MIAMIBEACH

OFFICE OF THE CITY MANAGER

LTC #047-2026

LETTER TO COMMISSION

TO: Honorable Mayor Steven Meiner and Members of the City Commission

FROM: Eric Carpenter, City Manager

DATE: February 10, 2026

SUBJECT: **UPDATE ON THE IMPLEMENTATION OF "OPERATION CLEAN WATER" PROGRAM - #15**

The purpose of this Letter to Commission (LTC) is to provide the Mayor and City Commission with a summary of staff's efforts to date, as it relates to "Operation Clean Water," adopted on March 19, 2025, by Resolution No. 2025-33559.

At the July 10, 2025 meeting of the Land Use and Sustainability Committee (LUSC), City staff provided an update on the North Beach Water Quality and Park View Canal Report. The discussion concluded with a motion, directing the Administration to provide weekly updates on the "Operation Clean Water" efforts at the Park View Canal, with a focus on Biscayne Beach Elementary hotspots, associated lateral pipe-lining, above-ground cleanliness (alleyways, street sweeping, pressure washing), and homeless outreach. At the September 11, 2025 LUSC meeting, Committee members made a motion to move the item to the City Commission for discussion, with a favorable recommendation to: 1) Authorize an independent, third-party review of the Sanitary Sewer Pump Station 23; 2) Expand the monthly water quality study to authorize and fund weekly water testing in Park View Canal; 3) Expedite the comprehensive infrastructure study for North Beach; and to maintain Park View Canal as a standing item on the Committee's agenda for regular updates.

In August 2025, the City of Miami Beach entered into a formal agreement with the University of Miami (UM) for the creation of an Ultraviolet Sanitization Pilot Project for street cleaning to reduce levels of enterococci entering the stormwater system. The pilot project aimed to clean the test area, 73rd Street (a documented "hot spot,") by increasing the frequency of mechanical street sweeping activities, remove visible debris and fecal deposits manually, and the use of ultra-violet (UV) light, an environmentally friendly technology that cleans without leaving a chemical residue, to disinfect street surfaces. The pilot project's cleaning and testing phases were completed on October 17, 2025. A draft report was provided to Public Works and Environment & Sustainability Departments for review, and comments were provided to the University of Miami on January 28, 2026. The final report will be shared in February 2026 upon receipt of the minor clarifications.

On August 8, 2025, the pipe-lining contractor, Vortex Infrastructure Services, LLC (Vortex), mobilized at Biscayne Beach Elementary and began cleaning lateral lines and performing closed-circuit television (CCTV) inspections through existing sewer system access points. The scope of work that was successfully performed by Vortex included the cleaning of 1,320 LF of pipe, the lining of approximately 1,100 LF of pipe, the installation and/or replacement of 12 cleanouts, the performance of 5 point-repairs due to collapsed pipes, rebar obstructions, or cleanout complications, and the plugging off of cleanout 1B (CO1B) in the School's courtyard. All work was coordinated with the Miami-Dade County School Board and Biscayne Beach Elementary representatives.

On Saturday, October 4, 2025, a sewer force main break which resulted in sewage being released onto the school grounds and into the Tatum Waterway near Park View Canal, was reported by a stakeholder on the grounds of Biscayne Beach Elementary. Public Works Operations staff promptly responded to the site and successfully bypassed the flows, stopping the overflow. Repairs were performed, the pipe was placed back into service, and normal pumping operations resumed. Miami-Dade County Environmental Resources Management (DERM) and the Florida Department of Environmental Protection (FDEP) were notified the same day, in accordance with County and State Code and City reporting protocols. Once the work was completed, Public Works' Operations staff returned to the site to thoroughly clean and disinfect the area, including all affected stormwater systems, and restored the damaged sod and court. An Emergency Purchase Authorization has been signed for the performance of subaqueous horizontal directional drilling services from Hawthorne Avenue, under the Tatum Waterway, to the west end of 75th Street, to connect Pump Station #24 to Pump Station #23. A competitive bid process was conducted, and Amici Engineering Contractors was determined to be the lowest responsive, responsible bidder. A purchase order has been issued, and sixty percent design drawings are currently under internal review. The contractor has initiated the pre-application permit process with the respective local and State agencies.

