

Biscayne Bay Watershed Management Advisory Board

Board Packet

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AGENDA

BISCAYNE BAY WATERSHED MANAGEMENT
ADVISORY BOARD (BBWMAB) MEETING

June 6, 2025 – 9:00 am – 12:00 pm

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

1. **Roll Call**
BBWMAB Vice Chair, Mayor Vince Lago
2. **Reasonable Opportunity to be Heard**
BBWMAB Vice Chair, Mayor Vince Lago
3. **Election of Chair – Actionable Item**
BBWMAB Vice Chair, Mayor Vince Lago
4. **Welcome New Board Members**
 - Jim Murley, Miami River Commission
 - Sam Accursio, Dade Agriculture Board
5. **Florida Legislative Session 2025** (Requested by OERR)
Jess McCarty, Executive Assistant County Attorney (*via Zoom*)
6. **Approval of Agenda – Actionable Item**
7. **Approval of Minutes for December 6, 2024 – Actionable Item**
8. **Reasonable Assurance Plan Progress Update** (Requested by Commissioner Steinberg)
Pamela Sweeney, Division Chief, RER-DERM
9. **2025 Progress Update** (Requested by OERR)
Loren Parra, Chief Resilience Officer, OERR
 - Mayor’s Boater Safety and Bay Education Task Force
 - Biscayne Bay Specialty License PlatePamela Sweeney, Division Chief, RER-DERM

- Biscayne Bay Report Card
- FDEP Grant Opportunities
- Watershed Plan
- BBSEER outcomes of Project Development Team meeting

10. Future Agenda Items

11. Adjournment

Biscayne Bay Watershed Management Advisory Board

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

MINUTES December 6, 2024, 9:00 am

MEETING CALLED BY	Roll call was taken and quorum established. Members Absent: Vice-Chair – Mayor Vince Lago, Commissioners Kevin Cabrera, Micky Steinberg, and Alex Fernandez, Mayor Tim Meerbott, Brett Bibeau, Kevin Cunniff, and Jerry Menendez	
MEMBER ATTENDEES	Chair – Commissioner Danielle Cohen Higgins Mayor Rachel Streitfeld T. Spencer Crowley, II, Esq. Jannek Cederberg Roberto Torres	Dave Doeblner Julissa Kepner Gerald McGinley Dr. Erik Stabenau
	Staff support for Biscayne Bay Watershed Management Advisory Board in attendance: Chief Bay and Water Resources Officer, Loren Parra (OOR); Lisa Spadafina (RER-DERM); Rashid Istanbuli (RER-DERM), Pamela Sweeney (RER-DERM); Nancy Jackson (OOR); Larissa Aploks (RER); Kathleen Oswald (OOR).	

REASONABLE OPPORTUNITY TO BE HEARD

Commissioner Danielle Cohen Higgins - Chair

PUBLIC COMMENT	<p>Lauren Novorska, Intern, Miami Waterkeeper: Thanked the county for providing full funding for the Reasonable Assurance Plan (RAP). Miami Waterkeeper is ready to collaborate on the RAP including socializing the public. She urged inclusion of all stakeholders for a collaborative approach.</p> <p>Scott Pollowitz, Friends of Biscayne Bay: Continued last year's ask for an increase in Water Quality grants. Urged Advisory Board Members and Commissioners to push to remove state- level preemptions on single use plastics. Discouraged building new incinerator. Announced Friends of Biscayne Bay's launch of adopt a storm drain program celebrating the 50-year anniversary of Biscayne Bay Aquatic Preserves.</p> <p>Rachel Silverstein, Executive Director, Miami Waterkeeper: Echoed Lauren's comments on RAP. Recommended integrating sustainable and green infrastructure solutions. Commented on the need for a strategic plan and funding to support coral reef restoration.</p>
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APPROVAL OF AGENDA

Commissioner Danielle Cohen Higgins - Chair

BOARD ACTION	A motion was made to adopt the Agenda by Spencer Crowley, and seconded by Mayor Rachel Streitfeld; motion passed unanimously.
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APPROVAL OF MEETING MINUTES

Commissioner Danielle Cohen Higgins - Chair

BOARD ACTION	A motion was made to approve the Minutes from September 13, 2024, by Roberto Torres and seconded by Dr. Erik Staenau; motion passed unanimously.
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BISCAYNE BAY RESTORATION ACTIONS, 2020-2024

Commissioner Danielle Cohen Higgins -
Chair

DOCUMENT	Chair Cohen-Higgins highlighted the compiled actions and urged review by Board Members. She congratulated staff on putting together this comprehensive report regarding Biscayne Bay water quality efforts to date.
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REASONABLE ASSURANCE PLAN (RAP) PROGRESS UPDATE

Pamela Sweeney, Sr. Water Scientist, RER-DERM

PRESENTATION	<p>Chairwoman Cohen-Higgins requested Pamela Sweeney to provide the update on the RAP.</p> <p>Pamela highlighted the complexity of Biscayne Bay, the most urbanized in the state, compared to other Florida watersheds that have also implemented a RAP. Despite that difference, we will be able to complete our RAP in 2 ½ years as opposed to the five years normally required. The Mayor authorized the county to take the lead on financing the plan allowing us to accelerate. We have met with 24 of 34 municipalities with plans to meet with remaining state and local stakeholders before year's end. The Plan of Study was recently approved by DEP, a major milestone.</p> <p>Board Comments: Spencer Crowley expressed concerns about the number of plans produced but not implemented regarding the health of Biscayne Bay. He asked what will make the RAP different. Pamela Sweeney responded that the county has already made progress with projects valuing over \$100 million since 2021. The RAP is a technical legally binding document and if the County doesn't comply, the state will come in and impose a BMAP.</p> <p>Jannek Cederberg questioned the modeling focused on upland areas and wondered how the project areas would be decided. Pamela Sweeney explained that models are not just looking at surface area water impacts but also groundwater impacts. She mentioned the importance of understanding how and where water moves, and that information will help us prioritize projects together with projects that stakeholders bring to the table.</p> <p>Dave Doeblen asked if the EPA had signed off on the Plan of Study and what is happening with the \$500k allocation for the Watershed Plan. Pamela answered that the state coordinates directly with the EPA. At the appropriate time in the process the EPA will sign off on the RAP. She shared that the RAP will inform the Watershed Plan and will include a broader focus on land use and zoning.</p>
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2024 HIGHLIGHTS

County staff from DERM, WASD, and OOR;
 Dr. Erik Stabenau, National Park Service

PRESENTATION	<p>Chair Cohen-Higgins requested that county staff from DERM, Galo Pacheco, Marina Blanco Pape, Laura Eldredge, and John Ricisak, WASD, Christine Wartman, and OOR, Loren Parra approach the dais to share their presentation.</p> <ul style="list-style-type: none"> • The Smart Cover Pilot Program monitors sewage overflow via 426 sensors installed to date and prevented 150 sanitary sewer overflows (SSOs). • The Stormwater Innovations Pilot Program deployed 10 different technologies at three sites for a total of \$812k. Water quality sampling is ongoing to identify the best technologies and achieve optimal maintenance cycles. Two new sites identified, and construction contracts awarded for \$1.5m. • Approximately 800 septic tanks have been connected to sewer over the 3 years of the FDEP grant program, out of 9,000 identified vulnerable tanks. WASD has received \$280m grants, completed 3,000 designs, and reduced 11,000 pounds per year of phosphorus and 1500 pounds of nitrogen. • Removed 37 tons of debris from the Spoil Islands, 290 derelict traps, and 40 Derelict Vessels in the year. Expecting to remove a total of 50 DVs by year end. • Loren Parra gave an overview of countywide water wins. She highlighted new bioswales at county parks (PROS), additional stormwater management at North Hobie Beach (DTPW), and the County's new Septic to Sewer assistance fund (WASD). She reiterated the Mayor's vision to expand Biscayne Bay restoration to include water movement and conveyances and
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	<p>celebrated departments like DEM for working to incorporate resilient infrastructure/policy that improves conditions in the Bay.</p> <ul style="list-style-type: none"> • Dr. Erik Stabenau, National Park Service, presented on Everglades Restoration related to Biscayne Bay. He highlighted the wetland improvements including Cutler Wetlands and Deering Estate pump installations improving habitat quality. He pointed out BBSEER and urged others to show up to public meetings. He also discussed the Florida Coral Reef Coordination Team that started this year and is another opportunity to improve water quality on the Bay. <p>Board Comments:</p> <ul style="list-style-type: none"> • Mayor Rachel Streitfeld requested follow up from WASD with municipalities to inform residents about the newly launched Septic to Sewer financial assistance program. • Spencer Crowley mentioned FIND grants available to help fund the cleaning of the Spoil Islands. He is going to change the rule regarding island deed holders so the county can apply for the funds. He also complimented the county about the success of the Ghost Trap Rodeo held in 2023 and confirmed there will be another event in 2025. • Dave Doebler mentioned that a side benefit of the legislative item just passed regarding the Mobile Pump out vessel grant and creating a No Discharge Zone within Biscayne Bay is that it creates an opportunity to interact with vessel owners and help prevent boats from becoming derelict. • Mayor Streitfeld showed interest in becoming more engaged with the Back Bay Study. Loren Parra explained the current status of the project. • Roberto Torres mentioned missed opportunities regarding Everglades Restoration specifically compromised projects and habitat loss due to canal construction. • Dave Doebler commented on the necessity of securing land for the BBSEER project.
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IMPERVIOUS SURFACE ORDINANCE ROLL OUT

Marina Blanco-Pape, Chief, Water Management Division, RER-DERM

PRESENTATION	Marina Blanco-Pape provided a brief update on roll out plans for the ordinance, which was adopted by the Board of County Commissioners on September 4, 2024. Technical webinars have been scheduled for January, additional staff are being onboarded to support municipalities, in the lead up to the ordinance's March 2025 effective date.
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2025 STATE LEGISLATIVE PRIORITIES RELATED TO BISCAYNE BAY

Commissioner Danielle Cohen-Higgins - Chair

DOCUMENT	Chair Cohen-Higgins referred to the one-page handout in the board packet for elected officials and advocates to support Biscayne Bay when they go to Tallahassee or meet with the delegation during the 2025 session.
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FUTURE AGENDA ITEMS

Commissioner Danielle Cohen Higgins - Chair

DISCUSSION	Chairwoman requested that board packet be submitted minimum 3 days prior to advisory board meetings to facilitate discussion. Dave Doebler recommended that the county support Senator Garcia's legislation, SB50, which supports Biscayne Bay and water quality. He also mentioned the need to prevent state pre-emption regarding single use plastics. Mr. Doebler would like to restart the Marine Debris plan and volunteered to use the BB Marine Health Coalition to lead the process. Staff will meet with the County Attorney to ensure Sunshine is maintained as we move forward with the process.
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ADJOURN

Commissioner Danielle Cohen Higgins - Chair

DISCUSSION	The Chair thanked the BBWMAB and staff for their work. The meeting was adjourned.
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2025 BISCAYNE BAY LEGISLATIVE PRIORITIES

Florida's Biscayne Bay is a cherished resource for locals, an undeniable draw for tourists, and home to some of our State's most iconic species, including storm-reducing mangroves and coral reefs. But our Bay is deteriorating rapidly due to pollution, stormwater runoff, and aging infrastructure.

Our Bay generates over **\$64 billion** in economic output a year, supporting **448,000** jobs, and contributing **\$4 billion** in tax revenue for Miami-Dade County. In 2022, Biscayne Bay contributed 19% to Miami-Dade, 9% to Southeast Florida, and 3% to the State of Florida in economic output. It's never been more clear - a healthy Biscayne Bay means a stronger Miami-Dade and a more prosperous Florida.



LEGISLATIVE PRIORITIES

- **Biscayne Bay Water Quality Grant Program:**
SUPPORT sustained funds in the grant program to address water quality challenges. Projects may include stormwater management, wastewater, and other projects.
- **Homeowner assistance to connect sanitary sewers**
SUPPORT funding to help homeowners with the private property cost of constructing and connecting to sanitary sewer laterals.
- **Septic Systems**
SUPPORT sustained funding to address failing septic systems and convert compromised septic systems to centralized sewer infrastructure to protect public health and water quality.

