trash behind. We need to address the root causes and clear people off the Causeway!
3. Insufficient Maintenance of Stormwater Systems and Canals: This is starting to be addressed, but it isn't near frequent enough. Adding pollution controls and maintenance is government's responsibility.
4. Lack of pride in the 305. Miami is an amazing place. Sure it has problems, but we are lucky that this is our home. Every resident must take pride in our neighborhoods and our community every single day - not just when the Heat win the playoffs. This is our home.

Attached, please also find the **post-event survey results** demonstrating the impact of the event on people and their awareness of marine debris (in addition to the clear environmental impact). While we know cleanups are not the answer, we have demonstrated that cleanups provide an eye-opening experience to volunteers that show how bad the problem is, and arm them with action items they can do to be part of the solution.

- **We are reaching new people!** For 38% of survey respondents, the 2022 ICC was their first cleanup
- **Participating in a cleanup is a powerful learning experience!** 66% had an increase in knowledge about marine debris from attending the event.
- **Cleanups are a steppingstone to further action!** 96% want to do more to protect the environment



And finally, in case you missed it live, watch Emmy award-winning journalist, Louis Aguirre from Local 10 News (on Channel 10) and his recap of ICC on his weekly 'Don't Trash Our Treasure' segment. All of our site captains submitted footage of the different cleanups. [Watch the news segment here](#)

Location	Volunteers	Pounds
Crandon Marina Mangrove Paddle Clean Up with Fill-A-Bag and Miami EcoAdventures	70	1328
Virginia Key Dog Beach with FL DOH SWAT	68	262
Crandon Park Oceanside	74	240
Matheson Hammock Park with Miami EcoAdventures	77	230
Haulover Bayside with Sereia Films	23	204
Chapman Field Mangrove Cleanup with Miami EcoAdventures	22	120
Black Point Marina with Team US Coast Guard	57	587
Deering Estate, People's Dock, and Deering Point	83	360
East Greynolds Park and Farina Preserve with Frost MUVE and DERM	31	715
Hobie Island (Rickenbacker Causeway)	125	502
Venetian Causeway Mangroves with Fertile Earth	25	69
TOTAL IMPACT	655	4617



Dara Schoenwald Executive Director 786-525-6040
<http://www.volunteercleanup.org>

Raise money for us while you shop on Amazon!
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BBWMAB POLICY UPDATES

The following is a listing of legislative actions taken by the Board of County Commissioners related to Biscayne Bay since the last BBWMAB meeting in June.

File Number: 221611

Agenda Date: 7/19/2022

RECOGNIZE THE TOWN OF CUTLER BAY

Sponsors: Danielle Cohen Higgins, Prime Sponsor

[Legislative Matter \(miamidade.gov\)](https://miamidade.gov)

Status: Presented

BBWMAB Recommendation: Water Quality

File Number: 221450

Agenda Date: 7/19/2022

File Name: BBCW PHASE I RESTORATION PROJECT

Sponsors: Danielle Cohen Higgins, Prime Sponsor

[Legislative Matter \(miamidade.gov\)](https://miamidade.gov)

Status: Adopted

BBTF Recommendation: Watershed Habitat Restoration and Natural Infrastructure

File Number: 220470

Agenda Date: 9/1/2022

OPERATIONS AND MAINTENANCE OF MUNICIPAL STORMWATER

Sponsors: Danielle Cohen Higgins, Prime Sponsor | Sally A. Heyman, Co-Sponsor |

Jean Monestime, Co-Sponsor | Rebeca Sosa, Co-Sponsor | Sen. Javier D. Souto, Co-Sponsor

[Legislative Matter \(miamidade.gov\)](https://miamidade.gov)

Status: Adopted

BBWMAB Recommendation: Water Quality and Infrastructure

File Number: 221980

Agenda Date: 10/6/2022

BISCAYNE BAY FRIENDLY DECALS AWARENESS CAMPAIGN

Sponsors: Rebeca Sosa, Prime Sponsor | Sen. Javier D. Souto, Co-Sponsor

[Legislative Matter \(miamidade.gov\)](https://miamidade.gov)

Status: Adopted

BBTF Recommendation: Education and Outreach

File Number: 221867

Agenda Date: 10/18/2022

RELATING TO ENVIRONMENTAL PROTECTION

Sponsors: Raquel A. Regalado, Prime Sponsor | Sen. Rene Garcia, Co-Sponsor

[Legislative Matter \(miamidade.gov\)](https://miamidade.gov)

Status: Adopted

BBTF Recommendation: Water Quality and Infrastructure