Nanobubble technology was identified and reviewed by the Environment and Sustainability Department, Public Works Departments, and the City Manager's Office as a viable technology for use in the Park View Canal. The use of nanobubbles can greatly improve water quality in the canal by using special generators to create tiny bubbles (less than 200 nanometers in size) that stay suspended in water for a long period of time to help dissolve gases like oxygen, more effectively in water. This helps to accelerate various physical, chemical, and biological processes, and it can prevent the buildup of biofilm and scale in the water. These processes also help clean the water by promoting the breakdown of microbial contaminants, reducing harmful pathogens, algal growth, and bad odors, ultimately improving overall water quality. At the request of the City Commission and the subsequent Budget Hearing, staff were directed to explore an initial short-term project to test how the technology works within the Park View Canal setting and to evaluate the impact of the technology, which requires design and permitting from environmental regulatory agencies. The Consultant Service Order for dredging was updated and expanded to include nanobubbles design and permitting. TYLin, the consultant, held the interdepartmental kickoff meeting on January 7, 2026, following receipt of the change order. A six-month timeframe is anticipated for design and permitting, and TYLin additionally advised that the minimum short-term pilot project envisioned at this time is one-year. The construction phase, which includes the consultant with the customized equipment and activation, require further procurement. Also, the design process has begun for the evaluation of dredging as a potential option to aid in the natural flushing of the waterway.

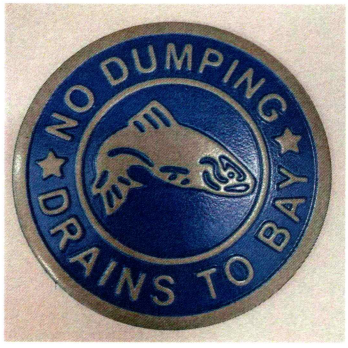
At the September 17, 2025 City Commission meeting, a motion was passed to move forward with and authorize funding for weekly water testing at up to five locations within Park View Canal. At the September 30, 2025 City Commission Budget Meeting, $21,000 was approved and added to the Public Works' Stormwater budget for FY26 to fund the sampling effort. The Environment and Sustainability and Public Works Departments obtained a proposal and executed a Purchase Order for the Miami-Dade County sampling contractor, Eurofins Environment Testing, on November 14, 2025, and the weekly sampling began on Thursday, November 20, 2025. Eurofins Environment Testing is a certified laboratory utilized by the Miami-Dade County Surface Water Quality Monitoring Program for water quality sampling. The sampling map was developed by the Environment and Sustainability Department, drawing on known hotspot locations, publicly accessible shorelines, and input from Dr. Helena Solo-Gabriele, Associate Dean, University of Miami College of Engineering. There may be an opportunity to adjust sampling points at a later date to include sampling for additional areas and to collect unique data points. Sampling results (CMB Results) for enterococci since the previous LTC are attached as 'EXHIBIT – A', and the table also includes a column for Surfrider Foundation's Miami Chapter Blue Water Task Force (BWTF) results for water samples they collect at the Park View Canal kayak launch as requested by the City Commission.

There are varying standards for enterococci in marine waters and they are dependent on factors such as the classification of a water body, flushing rates, and proposed use of the waterways (i.e. recreation type). The Florida Department of Health (FDOH) Healthy Beaches standard for enterococci is 70 MPN/100mL, the Florida Department of Environmental Protection (FDEP) standard for enterococci in Class III Waters is 130 MPN/100mL, and the United States Environmental Protection Agency (EPA) standard for enterococci for kayaking in calm waters is 371 MPN/100mL.

The sampling map is as follows:

DERM issued a Class II permit for seven Downstream Defender hydrodynamic separator/water quality structures on Friday August 1, 2025, allowing the City to move forward with the final design and the procurement process. Construction is scheduled to commence in the first quarter of 2026. On December 9, 2025, Governor DeSantis issued a press release to announce grant awards for Biscayne Bay Water Quality Improvement Grants. The City of Miami Beach was selected as a recipient of one of eight grants, in the amount of $426,750 to account for the construction of the Downstream Defenders along Park View Canal. In the meanwhile, routine maintenance efforts for the existing stormwater structures from 72nd to 77th Streets, between Dickens Avenue and Collins Avenue remain ongoing. The Public Works and Communications Departments worked together on the design and copy of the "FROG can Clog" and "Don't Grease the Streets" public outreach to decrease contamination to the Bay. As part of the outreach campaign, both designs were displayed on the side of three waste collection trucks. Below are photographs of two of them:

Stormwater drain markers were ordered and are being placed throughout Parkview Island and Parkview extended area (72nd Street – 76th Street) at stormwater inlets. Installation of the drain markers at approximately 100 locations was completed during the week of December 15. Below is a sample of the markers installed:



The Sanitation Division continues to provide mechanical and hand-sweeping crews in the Park View area three (3) times per week (Monday, Wednesday, and Friday). The Multihog machine operates on alternating days (Tuesday, Thursday, and Saturday), focusing on alleyways between 73rd and 76th Streets. Eleven (11) doggie-bag dispensers (which are refilled twice a week) were installed in the area. The litter collection service frequency in Crab Alley has increased from twice to three times per week.