APPROPRIATION REQUESTS

- **Rootwells for Flood Mitigation and Water Quality:**
SUPPORT funding for 20 enhanced root zone wells within flooded and impervious areas for tree planting that seeks to serve the public and the Bay.
- **Biscayne Gardens Pump Station Retrofit & Improvement Project:**
SUPPORT project intended to increase and optimize flood control capability of the existing pump station and accounts for projected sea level rise. This upgrade would improve water quality in the Spur #4 Canal.
- **Goulds Canal Restoration | Leachate Pollution Reduction & Prevention:**
SUPPORT project will prevent contaminants from being drawn from the Goulds Canal, which is adjacent to the South Dade Landfill; the L-31E canal, and the Comprehensive Everglades Restoration Plan (CERP), Biscayne Bay Coastal Wetlands S-705 pump station project. The Goulds Canal filling will directly limit landfill nutrient leachate from traveling into Biscayne Bay Aquatic Preserves and Biscayne National Park.
- **Miami-Dade County Secondary Canal improvements:**
SUPPORT C6 (Miami River) and C9 (Snake Creek) Basin Improvements (Phase 2) which include raised top of bank elevations (enhancing storage), culvert upgrades (enhancing conveyance), and outfall improvements, all designed to account for sea level rise projections to 2060. Once implemented, these improvements would improve water quality throughout the C-6 and C-9 watershed basins.
- **Enhanced Bay Monitoring | Equipment with Telemetry:**
Total Funding Request: \$250,000
Potential Match Amount: \$25,000
Estimated Total Project Cost: \$275,000

This funding would support the purchase of water quality sampling equipment, including the maintenance and/ or the replacement of existing ambient water quality sampling equipment used in monthly sampling across Biscayne Bay as well as new equipment to support pollution source tracking investigations and monitoring potential benefits of current and future nutrient reduction projects.

With updated and higher quality equipment, county scientists can enhance current ambient monitoring projects address needed maintenance, repair, or replacement of data sondes used in the monthly sampling program. The data from this 40-year-old program is used by the state in its biennial water quality assessments to determine impairments.

2025 Legislative Session

Adopted legislation related to Biscayne Bay

[HB 481: Anchoring Limitation Areas/Biscayne Bay](#)

The Governor signed into law HB 481 by Representative Vicki L. Lopez (R – Miami).

HB 481 provides a new exception to the state’s preemption of local government regulations with respect to vessels anchoring outside the marked boundaries of mooring fields. The bill allows local governments to regulate vessels that:

- a. Remain anchored overnight for a period of at least 1 hour, any time between one-half hour after sunset and one-half hour before sunrise;
- b. Within the jurisdiction of a county with a population of 1.5 million or more; and
- c. Do so for more than 30 days in a 6 month period, excluding any time the vessel is anchored overnight within the boundaries of a marked mooring field or any time the vessel is anchored overnight for the purpose of completing permitted marine construction, installation, or maintenance work.

At the March 18, 2025 meeting, the Board adopted Resolution No. [R-312-25](#) sponsored by Commissioner Danielle Cohen Higgins, which urged the Florida Legislature to enact Senate Bill 866, House Bill 481, or similar legislation that would expand local government authority over anchoring.

[SB 830: Lost or Abandoned Property/Migrant Vessels/Derelict Vessels/FWC](#)

The Governor signed into law SB 830 by Senator Ana Maria Rodriguez (R – Doral).

SB 830 prohibits leaving migrant vessels on Florida waters. A “migrant vessel” is defined as an irregularly constructed and equipped maritime vessel that was designed, intended, or used for the purpose of undocumented immigrant transportation and that was built or assembled using or combining makeshift or improvised materials or material components, and meets at least one of the following criteria:

- a. The vessel was not constructed by a boat manufacturer; or
- b. The vessel was not assigned a hull identification number.

SB 830 authorizes the Florida Fish and Wildlife Conservation Commission to fund the removal of migrant vessels in a similar manner as that for derelict vessels through specified grants and federal disaster funds. The bill also expands derelict vessel removal grant programs for local governments to also include migrant vessels.

SB 1388: the Boater Freedom Act

The Governor signed into law SB 1388 by Senator Jay Trumbull (R – Panama City).

SB 1388 relates to boats and vessels and among other provisions provides as follows:

- a. A law enforcement officer may not board any vessel or perform a vessel stop without probable cause that a violation of vessel safety laws has occurred or is occurring, regardless of whether the owner or operator of the vessel is on board;
- b. A law enforcement officer may not perform a vessel stop or board a vessel for the sole purpose of making a safety or marine sanitation equipment inspection, and a violation of safety and marine sanitation equipment requirements may only be considered a secondary offense;
- c. The Florida Fish and Wildlife Conservation Commission and the Florida Department of Highway Safety and Motor Vehicles must create a “Florida Freedom Boater” safety inspection decal that will be issued following the demonstration of compliance with safety equipment carriage and use requirements;
- d. Prohibits a state agency, county, municipality, or other government entity from restricting the use or sale of a watercraft based on the energy source used to power the watercraft; this provision of SB 1388 is titled the “Watercraft Energy Source Freedom Act”; and
- e. The Florida Fish and Wildlife Conservation Commission may not issue licenses to any vessels owned in whole or in part by an alien power.

HB 289: Boating Safety/Lucy’s Law/Driving and Boating Offenses

HB 289 relates to boating safety and is titled “Lucy’s Law”, after Lucy Fernandez who was killed in a boat crash in 2022 in Biscayne Bay. The bill:

- a. Increases the general penalties for leaving the scene of a boating accident or reckless operation of a vessel, making it a:
 - i. First-degree felony if an accident results in a fatality;
 - ii. Second-degree felony if the accident caused serious bodily injury;
 - iii. Third-degree felony if the accident caused non-serious injuries; and
 - iv. Second-degree misdemeanor with property damage only.
- b. Provides a mandatory minimum sentence of four years for fleeing the scene of a boating accident that resulted in a fatality;

- c. Enhances penalties for reckless operation of a vessel that results in accidents or injuries, making it a:
 - i. Second degree misdemeanor if the reckless vessel operation does not result in an accident;
 - ii. First degree misdemeanor if the reckless vessel operation results in an accident that causes damage to the property or person of another; and
 - iii. Third-degree felony if the reckless vessel operation results in an accident that causes serious bodily injury.
- d. Makes it a second-degree misdemeanor to knowingly provide false information in required boating accident reports
- e. Expands the definition “vessel homicide” to include certain incidents involving the death of an unborn child;
- f. Imposes certain obligations on vessel operators regarding documentation required aboard the vessel; and
- g. Adds death of an unborn child to boating under the influence manslaughter and provides that a person who is convicted of BUI manslaughter must serve a mandatory minimum sentence of 4 years.

HB 289 next goes to the Governor, and if signed into law, will take effect July 1, 2025.

At the May 21, 2024 meeting, the Board adopted Resolution No. [R-461-24](#) sponsored by Commissioner Raquel A. Regalado, which urged the Florida Legislature to align the penalties imposed on vessel operators who flee the scene of an accident with those applicable to vehicular drivers.

At the September 17, 2024 meeting, the Board adopted Resolution No. [R-820-24](#) sponsored by Commissioner Danielle Cohen Higgins, which urged the Florida Legislature to amend boating safety laws to promote safety, prevent accidents, and ensure that violators are brought to justice.

At the January 22, 2025 meeting, the Board adopted Resolution No. [R-80-25](#) sponsored by Commissioner Raquel A. Regalado, which urged the Florida Legislature to enact Senate Bill 58 or similar legislation that would amend boating safety laws to promote safety, prevent accidents, and ensure that violators are brought to justice.

Biscayne Bay Reasonable Assurance Plan (RAP) Project Crosswalk to DEP Project Types

Category	Wastewater			Agriculture	Stormwater				Load Tracking		In Waterbody																
Subcategory	Sanitary Sewer Load Reducing Actions	OSTDS Load Reducing Projects	Industrial Wastewater Load Reducing Projects	Agriculture	Stormwater Structural Retention/Detention	Stormwater Structural - Other	Stormwater Non-structural BMPs	Education, Outreach Regulations, Ordinances, and Other Non-structural Programs	Model-related	Credit Sharing	In Waterbody																
Project Types	Wastewater - Injection Well	Onsite Sewage Treatment and Disposal System (OSTDS) Enhancement	Industrial Facility Upgrades	*Agricultural BMPs	100% On-site Retention	Stormwater - Alum Injection System	*BMP Cleanout	*Golf Course or Sports Field BMPs	Non-contributing Basin	Credit Sharing	In Waterbody - Alum Injection System																
	Sanitary Sewer - Alum Injection System	OSTDS Phase Out		Dairy Remediation	Control Structure	Baffle Boxes- First Generation	*Catch Basin Inserts/Inlet Filter Cleanout	*Education Efforts	Land Use Change		*Aquatic Vegetation Harvesting																
	Wastewater Treatment Facility (WWTF) Disposal Site	*OSTDS Conversion to Distributed Wastewater System				Dry Detention Pond	Baffle Boxes- Second Generation	*Street Sweeping	Fertilizer Cessation		BMP Missing from Model	Muck Removal/Restoration Dredging															
	WWTF Diversion to Reuse						Exfiltration Trench	Baffle Boxes- Second Generation with Media	*Stormwater - Biological/ Bacteria Treatment		Fertilizer Reduction		Wetland Restoration														
	WWTF Nutrient Reduction							Grass swales with swale blocks or raised culverts	BMP Treatment Train		*Regulations, Ordinances, and Guidelines		*Fish Harvesting														
	WWTF Upgrade								Grass swales without swale blocks or raised culverts		Stormwater - Injection Well			*In Waterbody - Biological/ Bacteria Treatment													
	Decommission/ Abandonment										Impoundment			Hybrid wetland treatment technology (HWTT)													
	Notes: *Project type is allowed to be listed as "Ongoing" for project status. To qualify as ongoing, the lead entity is performing actions each year. This status is used when a project is typically non-structural and continuous. Ongoing projects are not a continuation of a reduction for a structural project.													Off-line Retention BMPs		Hydrodynamic Separators											
																On-line Retention BMPs		Stormwater Reuse									
												Regional Stormwater Treatment				Floating Islands/ Managed Aquatic Plant Systems (MAPS)											
																Wet Detention Pond				Vegetated Buffers							
																				Constructed Wetland Treatment		Biosorption Activated Media (BAM)					
																						Bioswales		Denitrification Walls			
																								LID- Green Roofs		LID- Other	
																								LID- Rain Gardens		Creating/ Enhancing Living Shorelines	
					LID- Tree Boxes/Tree Wells																			Shoreline Stabilization			
						Pervious Pavement Systems																		Stormwater System Upgrade			
							Hydrologic Restoration																				
								Stormwater Treatment Areas (STAs)																			
									Retention/Detention BMP with Nutrient Reducing Media																		
	Retention/Detention BMP Retrofit with Nutrient Reducing Media																										
											Dispersed Water Management (DWM)																
		Credit Available									Crediting policy is defined in the DEP BMP Efficiencies Guidance.																
		Provisional Crediting									Projects in this category are limited to certain locations or are considered on a case-by-case basis which may require gathering of locally relevant data.																

Biscayne Bay Reasonable Assurance Plan (RAP)
Project Crosswalk to DEP Project Types


Category	Currently Ineligible for Nutrient Credit				
Subcategory	Studies, Research, Assessments, Planning Efforts, Enhanced Education	Land Acquisition/ Conservation	Nutrient Stormwater - Nutrient Projects Ineligible for Credit	Wastewater - Nutrient Projects Ineligible for Credit	Other Non-Credit Activities in Biscayne Bay
Project Types	*Monitoring/Data Collection	Land Acquisition	Stormwater Aeration System	*Sanitary Sewer Inspections	Coordination Efforts Related to Water Quality or Habitat Protection
	Study	Land Preservation	Stormwater System Rehabilitation	*Sanitary Sewer and WWTF Maintenance	DEP Inspection of WWTF and Discharge Monitoring Report Reviews
	*Enhanced Public Education	**Natural Wetlands as Filters	Turbidity Reducing Polymers (e.g., Floc logs®)	Wastewater Service Area Expansion	DEP Inspection of Confined Animal Feeding Operations and Compliance Well Reviews
			Plugging Artesian Wells	Regulations, Ordinances, and Guidelines	Derelict Vessel Removals
			SAV Planting	WWTF Capacity Expansion	FDACS Implementation Verification (IV) Visits/Compliance Outreach
			Creating/ Enhancing Oyster Reefs		Identification & Repairs to Lateral Only Connections (LOCs)
			**Macroalgal Harvesting		Identification & Repairs to Septic System Failures
			*Exotic Vegetation Removal		Illicit Connection Identification & Removal
			Stormwater maintenance, including MS4 requirements		Marina Pump Out Program Implementation
					NPDES MS4 (Stormwater Permits) Related Activities
					Other
					Repairs to Sewer Collection Lines
					Smart Lids and Other Sanitary Sewer Overflows (SSO) Prevention Tools
					Tracking of Law Enforcement Needs/Issues
					Trash Prevention and Removal
Notes:					
*Project type is allowed to be listed as "Ongoing" for project status. To qualify as ongoing, the lead entity is performing actions each year. This status is used when a project is typically non-structural and continuous. Ongoing projects are not a continuation of a reduction for a structural project.					
Currently Ineligible for Credit		Project types where BMPs lack data to assign credits or have unknown benefits that cannot be quantified.			

