MIAMIBEACH

COMMISSION MEMORANDUM

TO: Honorable Mayor and Members of the City Commission
FROM: Mayor Steven Meiner
DATE: December 13, 2023

SUBJECT: DISCUSS, TAKE ACTION, AND REFERRAL TO THE PUBLIC SAFETY AND NEIGHBORHOOD QUALITY OF LIFE COMMITTEE TO DISCUSS THE PROTECTION OF BISCAYNE BAY AND ENHANCEMENT OF PUBLIC HEALTH AND THE CITY'S RESILIENCY BY PRIORITIZING AND EXPEDITING THE IMPLEMENTATION OF WATER AND SEWER INFRASTRUCTURE PROJECTS IN THE CITY.

ANALYSIS

Please place on the agenda for the June 28, 2023 City Commission meeting as a Discuss, Take Action and Referral to the Public Safety and Neighborhood Quality of Life Committee (PSNQLC) to discuss the installation of new water and sewer piping and related infrastructure throughout Miami Beach, projects which are crucial to address our aging infrastructure, mitigate water main breaks, water leaks, and sewer main breaks, protect the environment, safeguard public health, and improve resilience. Our City's water and sewer system is an essential investment in the City's infrastructure and the well-being of its residents and surrounding ecosystems.

Replacing aging water and sewer infrastructure in Miami Beach contributes to the protection and preservation of Biscayne Bay by improving wastewater management, reducing nutrient pollution, minimizing environmental impacts, and building resiliency. It is an essential step towards maintaining the health and ecological balance of Biscayne Bay for current and future generations.

Many of Miami Beach's water and sewer pipes are reaching or have already surpassed their intended lifespan. Over time, these pipes deteriorate, become brittle, and are more prone to leaks, breaks, and failures. By installing new infrastructure, the City can ensure a reliable and efficient sewer system that minimizes the risk of disruptions and water quality issues.

The benefits of upgrading our water and sewer system infrastructure are as follows:

1. Environmental Impact: Leaking sewer pipes can contaminate groundwater and nearby water bodies, leading to environmental degradation and compromising the health of ecosystems. By replacing aging sewer pipes, Miami Beach can protect its surrounding environment, including the sensitive marine ecosystems like Biscayne Bay, ensuring cleaner water and preserving biodiversity.

2. Enhanced Public Health: Sewer main breaks or leaks pose a risk to public health, as they can result in the discharge of untreated wastewater into the environment. This contamination can lead to the spread of waterborne diseases and other health hazards. Installing new sewer piping helps maintain the integrity of the sewage system, reducing the potential for public health risks associated with sewer failures.

3. Improved Resilience: Upgrading sewer infrastructure enhances the overall resilience of the system against extreme weather events, such as heavy rainfall or hurricanes. New sewer piping, designed with modern materials and technologies, can better withstand these challenges, minimizing disruptions and maintaining essential services during adverse weather conditions. Although the City's 2019 Hazen & Sawyer Water & Sewer Master Plan has identified and prioritized aging infrastructure throughout the City, I propose that the City also prioritize expediting upgrades in North Beach, to the fullest extent possible.

Accordingly, as part of this referral, I would ask for the Public Works Department to update the Committee on the existing Master Plan and the City's Five Year Water & Sewer Critical Needs Plan, with a particular focus on a detailed assessment of the existing water and sewer infrastructure in the North Beach area to identify areas with the highest priority for replacement. This will help address Park View canal high bacteria levels that could be caused by leaky infrastructure (see attached).

I would also ask staff to provide details on projects in progress in the North Beach area, including the scope of the projects, the extent of the water/sewer pipe replacement needed, the timeline, and the estimated budgets for the projects, as well as any additional actions that may be required by the City Commission to expedite their implementation.

In addition, as part of the prioritization process: I request for the Public Works Department to provide data on number of City-wide water or sewer main breaks and frequency, including the number of total gallons leaked out and cost of emergency repairs.

Finally, I request for the Administration to update the Committee on the Biscayne Bay Task Force recommendations, and how City's infrastructure upgrades could better align with, and complement, the Task Force's plan related to water quality improvement, habitat restoration, and environmental considerations, as follows:

1. Habitat Restoration: The City's water/sewer replacement projects should support habitat restoration efforts in alignment with the Task Force's recommendations. For instance, the City should consider incorporating features such as artificial reefs or mangrove plantings to enhance habitat diversity and protect the bay's ecosystems.

2. Land Use and Coastal Resilience: The City's water/sewer replacement projects should align with the Task Force's recommendations for land use practices and coastal resilience. The City should incorporate sustainable and resilient design principles that mitigate the impacts of sea-level rise, considering the long-term health of Biscayne Bay.

3. Public Outreach and Education: The City should also seek ways to better collaborate with the Task Force to develop and implement public outreach and education campaigns related to its water/sewer replacement projects, to raise awareness about how the City's projects contribute to the restoration and protection of Biscayne Bay.

4. Monitoring and Research: The City should incorporate the Task Force's suggested monitoring and research protocols to evaluate the effectiveness of its water/sewer replacement projects in improving water quality and supporting habitat restoration efforts. The City should collect data on relevant indicators to measure the project's impact on Biscayne Bay's health.

By aligning the City's water/sewer replacement projects with the recommendations of the Biscayne Bay Task Force, we can ensure that the City's projects contribute to the broader goals of protecting and restoring the bay's ecological health. Collaboration with the Task Force and other stakeholders will help foster a comprehensive and coordinated approach to the conservation of Biscayne Bay.

By fostering a strong partnership between Miami Beach and Miami-Dade County, both entities can leverage their resources, expertise, and influence to drive meaningful change and successfully implement the recommendations of the Biscayne Bay Task Force Report. Collaboration and coordination will be key to ensuring the long-term health and resilience of Biscayne Bay.

Biscayne Bay Task Force Report:
MANAGEMENT PLAN.pdf (miamidade.gov)

SUPPORTING SURVEY DATA

N/A

FINANCIAL INFORMATION

N/A

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-14?	**Does this item utilize G.O. Bond Funds?**
Yes	No

Legislative Tracking

Mayor Steven Meiner