

C7 AS A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, DIRECTING THE ADMINISTRATION TO PRIORITIZE, AS PART OF THE FY 2026 BUDGET PROCESS, FUNDING FOR IMPROVEMENTS TO ADDRESS THE WATER QUALITY CONCERNS RELATING TO THE PARK VIEW ISLAND CANAL.

Applicable Area:

MIAMI BEACH

COMMISSION MEMORANDUM

TO: Honorable Mayor and Members of the City Commission

FROM: City Attorney Ricardo J. Dopico

DATE: April 23, 2025

TITLE: A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, DIRECTING THE ADMINISTRATION TO PRIORITIZE, AS PART OF THE FY 2026 BUDGET PROCESS, FUNDING FOR IMPROVEMENTS TO ADDRESS THE WATER QUALITY CONCERNS RELATING TO THE PARK VIEW ISLAND CANAL.

RECOMMENDATION

BACKGROUND/HISTORY

ANALYSIS

The attached Resolution was prepared at the request of the sponsor, Commissioner Alex Fernandez.

FISCAL IMPACT STATEMENT

N/A

Does this Ordinance require a Business Impact Estimate? (FOR ORDINANCES ONLY)

If applicable, the Business Impact Estimate (BIE) was published on:
See BIE at: <https://www.miamibeachfl.gov/city-hall/city-clerk/meeting-notices/>

FINANCIAL INFORMATION

CONCLUSION

Applicable Area

Citywide

Is this a “Residents Right to Know” item, pursuant to City Code Section 2-17?

No

Is this item related to a G.O. Bond Project?

No

Was this Agenda Item initially requested by a lobbyist which, as defined in Code Sec. 2-481, includes a principal engaged in lobbying? No

If so, specify the name of lobbyist(s) and principal(s):

Department

City Attorney

Sponsor(s)

Commissioner Alex Fernandez

Co-sponsor(s)

Commissioner Davide Suarez
Commissioner Laura Dominguez
Commissioner Tanya K. Bhatt

Condensed Title

Prioritize Water Quality Improvements to Park View Island Canal for FY 2026 Budget Process.
(AF/DS/LD/TB) CA

Previous Action (For City Clerk Use Only)

RESOLUTION NO. _____

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, DIRECTING THE ADMINISTRATION TO PRIORITIZE, AS PART OF THE FY 2026 BUDGET PROCESS, FUNDING FOR IMPROVEMENTS TO ADDRESS THE WATER QUALITY CONCERNS RELATING TO THE PARK VIEW ISLAND CANAL.

WHEREAS, the City of Miami Beach is committed to maintaining and improving the quality of its waterways and Biscayne Bay as they are critical to environmental, economic, and recreational prosperity, and to the health, safety, and welfare of the citizens of the City of Miami Beach; and

WHEREAS, following a sanitary sewer overflow caused by a contractor in March of 2020, the high bacteria levels did not decrease to meet State parameters, and a "No Contact Advisory" has been issued for the Park View Canal Kayak Launch location since that time; and

WHEREAS, the City implemented various strategies to isolate potential sanitary sewer leaks, including multiple dye testing, deep cleaning of the stormwater lines, water quality testing throughout the stormwater system, sediment sampling in the canal, CCTV inspections, and smoke testing to determine potential illegal cross connections between private properties sewer lines and the City's stormwater system; and

WHEREAS, the City performed advanced gene biomarker analysis to identify fecal indicators for humans, dogs, or birds at locations within the canal, and the results of the analysis in 2020 and 2021 indicated that fecal coliform from dogs and birds were present at high concentrations in samples; and

WHEREAS, the City retained ESciences, a third-party consultant specializing in environmental investigations, to conduct a thorough analysis of the data which indicated more studies were necessary to draw conclusions in the data set, as trends could not be identified; and

WHEREAS, in light of the continued elevated levels, the City procured the services of Dr. Solo-Gabriele, Associate Dean for the University of Miami College of Engineering, a global water quality expert in evaluating microbes in water and sediments; and

WHEREAS, at the September 28, 2022 City Commission meeting, item R7 H Resolution No. 2022-32331 ratified the City Manager's emergency engagement of services from the University of Miami to conducted water quality contamination research and analysis for Park View Canal. The item was sponsored Commissioner Alex Gonzalez and co-sponsored by Commissioner Kristen Rosen Gonzalez.