Memorandum



Date: April 17, 2025

To: Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners

From: Daniella Levine Cava
Mayor 

Subject: Creation of Boater Safety and Bay Education Task Force

Biscayne Bay borders virtually every mile of Miami-Dade County, cradling its 34 cities and its almost 3 million residents. It is both ecologically diverse and culturally significant, as well as an economic powerhouse for our State and County. Biscayne Bay and the Miami River are important components of the Miami-Dade's quality of life and economy generating over \$64 billion a year in economic output. Together, they support a wide variety of economically significant uses including recreational fishing, swimming, boating, and sailing.

The Florida Fish and Wildlife Conservation Commission's [2023 Boating Accident Statistical Report](#) found 659 reportable boating accidents and 59 boating related fatalities in the calendar year. Unfortunately, many of those incidents occurred within Miami-Dade County and this increase in accidents and fatalities on our waterways has inspired numerous individuals to work for the promotion of greater boating safety and the prevention of future boating accidents. To both protect residents and our marine resources, and honor the lives lost across our waterways ahead of the 2025 boater safety season-, I am creating the Mayor's Boater Safety and Bay Education task force. This task force will present recommendations to me related to this critical issue and help to develop a final report with recommendations to improve safety conditions across Miami-Dade's waterways.

As of March 2022, there were 74,622 registered boats in Miami-Dade County, Florida, making Miami-Dade one of the top five counties in Florida for vessel registration. Registrations continue to increase annually, and staff, recreationalists, and residents alike have observed increased boating traffic on the water.

Efforts related to boating safety may include efforts by Miami-Dade County, our 34 cities and municipalities, and also the State of Florida, including the Florida Fish and Wildlife Commission, which provides for State law enforcement on the water, as well as municipalities that border Biscayne Bay and which have their own municipal law enforcement.

My administration is committed to the protection of both residents and our natural resources and wishes to receive recommendations related to increasing safety across our county waterways from the Boater Safety and Bay Education task force. These recommendations may include, but should not be limited to boating safety issues in Miami-Dade County, education and outreach efforts to increase safe recreation, coordination and communication between County, State, and municipal law enforcement, the future creation of a permanent County advisory board related to boating safety and bay education and the composition thereof, and recommendations regarding proposed State legislation, activities, and appropriations.

As part of their duties, the task force shall review relevant data and prior reports and assessments related to safety and recreation along Miami-Dade County waterways and hear advice and recommendations from County staff, the Florida Fish and Wildlife Commission, and the task force may hear additional presentations and comments from other experts and community leaders.

The task force is advisory only and shall not have the power or authority to commit Miami-Dade County or any of its agencies or instrumentalities to any policies, incur any financial obligations, or to create any liability, contractual or otherwise, on behalf of Miami-Dade County or any of its agencies or instrumentalities.

The Task Force will include one representative from the following organizations, based in Miami-Dade County:

1. Member who is regarded as a community leader on boater safety and bay education, *Andres Fernandez, The Lucy Fernandez Foundation*
2. Member who is regarded as a community leader on boater safety and bay education, *Nick Estrella, The Monica Burguera Foundation*
3. Member who represents local enforcement and accountability, *State Attorney Katherine Fernandez Rundle*
4. Member who represents the recreational boating industry, *Captain Glenn Clyatt, HMY Yachts*
5. Member who possesses expertise in community and economic vitality, *Taylor White, Key Biscayne Community Foundation*
6. Member who is representative of the local commercial vessel or operator industry, *Mike Simpson, Island Queen Fleet-Bayside*
7. Member who is representative of the community-at-large and has demonstrated an engagement in boater safety and bay education, *Aabad Melwani, Rickenbacker marina*
8. Member who is representative of the community-at-large and has demonstrated an engagement in boater safety and bay education, *Larry Barryman, Manager, Miami International Boat show*

Members should have reputations for integrity and community service. The task force shall elect one of its members as chairperson and one of its members as vice-chairperson. The chairperson shall preside at all meetings at which they are present. The vice chairperson shall act as chairperson in the absence of their chairperson. Members of the task force shall serve without compensation and shall not be eligible for reimbursement of expenses accrued in service as a member of this task force, including travel expenses.

I have appointed Loren Parra, Miami-Dade County Chief Resilience Officer, to provide adequate staff and support services to the task force. The County Attorney's Office shall provide legal counsel, as needed, to the task force.

A summary of all recommendations and the Task Force's deliberations will be presented to the Miami-Dade County Board of County Commissioners. All meetings will be noticed, and all public records will be maintained, in accordance with the Government in the Sunshine Laws.

Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners
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Members of the Board of County Commissioners and their staff are invited to attend. The task force is anticipated to complete its work and sunset within seven months but shall not exceed one year.

If you have any questions or concerns, please feel free to contact Loren Parra, Chief Resilience Officer, at (786)-685-9932 or loren.parra@miamidade.gov.

C: Geri Bonzon-Keenan, County Attorney
 Gerald Sanchez, First Assistant County Attorney
 Jess McCarty, Executive Assistant County Attorney
 Office of the Mayor Senior Staff
 Department Directors
 Office of Policy and Budgetary Affairs
 Yinka Majekodunmi, Commission Auditor
 Basia Pruna, Director, Clerk of the Board

Memorandum



Date: April 25, 2025

To: Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners

From: Daniella Levine Cava *Daniella Levine Cava*
Mayor

Subject: Report on the 2025 Annual Report Card Program on the Health of Biscayne Bay – Directive No. 180799

Executive Summary

This report is provided pursuant to Resolution No. R-463-18, which I sponsored as Commissioner, directing the County Mayor or County Mayor's designee to develop an annual "report card" program that evaluates the health of Biscayne Bay and employs a simple and easy-to-understand "stoplight" approach to reporting on the health of Biscayne Bay. The Resolution further directed that the health evaluation shall be data-driven, use sound scientific principles, incorporate information on water quality and habitat values throughout Biscayne Bay, and include easy-to-read graphics suitable for the general public to understand, and that the results of the health evaluation shall be made publicly accessible.

The 2025 Biscayne Bay Report Card, attached herein, was developed by staff in the Department of Regulatory and Economic Resources, Division of Environmental Resources Management (RER-DERM) with inputs from various County departments including the Office of Environmental Risk and Resilience (OERR) and the Water and Sewer Department (WASD). The County created a website dedicated to Biscayne Bay (www.miamidade.gov/BiscayneBay) which provides public access to the annual report card in an interactive online format. The report card online provides the public with information related to each indicator evaluated for bay health and each indicator's annual stoplight score across the bay, provides locations of monitoring stations and other information about monitoring programs, highlights the County's accomplishments toward bay restoration over the past year, and shares steps the public can take to help protect Biscayne Bay. Please find attached the "stoplight" maps associated with the 2025 Biscayne Bay Report Card for your review.

Out of the 12 regions in the Bay, nearly all maintained their water quality ratings from 2024. Only one, Region South North Bay-B (or "SNB-B" as shown on the 2025 Biscayne Bay Report Card) declined from "fair" to "poor". It is noted that this region that lies between I-395 and I-195 receives little flushing from either the landward or barrier island side, which can allow waters impacted by pollutants to reside in the basin for longer periods of time without mixing with and being taken away by the tide. These results can vary from year to year, making it all the more important to continue our long-term commitment to ongoing Bay initiatives. Water quality, and the ecological responses to it, are largely determined by the quality of stormwater and groundwater received by canals and eventually the bay. Total nitrogen conditions are "fair" or "poor" in some northern bay and extreme south bay regions and some tidal tributaries; total phosphorus remains in "fair" or "poor" condition in the northern Biscayne Bay basins and tidal tributaries, and chlorophyll-a is in "poor" condition throughout Biscayne Bay other than the tidally-flushed SNB-C basin in the north.

We know that Biscayne Bay is the blue heart of our economy and our regional prosperity, now and for future generations. Given that the Bay and the tributaries canals and groundwater that feed it are facing unprecedented threats to their health and resilience, my administration continues to actively and aggressively

pursue short-term and long-term actions to restore the health of our Bay. The water resources of our County know no jurisdictional bounds, and these actions will require ongoing support and long-standing commitment from our municipal, state, and federal partners.

Policy and Legislative Updates

Building upon our successes in the past few years, many additional actions were taken in 2024 to improve the health and resilience of Biscayne Bay. This is truly a collaborative effort with the support of local, state and federal partners and the coordination of the Office of Environmental Risk and Resilience (OERR) which maintains a strong focus on the Bay. Additionally, the Biscayne Bay Watershed Management Advisory Board (BBWMAB) and the state Biscayne Bay Commission (BBC) provided policy recommendations and opportunities for important public engagement in support of protecting and restoring Biscayne Bay. Actions include continued investigations to inform our scientists about sources of pollution impacting our ground and surface waters; assisting our state and federal partners with regional restoration projects; proffering legislative Code changes and updates to the Comprehensive Development Master Plan to provide additional protections to our water quality while promoting resilient development and initiating capital improvements projects; and utilizing innovative technology to further reduce pollution from entering into our ground and surface waters and ultimately the Bay.

Impervious Surface Ordinance

The Impervious Surface Ordinance, adopted by the Board on September 4, 2024, amended development standards and procedures related to impervious surfaces and the implementation of new and substantially improved stormwater infrastructure, retention, and quality of direct discharges to a canal or Biscayne Bay. Adoption of this ordinance is expected to result in increased resilience, and reduction in flood risk and water quality impacts. The new regulations adjust the standards based on the County's updated stormwater modeling, including the interaction of groundwater, surface water, sea level rise projections, the local hydrology, topography, and land use. The ordinance also establishes recertification of stormwater management systems that serve or drain into a public right-of-way. Staff of RER-DERM is conducting continued engagement with stakeholders including property owners, engineers, contractors, and owners and operators of stormwater management systems over the past year to allow stakeholders adequate time to transition to the new standards. Most recently, RER-DERM hosted three technical webinars to industry and municipalities to highlight the important changes to Chapter 24 as a result of the Impervious Surface Ordinance, which became effective March 31, 2025.

Septic to Sewer Progress

As of January 1, 2023, conventional onsite sewage treatment and disposal systems (i.e., septic systems) are no longer approved for new or complete replacement systems. This is a significant win for water resource protection of Miami-Dade County because performance-based treatment systems (PBTS), of which there are several types, can significantly lower concentrations of nutrients and bacteria that reach groundwater and/or surface water. A total of 709 new PBTS were approved in 2024. Of the total number of projects approved, over 95% were for single-family residences (SFR) with Type 3 systems. For example, the equivalent of 709 three-bedroom homes each with a waste stream of 300 gallons per day, would otherwise have the potential to load total nitrogen at a rate of 64,790 pounds per year and total phosphorus at a rate of 11,662 pounds per year. Using a Type 3 PBTS at 709 single-family homes, there was an estimated 70% reduction in total nitrogen down to 19,437 pounds per year and a 44% reduction in total phosphorus down to 6,479 pounds per year, helping reduce the amount of nutrients reaching the Bay through groundwater.

Collaboration with State and Local Partners to Reduce Nutrient Pollution

On March 1, 2022, the Board of County Commissioners adopted a Resolution directing the development of a Reasonable Assurance Plan (RAP) to be approved by the Florida Department of Environmental Protection (DEP) to address Biscayne Bay's water quality impairments. Biscayne Bay faces water quality impairments

under the federal Clean Water Act through non-compliance with state nutrient criteria including exceedances of nitrogen, phosphorus, and chlorophyll-a. The RAP is a stakeholder-driven effort wherein key stakeholders who contribute nutrient loads to Biscayne Bay collaborate to develop a plan to meet nutrient reduction allocations. Quantifying nutrient loads and from what sources is a major component of the RAP, and this includes sources from more urban land uses as well as agricultural runoff. Miami-Dade County RER-DERM is leading stakeholder coordination and development efforts. To date, all external technical experts needed to develop the RAP have been procured. Additionally, the RAP Plan of Study, providing the outline for what information will be contained in the RAP, has been approved by DEP. Development of the integrated groundwater/surface water model is underway as is identification of County and municipal nutrient-reducing projects for inclusion in the plan.

Grants and Projects Update

Restoration and Coastal Protection Projects

Progress has been made on two key Biscayne Bay Coastal Wetlands (BBCW) infrastructure projects. The Cutler Wetlands Component of the BBCW Comprehensive Everglades Restoration Plan (CERP) project is the final component of the five-part BBCW Project being constructed by the US Army Corps of Engineers and South Florida Water Management District (SFWMD) in partnership with Miami-Dade County. The component will deliver freshwater from the C-1 Canal through the S-701 pump station in order to rehydrate coastal wetlands adjacent to Biscayne Bay, diverting water that would otherwise be discharged directly into the Bay with no treatment, carrying pollutants with it. County staff visited the site with federal and agency colleagues to document the progress made on the S-701 pump feature which is slated for completion and will be operational in November 2025. Additionally, RER-DERM restoration experts led an interagency team to visit local and regional restoration projects in southern Miami-Dade County, including a visit to the BBCW S-703 pump station. The pump was operational and flowing water through EEL-managed wetlands to the Bay. This wetland restoration component will not only help improve the health of Biscayne Bay in this part of the system but will help build resilience along three miles of the County's coastline by rehydrating and enhancing mangrove communities along the coast. I proudly championed these rehydration projects before becoming Mayor, and the County will continue to provide historic support for CERP through the many supporting activities that occur through RER-DERM.