The Homeless Outreach Services Team continues to visit the area. If individuals are found, support services are offered to assist them.

Code Compliance continues to conduct weekly walk-throughs and inspections to check for sanitation issues such as illegal dumping, overflowing dumpsters, and trash in the alleys in the North Beach watershed area. All observed violations result in the issuance of a citation for the creation of a health hazard/nuisance.

The Sanitary Pump Station #23 Assessment is being conducted by CHA, which is one of the City's consultants for Water and Sewer related work. The assessment will take place over the course of 90 days and will include the following tasks: Data Collection, Field Investigations, Site Analysis, and Adjacent Infrastructure Analysis. The Sanitary Pump Station #23 Assessment project was approved by the Procurement Department and a Notice-to-Proceed was given to CHA to start working on the study. During the project's site visit and kick-off meeting on December 8, 2025, CHA and the Public Works Department inspected all aspects of the pump mechanical room well and control/electrical room. Both parties further discussed past efforts of rehabilitation that have been done to Sewer Pump Station #23 and rehabilitation efforts done on the sewer system in the area. The site visit was finalized by an inspection of the pump station site and inspection of the force main aerial crossing located at Bay Drive bridge, and the force main aerial crossing located at the 71st Street bridge.

CHA has officially completed the Adjacent Infrastructure Analysis, which reviewed all sanitary and stormwater infrastructure adjacent to, and near Pump Station #23 which has the potential to affect the water quality in the Parkview Canal. Public Works will examine the findings when CHA submits their first draft of the Analysis and the Technical Memorandum for review.

CHA delivered to Public Works the first draft of the Pump Station #23 Study and Adjacent Infrastructure Analysis on January 20, 2026. Staff reviewed the report and provided comments to the consultant. A follow-up meeting with CHA to go over the comments was held on February 4, 2026. CHA is currently addressing comments from the February 4, 2026 meeting with Public Works, and will be submitting a final draft on March 6, 2026

For more information, contact Rodney Knowles, Assistant Public Works Director at RodneyKnowles@miamibeachfl.gov.

DM/JN/RK

EXHIBIT – A

Site Name	CMB Collection Date/Time	CMB Results MPN/100mL	BWTF Collection Date/Time	BWTF Results MPN/100mL
BBE Outfall	12/30/25 10:55 AM	256		
75th Street End	12/30/25 10:45 AM	313		
Kayak Launch	12/30/25 10:31 AM	504	1/2/26 10:55 AM	213
73rd Street	12/30/25 10:22 AM	345		
Bonita Drive	12/30/25 10:10 AM	201		
BBE Outfall	1/8/26 11:15 AM	384		
75th Street End	1/8/26 11:10 AM	262		
Kayak Launch	1/8/26 10:55 AM	218	1/8/26 2:09 PM	74
73rd Street	1/8/26 10:40 AM	199		
Bonita Drive	1/8/26 10:30 AM	10		
BBE Outfall	1/14/26 11:02 AM	2,333		
75th Street End	1/14/26 11:04 AM	>2,4196.0		
Kayak Launch	1/14/26 11:09 AM	>2,4196.0	No sample collected by BWTF.	
73rd Street	1/14/26 11:12 AM	>2,4196.0		
Bonita Drive	1/14/26 11:15 AM	>2,4196.0		
BBE Outfall	1/22/26 11:40 AM	4,352		
75th Street End	1/22/26 11:55 AM	2,613		
Kayak Launch	1/22/26 11:27 AM	>2,4196.0	1/22/26 1:59 AM (reported time by BWTF, but assumed to be an error)	3,282
73rd Street	1/22/26 11:20 AM	11,199		
Bonita Drive	1/22/26 11:10 AM	3,076		
BBE Outfall	1/29/26 12:40 PM	52		
75th Street End	1/29/26 12:30 PM	323		
Kayak Launch	1/29/26 12:18 PM	279	1/29/26 10:00 AM	41
73rd Street	1/29/26 12:10 PM	282		
Bonita Drive	1/29/26 11:55 AM	1,722		