In addition to these regional efforts, many restorative actions were taken on a local level to reduce the amount of marine debris and further reduce the amount of pollution reaching the Bay. RER-DERM staff removed over 40 derelict vessels last year, bringing the County's total number of derelict vessels removed to date to 500. Additionally, over 250 ghost traps, and 37.81 tons of trash from spoil islands as part of their ongoing work to address marine debris and derelict vessels and fishing gear impacting our Bay. RER-DERM's Environmentally Endangered Lands (EEL) Program acquired 24.55 acres of land with high environmental value for the period of January 1, 2024 through December 31, 2024. These lands help the County protect water resources by storing stormwater and recharging the Biscayne Aquifer. The EEL program now manages over 28,000 acres of environmental land for this and future generations.

State and Federal Grants

The County continues its tasks related to the Biscayne Bay Water Quality Improvement (BBWQI) grant program, funded by DEP. The main objective of the Characterization and Pollution Reduction project is to identify and eliminate pollution reaching Biscayne Bay. This work includes characterizing sources of pollution reaching Miami River, Little River, Biscayne Canal, and Arch Creek as well as groundwater, and piloting nutrient-reducing stormwater and wastewater technologies. RER-DERM continues to spearhead the effort to innovate not only stormwater solutions that can help eliminate and reduce nutrient pollution impacting our Bay but also wastewater solutions such as Smart Covers largely through state grant funding. Through December 2024, a total of 426 Smart Covers had been installed with 150 sewage spills being predicted and prevented

across coastal Miami-Dade County last year alone. The Water and Sewer Department (WASD) continued to receive important funding from the BBWQI grant program to implement septic to sewer transitions including force main, gravity sewer and laterals. To date, approximately 800 septic tanks have been connected to the central sewer system under this program.

Another highlight of the program was the completion of the draft Living Shorelines Guidance Document for the Biscayne Bay Watershed. This tool developed by RER-DERM, with consulting technical support and input from various stakeholders, will serve to guide parcel owners on the options are available to protect their property while also supporting the health of Biscayne Bay.

The DEP Resilient Florida Grant to support RER-DERM's restoration of West Matheson Hammock Park's historic Snapper Creek slough hit major milestones last year. Two successful pump tests were conducted, mimicking the ecological processes of the Snapper Creek slough and recreating Snapper Creek's historic flow into Biscayne Bay for the first time in nearly one hundred years. Additionally, nearly 300,000 cubic yards of landfill debris have been removed from this historic Everglades habitat at West Matheson. On the coastal side, twenty-five acres of tree island habitat were restored and efforts to eradicate invasive species from Matheson's mangrove habitat were successful.

The County also received a \$500,000 state legislative appropriation to develop the Biscayne Bay Watershed Plan. This plan will serve as a binding blueprint used to achieve water quality, seagrass restoration, and the overall health of Biscayne Bay. Unlike the Reasonable Assurance Plan (RAP) which is exclusively focused on water quality and nutrient reduction, the watershed plan accounts for growth/development policies, enforcement activities, increased development pressures, and recreational usage of the Bay. Providing recommendations for the Watershed Plan is a key duty of the BBWMAB and I look forward to their leadership and input on this critical priority.

Community Outreach and Education

The County's fertilizer ban goes into effect May 15 – October 31, and outreach related last year included educational fertilizer awareness mailers sent to all licensed pesticide and fertilizer applicators in the County. RER-DERM also partnered with fertilizer retail outlets for the display of informational signage at fertilizer points-of-sale in Lowes, Home Depot, and Walmart Garden Centers during the restricted fertilizer application period. The County also launched a paid campaign which included search engine marketing, web banners, and social media advertisement. For communities interested in educating their residents on responsible fertilizer use under the ordinance, please visit www.miamidade.gov/BiscayneBay to download our toolkit.

Residents can also do their part to help protect Biscayne Bay by volunteering for Baynanza. This month we celebrated the 43rd anniversary of Baynanza, the County's signature annual cleanup of Biscayne Bay that RER-DERM has coordinated from its inception. This event spans the length of the County, providing opportunities for volunteers to find a location closest to them to help give the Bay a hand. This year, 3,963 participants collected over 16 tons of trash at 32 sites along the Bay. These initiatives continue to be supported by thousands of volunteers and stakeholders whose work contributes greatly to the restoration and future health of Biscayne Bay and the County is grateful for their dedication.

With funding from the U.S. Environmental Protection Agency, RER-DERM is currently developing the *Biscayne Bay Boating Community Outreach and Education Campaign*. This campaign engage the recreational boating public in Miami-Dade County through a variety of means and methods to promote a sense of individual responsibility and action, and foster lasting environmental stewardship among our coastal waterway stakeholders. Outreach is concentrated in the northern portion of Biscayne Bay, where the density of spoil islands popular among the boating community for recreational purposes is greatest, as well as public and

private marinas and boat ramps, and the County is also providing web resources that will be available to anyone.

Additionally, the Office of Environmental Risk and Resilience has partnered with the Lucy Fernandez Foundation to stand up the Boater Safety and Bay Education Task Force. Over the last year we've increased outreach and education before boating holidays countywide, and I look forward to implementing the recommendations of this task force to continue education with the goal of eliminating preventable accidents and fatalities on our waterways.

In partnership with The Miami Foundation and several local organizations, the OERR reached the goal of 3,000 Biscayne Bay Specialty License Plate registrations resulting in statewide production of the plates by mid-2025. The license plate not only helps to raise awareness about the critical importance of Biscayne Bay but will also provide a source of ongoing funding to preserve and restore Biscayne Bay including water quality improvements, marine debris clean-up and monitoring, and critical habitat restoration grants.

Closing

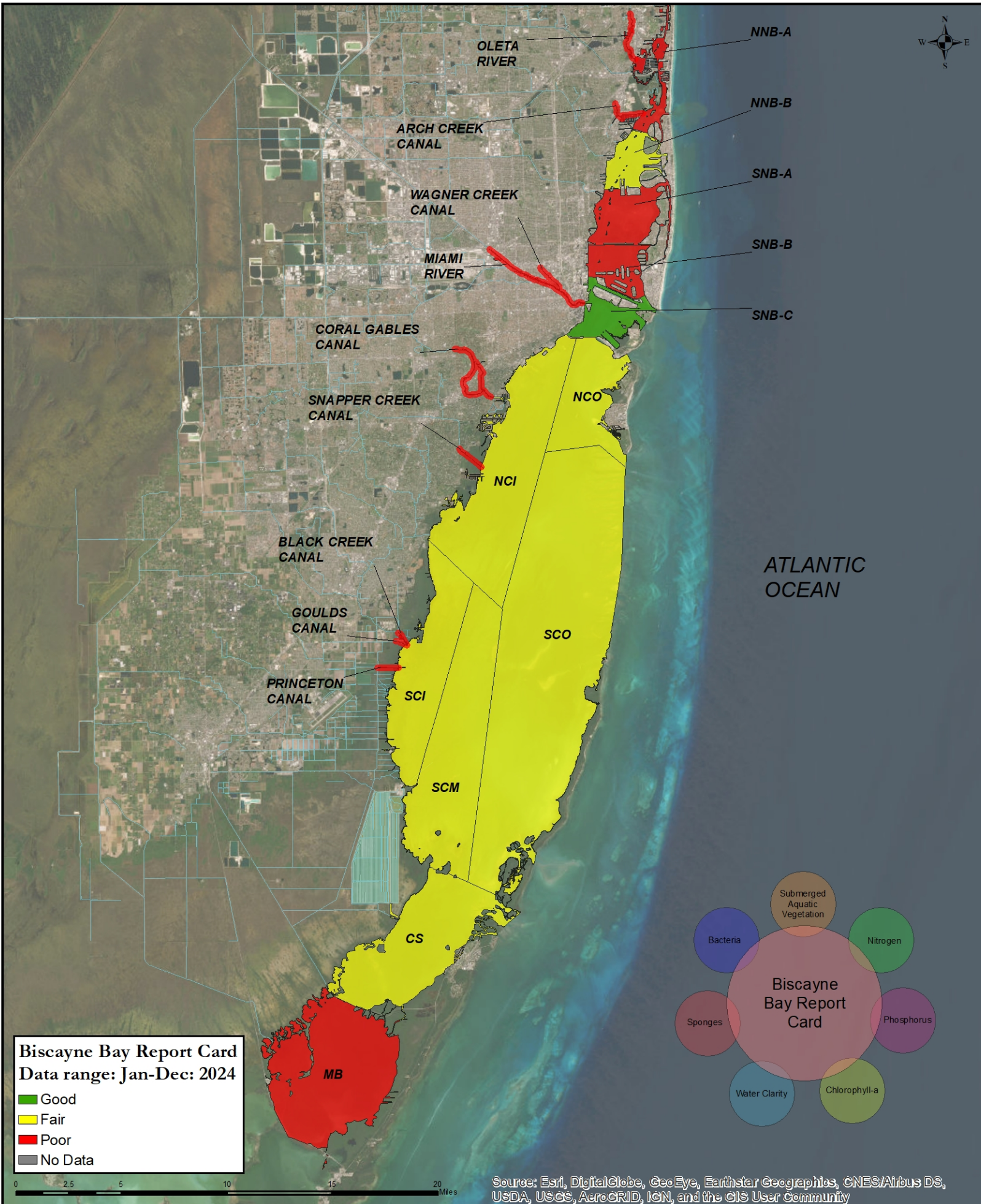
As we continue to balance the needs of our growing community, it is essential that we prioritize the work of restoring the health and resilience of Biscayne Bay to protect not only our environment but our economy. My administration remains steadfast in our commitment to continue to pursue tangible and necessary actions to protect the health of Biscayne Bay, collaborate with our stakeholders at all levels, and implement needed policies, legislation, research, and outreach to accomplish the goals we have set forth together.

In accordance with Ordinance No. 14-65, this report will be placed on the next available Board meeting agenda. If you have any questions regarding this report, please contact Lourdes M. Gomez, RER Director, at 305-375-2886 or at Lourdes.Gomez@miamidade.gov.

Attachment: 2025 Biscayne Bay Report Card

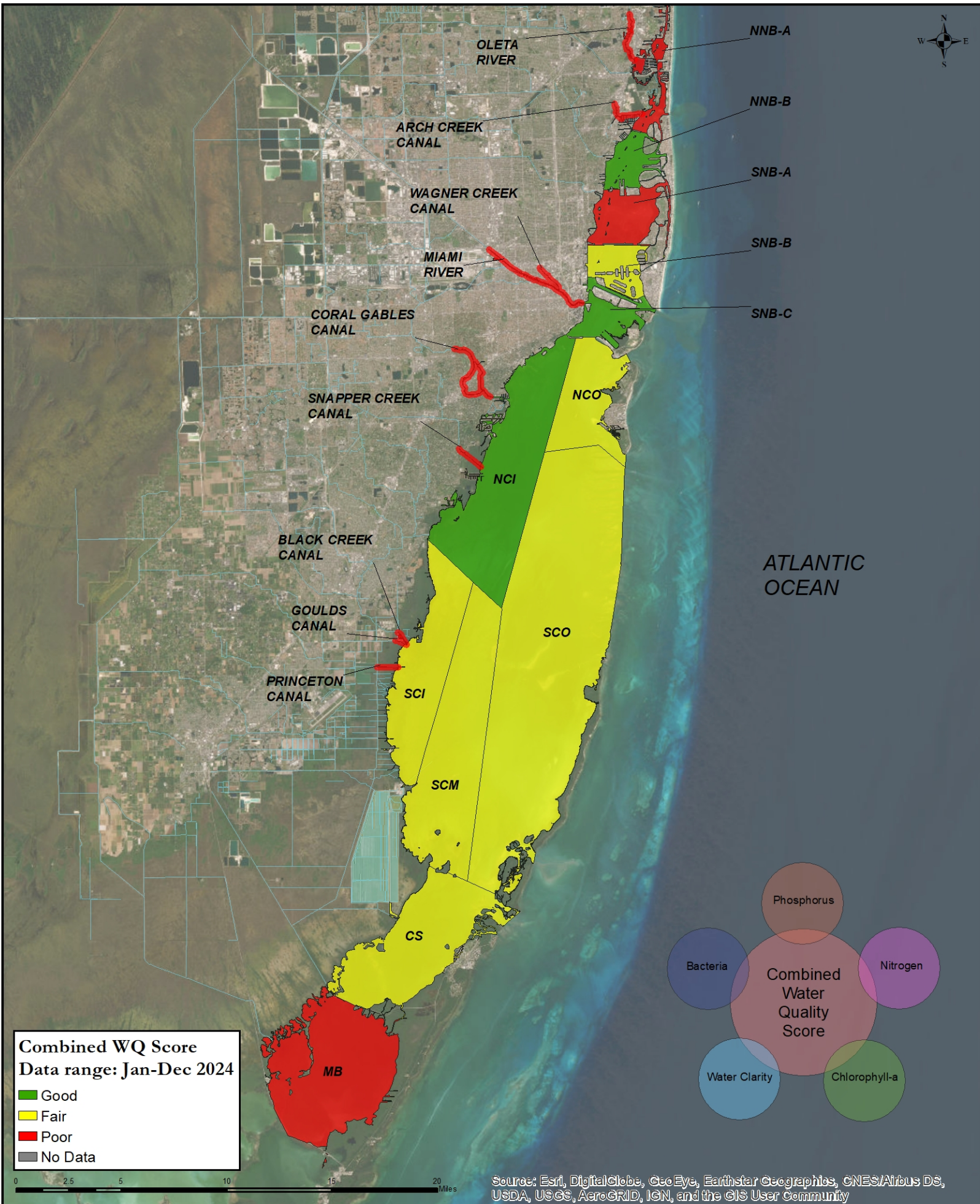
c: Geri Bonzon-Keenan, County Attorney
 Gerald Sanchez, First Assistant County Attorney
 Jess McCarty, Executive Assistant County Attorney
 Office of the Mayor Senior Staff
 Lourdes M. Gomez, Director, Department of Regulatory and Economic Resources
 Lisa Spadafina, Assistant Director, Department of Regulatory and Economic Resources
 Loren Parra, Chief Resilience Officer, Office of Environmental Risk and Resilience
 Yinka Majekodunmi, Commission Auditor
 Basia Pruna, Director, Clerk of the Board
 Eugene Love, Agenda Coordinator

2025 Biscayne Bay Report Card



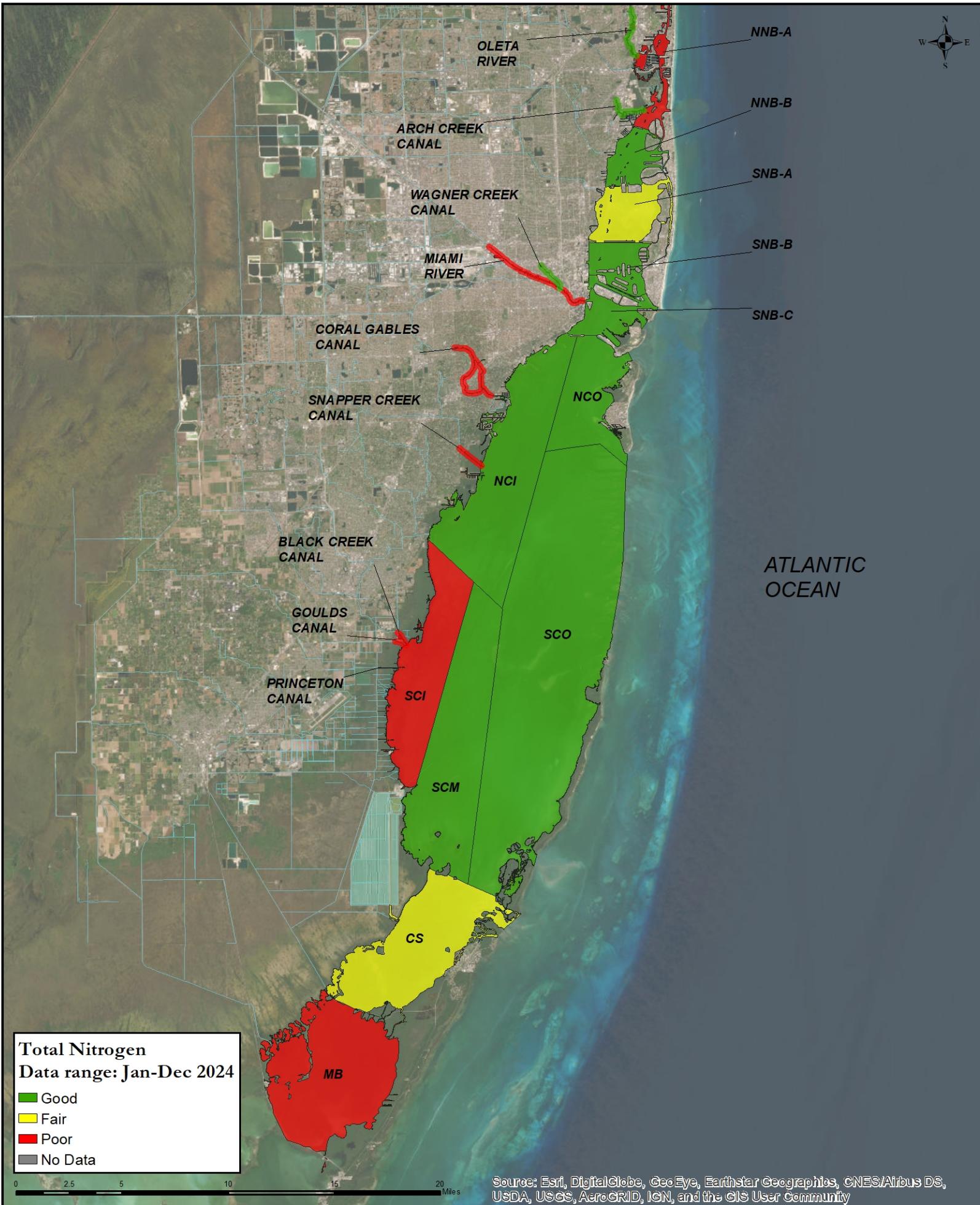
2025 Biscayne Bay Report Card

Water Quality Combined Score



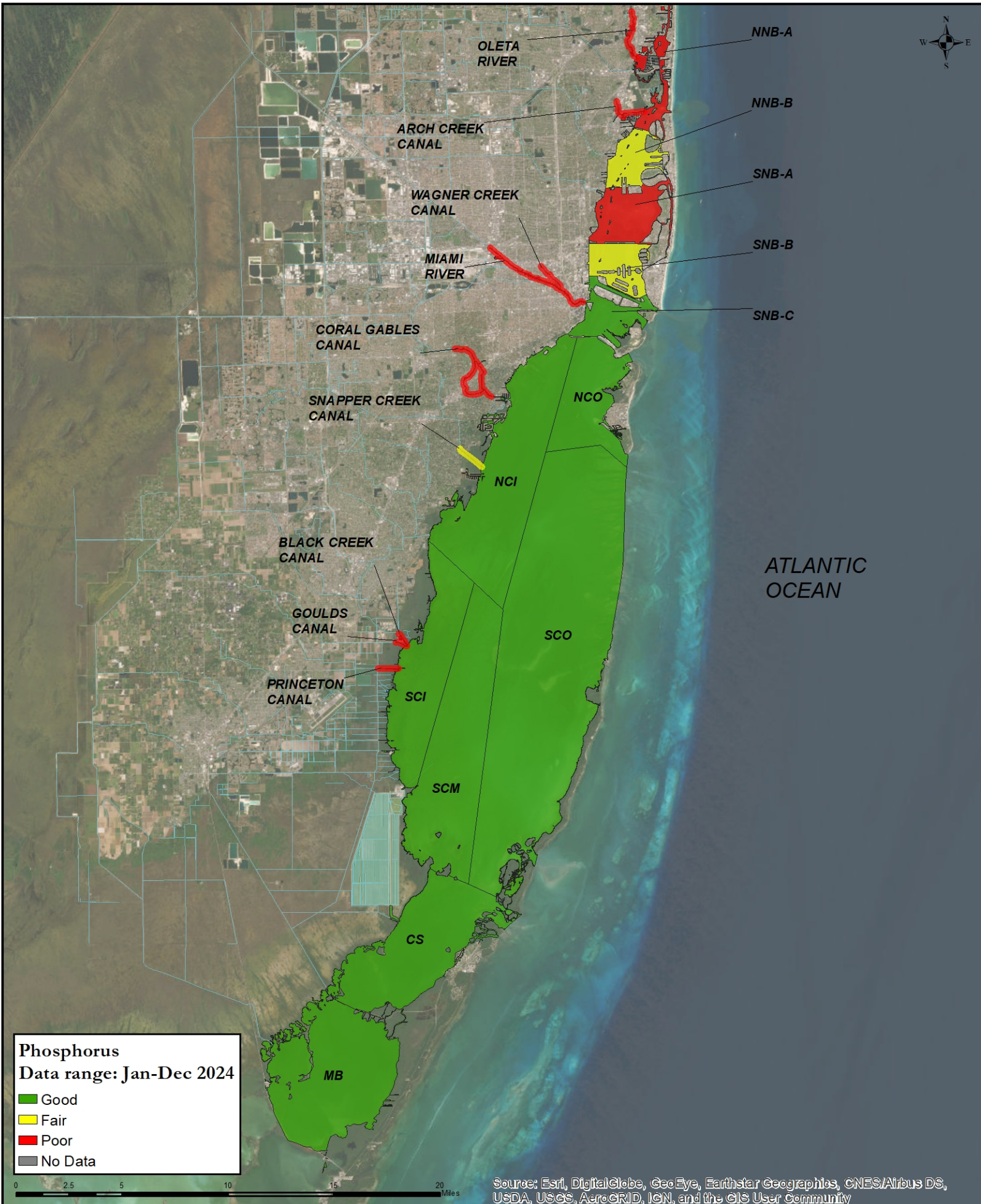
2025 Biscayne Bay Report Card

Total Nitrogen Score



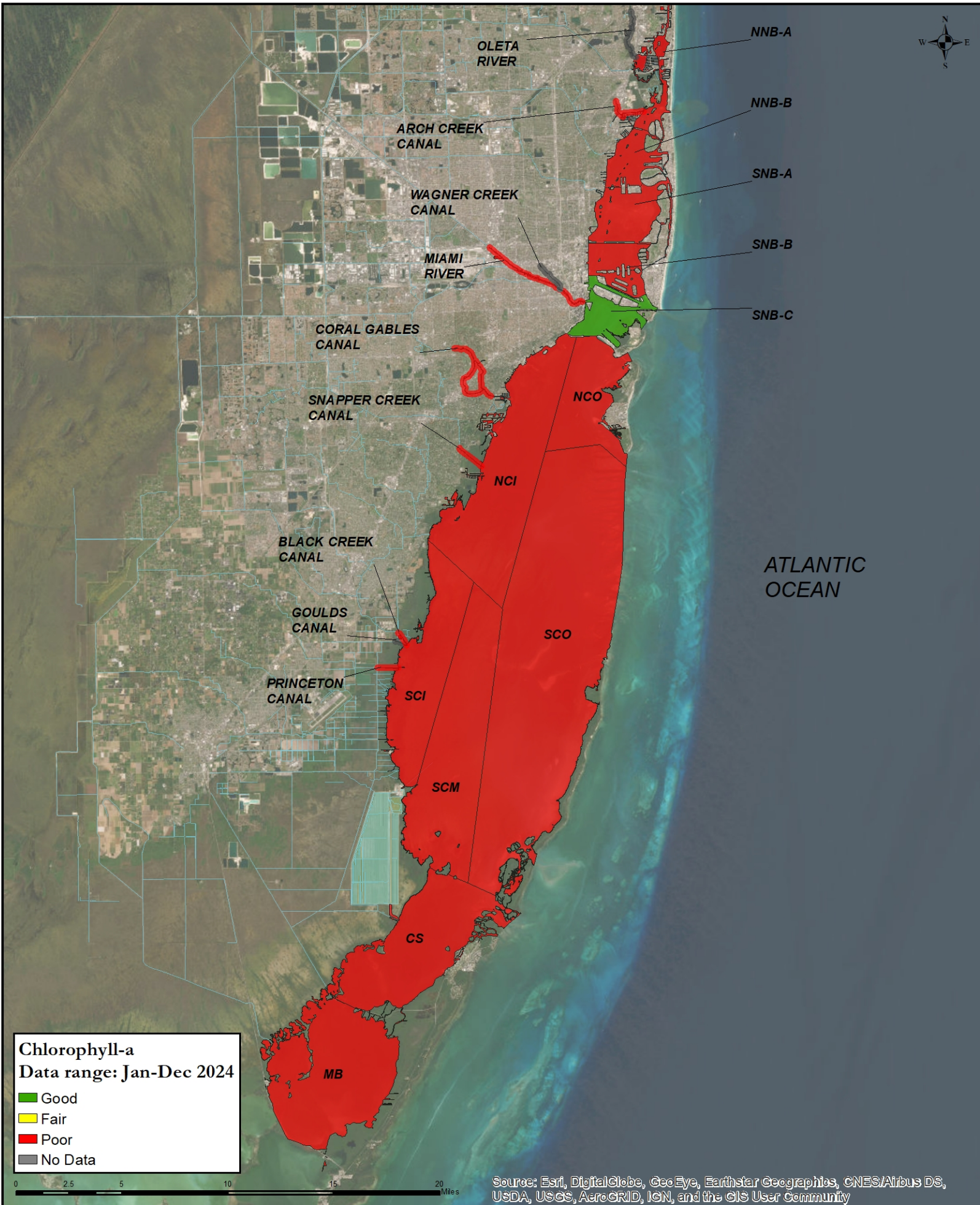
2025 Biscayne Bay Report Card

Total Phosphorus Score



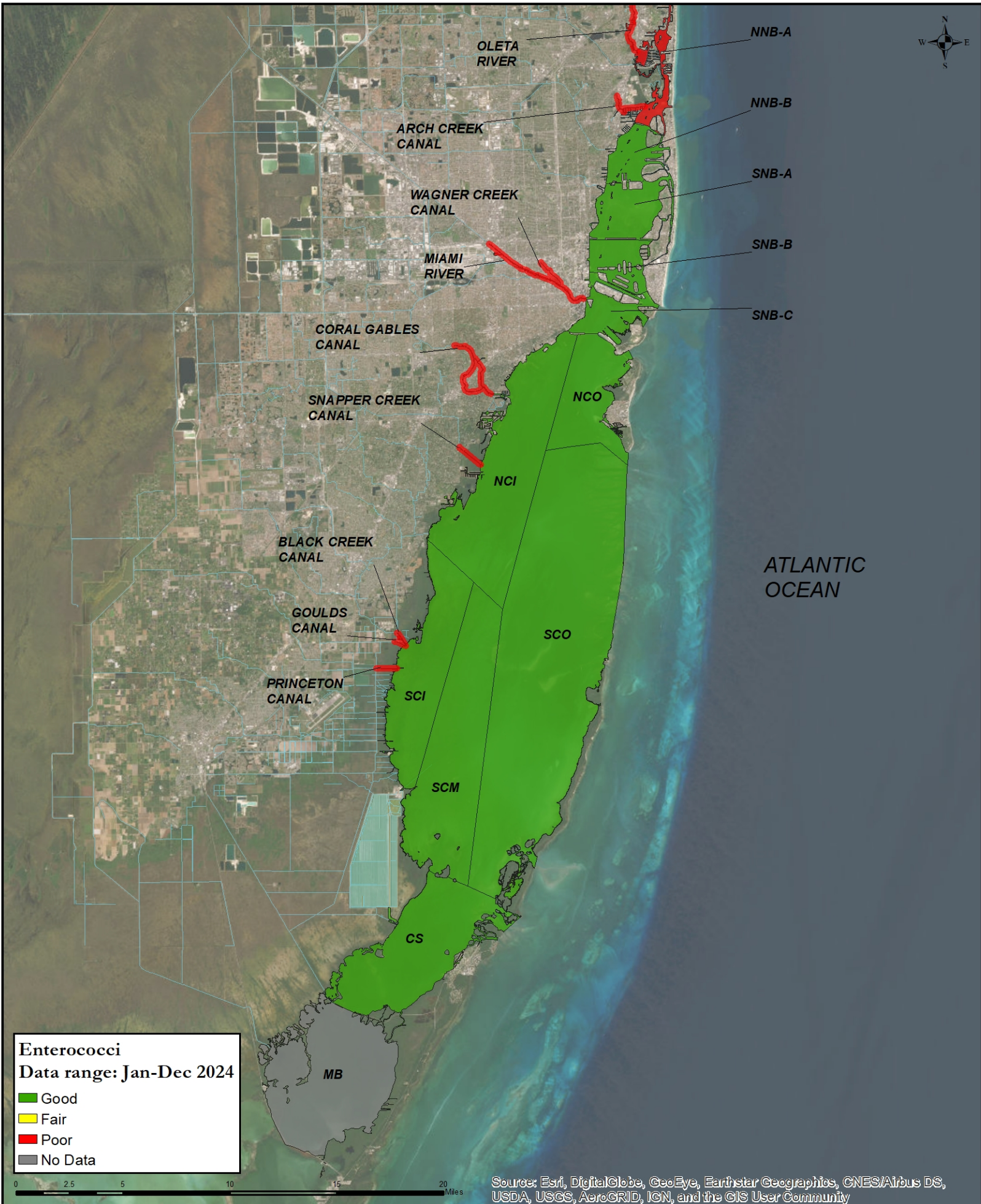
2025 Biscayne Bay Report Card

Chlorophyll-a Score



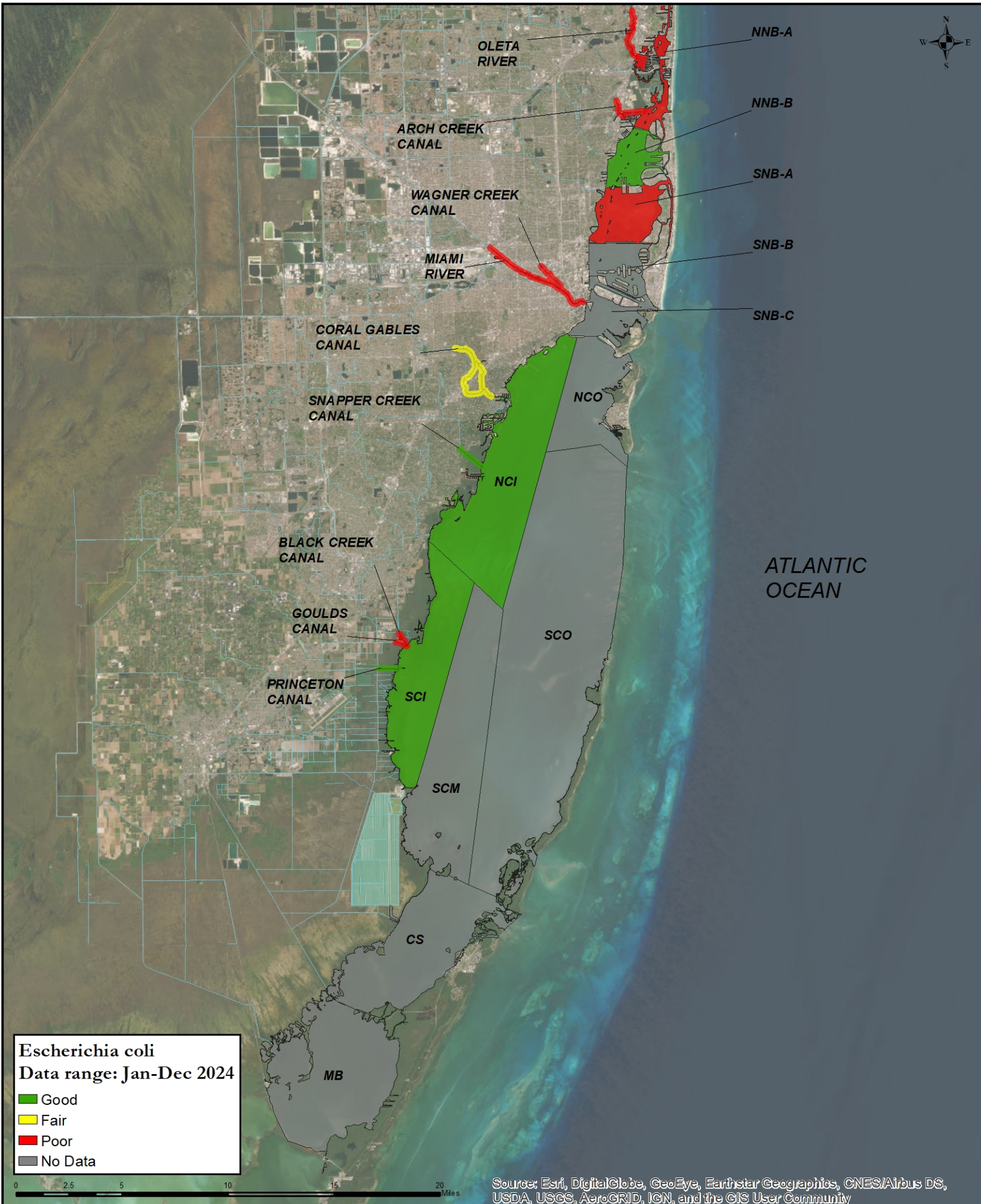
2025 Biscayne Bay Report Card

Bacteriological Score (*Enterococcus* spp.)



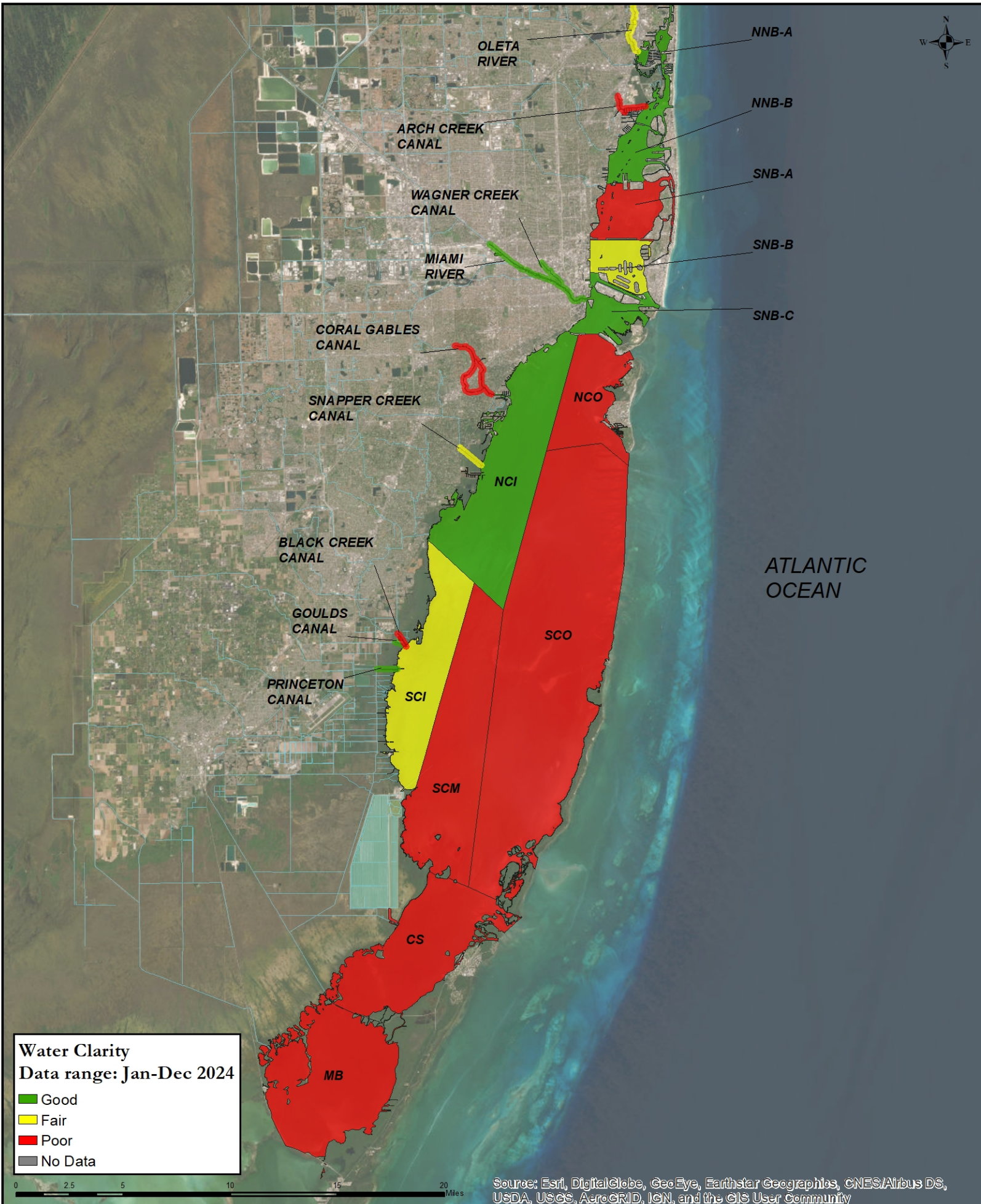
2025 Biscayne Bay Report Card

Bacteriological Score (*Escherichia coli*)



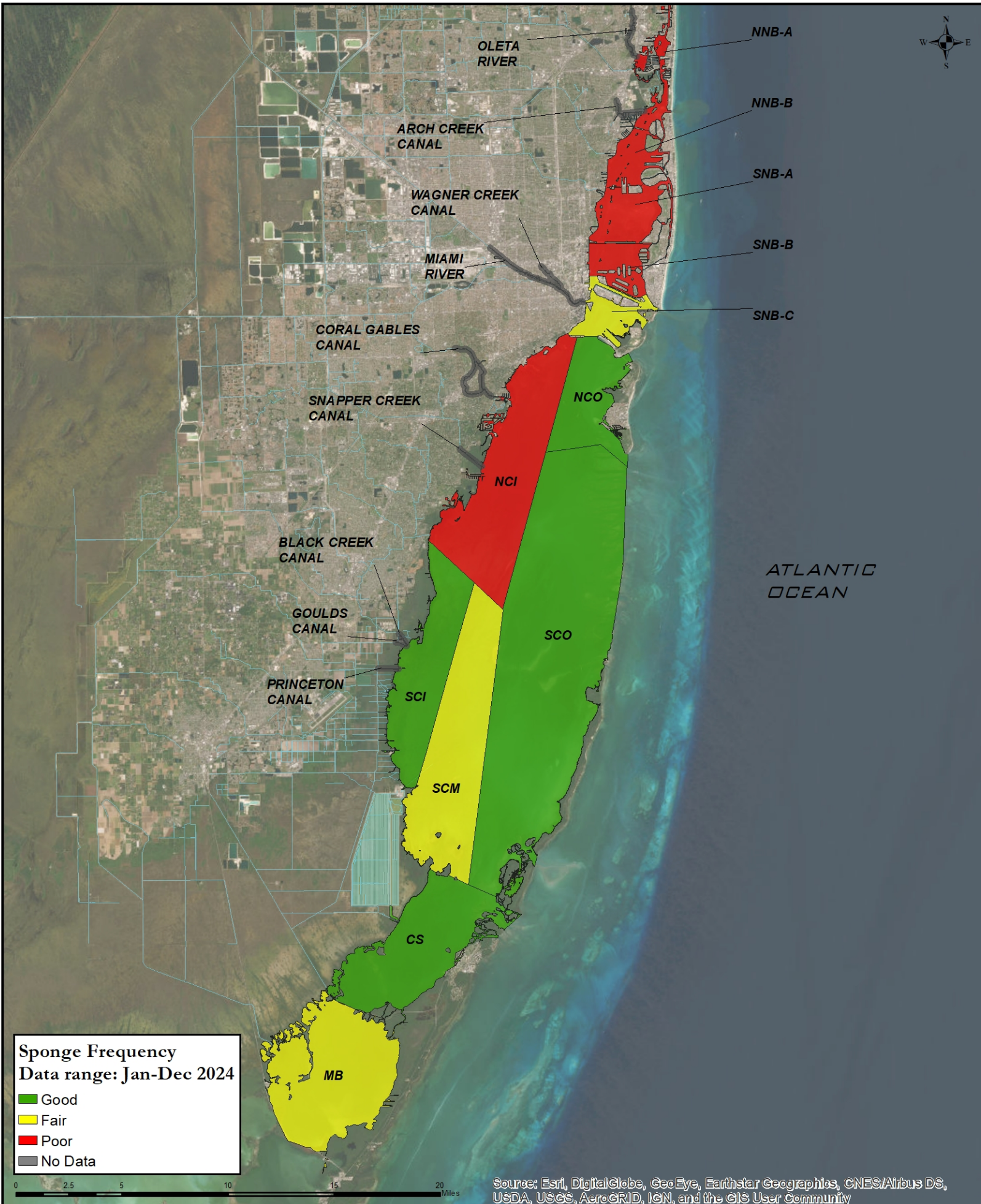
2025 Biscayne Bay Report Card

Water Clarity Score



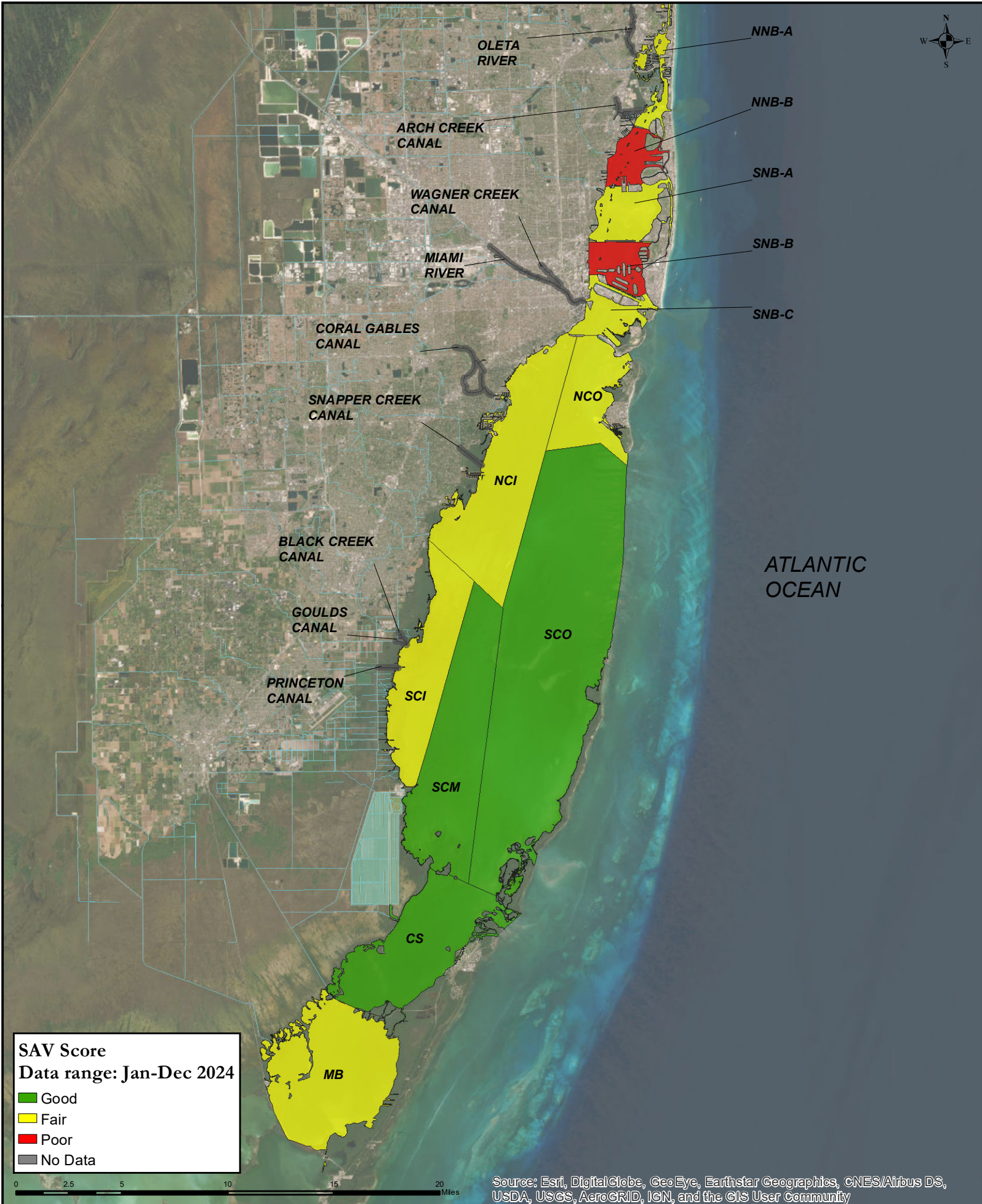
2025 Biscayne Bay Report Card

Sponge Frequency Score



2025 Biscayne Bay Report Card

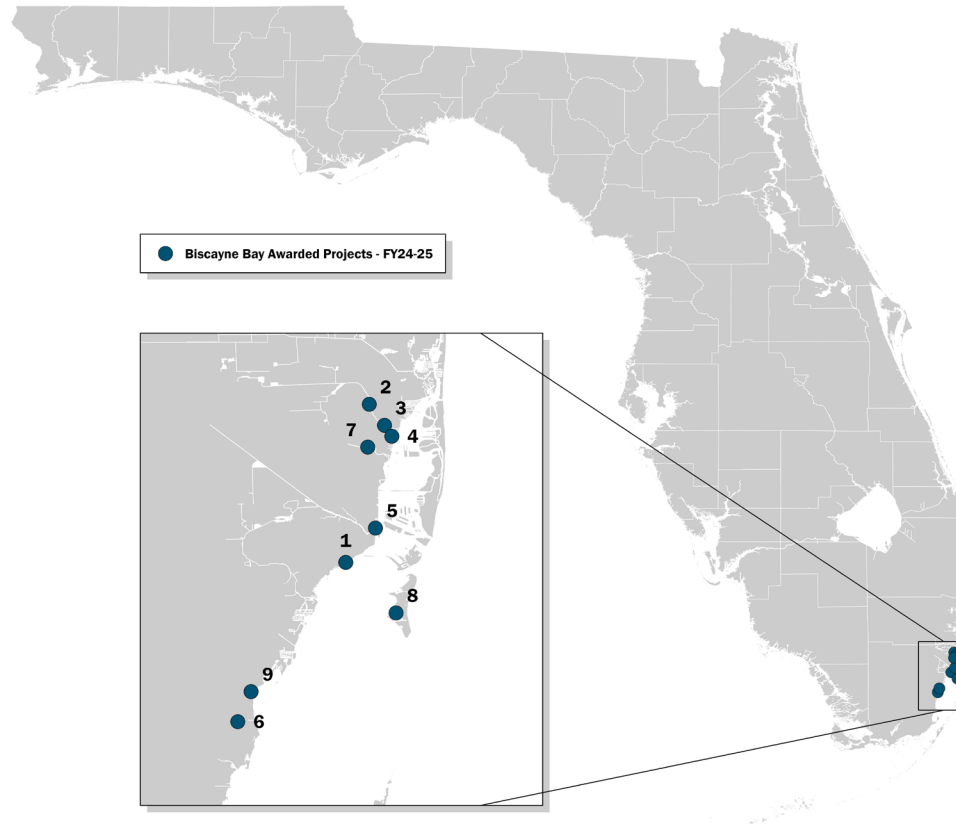
Submerged Aquatic Vegetation (SAV) Score



Report Card Region	2021 Score	2022 Score	2023 Score	2024 Score	2025 Score	<div>2025 Biscayne Bay Health Status by Region</div> <div> <div>> 3.9</div> <div>3.0-3.9</div> <div>0-2.99</div> </div>
Northern North Bay (NNB-A)	Poor	Fair	Poor	Poor	Poor	Nutrients increased, some reductions in Chlorophyll and Bacteria
Northern North Bay (NNB-B)	Poor	Fair	Fair	Fair	Fair	Total Phosphorus and Chlorophyll increased, Water Clarity decreased
Southern North Bay (SNB-A)	Poor	Poor	Poor	Poor	Poor	Total Phosphorus increased, Water Clarity decreased, and SAV increased
Southern North Bay (SNB-B)	Fair	Fair	Fair	Fair	Poor	Phosphorus increased and Water Clarity decreased, SAV and Invertebrates increased
Southern North Bay (SNB-C)	Fair	Good	Fair	Good	Good	Total Phosphorus increased, Water Clarity decreased, some increases in SAV
North Central Offshore (NCO)	Fair	Fair	Fair	Fair	Fair	Total Phosphorus increased and Water Clarity decreased
North Central Inshore (NCI)	Poor	Fair	Fair	Fair	Fair	Total Phosphorus increased while SAV and Invertebrates decreased
South Central Offshore (SCO)	Fair	Fair	Fair	Fair	Fair	Total Phosphorus increased and Water Clarity decreased, Total Nitrogen decreased
South Central Inshore (SCI)	Fair	Fair	Fair	Fair	Fair	Total Nitrogen, Total Phosphorus, and Chlorophyll increased, Water Clarity decreased, Invertebrates increased
South Central Mid Bay (SCM)	Fair	Fair	Fair	Fair	Fair	Total Phosphorus increased, Water Clarity decreased, and Invertebrates decreased
Card Sound (CS)	Fair	Fair	Fair	Fair	Fair	Total Phosphorus increased, Chlorophyll decreased
Manatee Bay (MB)	Poor	Fair	Poor	Poor	Poor	Total Phosphorus increased, Chlorophyll decreased



Biscayne Bay Water Quality Improvement Grant Program Fiscal Year 2024-25 Awards



Biscayne Bay Water Quality Improvement Grant Projects

Project Number	Partners	Project Description	Award
1	Miami-Dade County	Creation of a Smart Pond to reduce nutrient loading and flooding, installation of green stormwater infrastructure and Stormwater Improvement Project for the Village of El Portal	\$1,650,000
2	City of Miami	Stormwater management infrastructure improvement project to capture runoff, filter out pollutants, sediment and debris, and install black valves on the outfall pipe	\$900,000
3	Village of Palmetto Bay	Improvement of stormwater management infrastructure	\$930,000
4	Town of Culter Bay	Improvement of stormwater management infrastructure, including installation of a pump station and culvert to improve Bay health through wetland rehydration	\$5,400,000
5	Miami Shores Village	Phase II of Septic-to-Sewer Conversion Project, supporting construction of a gravity sewer main, lateral lines, pump station and connections	\$2,000,000
6	Miami Shores Village	First phase of a Septic-to-Sewer Conversion Project for residential properties	\$5,000,000
7	Village of Key Biscayne	Stormwater management upgrades to alleviate flooding within the K-8 School and surrounding areas	\$2,873,194
8	City of North Miami	Phase III of Septic-to-Sewer Conversion Project extending the city's wastewater collection system, connecting residential parcels to the sewer system and abandoning septic tanks	\$1,246,806
Total:			\$20,000,000



Memorandum



Date: April 18, 2025

To: Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners

From: Daniella Levine Cava
Mayor

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

Subject: Recommendations Related to Areas in Biscayne Bay for Anchoring and Future Mooring Fields - Directive No. 241837

Executive Summary

On October 1, 2024, the Board of County Commissioners (Board) approved Resolution No. R-886-24, sponsored by Senator Rene Garcia and co-sponsored by Commissioner Kevin Cabrera, Commissioner Danielle Cohen Higgins, and Commissioner Micky Steinberg, directing the County Mayor or County Mayor's designee to assess and make recommendations to this Board as to where in Biscayne Bay the anchoring and mooring of vessels may be most appropriate and where future mooring fields may be located. These recommendations are to consider, for example, the presence and protection of environmental resources, and potential impacts to residents and navigation, as well as other factors that may be relevant to such an assessment. The Department of Regulatory and Economic Resources, Division of Environmental Resources Management (RER-DERM) has outlined the regulatory considerations for mooring and anchoring in this report.

There are many regulatory aspects related to anchoring and mooring within the tidal waters of Miami-Dade County. These regulations are intended to allow vessels to safely navigate, anchor, and moor in areas of Biscayne Bay and its tidal tributaries in areas of sufficient water depth, while minimizing and avoiding adverse environmental impacts to natural resources, including marine and wildlife habitats, recreation, and any other environmental values affecting the public interest. Two County facilities that may be suitable for new or expanded vessel storage and launching facilities are Haulover Marina and Crandon Marina. RER-DERM will be working with Parks, Recreation and Open Spaces (PROS) staff to determine the feasibility of expanding these facilities during recurring monthly coordination meetings. In-depth analysis of site-specific requirements may necessitate procurement of a consultant for this anticipated multi-year endeavor. The estimated cost for the County to add moorings at these two locations includes a \$4.5 million investment and \$324,000 added to operating expenses. These projected costs are not budgeted and therefore would require identification of a funding source. RER-DERM will also collaborate with municipalities to identify suitable locations for managed mooring fields and, if such locations are available, to establish additional vessel mooring facilities within their respective municipal boundaries.

Background

The anchoring of vessels and floating structures in Miami-Dade County is primarily regulated under Chapter 327 of the Florida Statutes (F.S.) and is the purview of marine law enforcement. While not defined in Chapter 327 F.S., anchoring is the act of securing a vessel or floating structure in navigable waters by means of an anchor and attached line, chain, or cable that is cast or dropped temporarily overboard and later retrieved from the water to allow the vessel or floating structure to get underway. Mooring is the act of tying or affixing a vessel or floating structure to an object (i.e., a "mooring") that remains, or is intended to remain, in place regardless of whether a vessel or floating structure is attached to it. Section 327.02(14),

F.S., defines a floating structure as “a floating entity, with or without accommodations built thereon, which is not primarily used as a means of transportation on water, but which serves purposes or provides services typically associated with a structure or other improvement to real property.” Floating structures include, but are not limited to, such structures as floating docks, boatlifts, vessel platforms, helipads, and work platforms. Section 327.02(47), F.S., defines a vessel as “synonymous with boat as referenced in s. 1(b), Art. VII of the State Constitution and includes every description of watercraft, barge, and airboat, other than a seaplane on the water, used or capable of being used as a means of transportation on water.”

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

Anchoring

Until the passage of new State legislation in 2021 allowing Counties to establish Anchoring Limitation Areas (ALAs), Section 327.60, F.S., severely limited County and municipal governments from establishing local ordinances that regulate the anchoring of vessels (but not floating structures) outside the marked boundaries of permitted mooring fields, except for liveaboard and commercial vessels (not including commercial fishing vessels). State regulations regarding vessel anchoring in Florida have historically been quite liberal and, with some exceptions, generally have allowed the anchoring of vessels nearly anywhere and with no time limit. Exceptions include anchoring and mooring prohibitions within 150 feet of any public or private marina, boat ramp, boatyard, or other public vessel launching or loading facility; within 500 feet of a superyacht repair facility; and within 100 feet outward from the marked boundary of a public mooring field.

Section 327.4109(4), F.S., prohibits anchoring, mooring, tying or otherwise affixing a vessel or floating structure to an “unpermitted, unauthorized, or otherwise unlawful object that is on or affixed to the bottom” in State waters with the exception of a private mooring on privately owned submerged lands. Such unlawful objects would include any mooring installed in tidal waters of Miami-Dade County without the required regulatory permit(s), including a RER-DERM Class I permit.

Within State Park submerged lands, vessels shall not “moor, anchor or tie up to any buoy, marker, bank or any wharf, dock, tree, building or other object or structure on the bank, any watercraft of any kind in waters within or contiguous to park areas within one hundred feet of the shoreline, in areas designated by the Division as closed for such purposes.”, 62D-2.014(8)(c), F.A.C. Similarly, in 62D-2.015(2)(e), F.A.C., “no person operating passenger launches or excursion boats from outside the parks that are for rent or hire or carrying passengers for money shall land or anchor or tie up in any park without first having applied for and received a permit from the Division.” These rules exist within the waters of Miami-Dade County along the shorelines of Oleta River State Park and Sandspur Island, Barnacle Historic State Park, Bill Baggs Cape Florida State Park, and John Pennekamp Coral Reef State Park.

Anchoring Limitation Areas (ALA)

Florida Statute 327.4108 allows local governments to establish Anchoring Limitation Areas within their jurisdictions for the purpose of managing and regulating vessel anchoring. These limitation areas are typically designated in specific waterways or zones to address various concerns, such as safety,

environmental protection, and navigation. Eleven locations in Miami-Dade County were put forth for consideration as Anchoring Limitation Areas in the report for Directive No. 221350, which was accepted by the Board in December 2023. The areas were selected due to the presence of sensitive environmental resources such as seagrasses, inadequate water depths, and historic documentation of long-term vessel storage and vessel abandonment. The enforcement of Anchoring Limitation Areas is strictly the purview of law enforcement, not code enforcement, pursuant to Section 327.4108, F.S. The effective enforcement of Anchoring Limitation Areas, especially on a substantial basis, is expected to be challenging in Miami-Dade County. Challenges include but are not limited to lack of adequate marine law enforcement personnel (municipal, County, and State); competing higher priorities; and a need for resources to facilitate monitoring and documentation of the 45-day period by law enforcement. It should be noted that RER-DEEM does not consider a mooring field to be a substitute for an ALA.

Mooring Fields

Section 62-330.420, Florida Administrative Code (F.A.C.) outlines the criteria for a General Permit to local governments to construct, operate, and maintain a public mooring field for up to 100 vessels, including a dinghy dock and sewage pumpout dock directly supporting the mooring field. A Mooring Field Management Plan is required to provide reasonable assurance that the mooring field and supporting land-based facility will comply with all of the requirements of the general permit. Siting considerations for mooring fields include distance from marine resources and navigational channels, access to a supporting land-based facility, adequate water depth, and compliance with the County's Manatee Protection Plan (MPP).

Specific siting criteria from 62-330.420, F.A.C. is outlined below:

1. Navigational access must already exist between the mooring field and the nearest customarily used access channel or navigable waters for the sizes of vessels for which the mooring field is designed to serve, such that no new dredging is required to create access or adequate mooring depths.
2. The mooring field and mooring areas associated with the dinghy dock and pumpout vessel dock shall be sited in an area with adequate circulation and flushing based on the bathymetry plan.
3. The mooring field shall be associated with an existing or permitted land-based support facility that is operational prior to the mooring field being occupied. The land-based support facility shall provide amenities and conveniences for the number of occupants that are using the mooring field (e.g., parking, bathrooms, shower facilities, laundry facilities, etc.). These details shall be included in the Management Plan.
4. The mooring field, dinghy dock, and sewage pumpout dock shall not be located in the following areas.
 - a. Within any marked or customarily used navigational channel, or within setbacks established by the U.S. Army Corps of Engineers for federal channels.
 - b. Where they would adversely affect waters classified by the Department of Agriculture and Consumer Services as approved, conditionally approved, restricted, or conditionally restricted for shellfish harvesting as set forth in Chapter 5L-1, F.A.C.
 - c. Where they would adversely affect critical habitat designated by the U.S. Fish and Wildlife Service or U.S. National Marine Fisheries Service for any federally listed threatened or endangered species under the Endangered Species Act of 1973.
 - d. In predominantly fresh waters as defined in Chapter 62-302, F.A.C.

Additional Regulatory Considerations

Miami-Dade County Manatee Protection Plan

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

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

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

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

Recommendations

Based on the foregoing, the siting of future mooring fields is dependent on many factors notwithstanding the need to be co-located with an upland facility with the appropriate accommodations. In general, these facilities should be in areas that are recommended in the MPP for expansion of marine facilities for power boats or have no other manatee limitations. These locations are typically on the east side of Biscayne Bay, within the Dinner Key area, Key Biscayne or near the County's inlets at Government Cut and Haulover Inlet. There are two County facilities in those areas that could be suitable for new or expanded mooring facilities, Crandon Marina and Haulover Marina. The specific boundaries of a mooring field will need to be identified based on the targeted vessel size and type, water depth and presence of marine resources. In addition, an analysis of the upland facilities will need to be completed to determine the feasibility of additional parking spaces, tender/dinghy docks and any other necessary upland facility expansion. Of note, Matheson Hammock Park could be utilized for expansion of power boat facilities pursuant to the MPP, however the waters surrounding the park are typically shallow and may not be suitable for a mooring field. Any additional moorings at County facilities would remain governed by the current rules and regulations,

¹ <https://www.miamidade.gov/environment/library/reports/manatee-protection-plan.pdf>

including no overnight stay/sleeping would be allowed. If these rules and regulations are intended to be modified to accommodate the additional moorings, further analysis would be required to increase parking capacity, since it will severely limit and decrease patron usage at the boat ramps. An in-depth analysis of the aforementioned site-specific requirements is needed in order to accurately estimate the full fiscal impact to the County. An estimated cost summary is attached (Exhibit 1), based on construction, design, permitting, and operating expenses for the installation of 40 new moorings (20 at Crandon and 20 at Haulover). The estimate includes a \$4.5 million investment and \$324,000 added to operating expenses. These projected costs are not budgeted and therefore would require identification of a funding source.

There may be additional public facilities that could be suitable for additional mooring fields but would require a municipality to establish or expand an existing facility. The City of Miami already manages mooring fields in the Dinner Key area, as well as the west side of Watson Island. The City of Maimi Beach has expressed interest on several occasions regarding the establishment of both a managed mooring field area, as well as an Anchoring Limitation Area. Both cities are uniquely situated for this type of operation as both municipalities have facilities along Biscayne Bay that can be expanded for this purpose. However, limitations related to water depth, marine resources, navigation and submerged land ownership may narrow the availability of suitable space for additional mooring field facilities.

Based on the above, RER-DERM will work with PROS on the feasibility of expanding their facilities at Haulover Marina and Crandon Marina for additional mooring. Furthermore, it is recommended that the County work with any municipality that is interested in siting a managed mooring field within their municipal boundaries. In addition, pursuant to the Report Directives 221350 and 240822, RER-DERM will continue working towards the establishment of Anchoring Limitation Areas, where appropriate.

In accordance with Ordinance No. 14-65, this report will be placed on the next available Board meeting agenda. If additional information is needed, please contact Lourdes M. Gomez, Director, Department of Regulatory and Economic Resources, at Lourdes.Gomez@miamidade.gov or at 305-375-2886.

Attachment

c: Geri Bonzon-Keenan, County Attorney
 Gerald Sanchez, First Assistant County Attorney
 Jess McCarty, Executive Assistant County Attorney
 Office of the Mayor Senior Staff
 Lourdes M. Gomez, Director, Department of Regulatory and Economic Resources
 Lisa Spadafina, Assistant Director, Department of Regulatory and Economic Resources
 Yinka Majekodunmi, Commission Auditor
 Basia Pruna, Director, Clerk of the Board
 Eugene Love, Agenda Coordinator
 Office of Policy and Budgetary Affairs

Estimated Cost Summary

\$4.5M investment / \$324k added to operating expenses

Moorings

- * Add Moorings at Haulover Marina
- * Add additional Moorings at Crandon Marina
- * Logistics to add liveboards to Moorings

Annual Operating Expenses

Additional Moorings Revenue: 40 x \$285 per month	\$ 136,800.00
Moorings annual inspections & maintenance: 40 x \$350 each	\$ (14,000.00)
Annual Expense - Fuel & Maintenance	\$ (64,000.00)
Additional Staff: 5 new positions	\$ (382,463.00)
TOTAL	\$ (323,663.00)

Capital Investment

Consultants, engineers, design, and permitting	\$ (4,100,000.00)
New vessel for Haulover	\$ (100,000.00)
Initial cost to add moorings: 40 x \$8000 each	\$ (320,000.00)
TOTAL	\$ (4,520,000.00)