WHEREAS, Dr. Solo-Gabriele and the University of Miami team conducted a four-month sampling study to help determine the geographic or point-source(s) of bacteria; and

WHEREAS, the study discovered that freshwater surface layer of the canal had higher levels of bacteria, and that rainfall was the main predictor of poor water quality in the canal, with sediments from the canal shoreline, the streets, and sediments in catch basins, and shallow groundwater entering the canal from the 81-acre catchment area to the east and despite rigorous sanitary sewer testing, the system including private connections is aging and cannot be ruled out; and

WHEREAS, the study identified many sources contributing to degraded water quality including exotic and feral animal feces, the homeless population, dog waste, litter, and leaking dumpsters in commercial areas; and

WHEREAS, a community workshop was held in North Beach on January 24, 2023, and the draft final report with the study's recommendations was released via Letter to Commission (LTC) and on MBRisingAbove.com on January 23, 2023, for public comment through February 24, 2023; and

WHEREAS, City staff from several Departments have worked to address many of these findings by providing an increased level of services, and have developed an action plan that combines the study recommendations with actions that include both funded and unfunded items; and

WHEREAS, several impactful short-, mid- and long-term recommended actions were identified that include dredging within the Park View Canal to increase flushing and targeted stormwater and sanitary sewer infrastructure improvements; and

WHEREAS, the Environment and Sustainability Department (the "Department") was allocated \$500K in funding in FY 2023 for Phase 1 of Park View Canal dredging, which includes for planning, design, and permitting; and

WHEREAS, the Department procured this work and has completed bathymetric and geotechnical surveys, a flushing analysis, and pre-application meetings with environmental regulatory agencies. The results of these evaluations are being carefully reviewed for desired water quality outcomes and the appropriate next steps which may include application submittals to the regulatory permitting agencies. Project mobilization is recommended to coincide with the hydrodynamic separator installation to reduce sediment inputs into the canal following dredging; and

WHEREAS, the Department was allocated \$2 million in the FY 2024 - 2028 Capital Budget for Phase 2 of Park View Canal dredging, with construction anticipated to be completed in FY 2027/2028; and

WHEREAS, the Public Works Department was allocated \$510,000 in FY 2023 funds and completed pipe lining to 95% of the gravity sanitary sewer pipes and 98% of the manholes in Park View Island, and lining of Pump Station No. 23; and

WHEREAS, the Public Works Department was allocated a total of \$2.5 million in FY 2024 for rehabilitation of manholes and additional pipe lining in the area east of Parkview Island (from 73rd St to 76th St); and

WHEREAS, in January of 2025, 100% of sewer lining, including all five (5) North Beach pump station wet well rehabilitations were completed, and Public Works also concluded citywide force main leak detection, which found zero leaks in the system; and

WHEREAS, the Public Works Department was allocated \$200K in FY 2023 for design and permitting and \$2M for construction to retrofit existing gravity stormwater system with water quality treatment devices to minimize litter and sediments from entering the waterway, anticipated to be completed in FY 2026/ FY 2027; and

WHEREAS, the North Beach Town Center-North Shore D Neighborhood Improvement Project will include design and replacement of the stormwater and sanitary sewer infrastructure in the catchment area; this would include outfall relocations and water quality treatment pump stations; and

WHEREAS, on December 13, 2023 the City Commission authorized the City Administration to procure the services of Dr. Solo-Gabriele to conduct a post-study (Phase II) on the water quality in the Park View Island Canal, in order to determine whether the water quality has improved following the completion of proposed short-term remedial measures; and further, providing that the total amount of the post-study shall not exceed \$75,000; and

WHEREAS, at the March 13, 2024 City Commission meeting, the City Commission adopted Resolution No. 2024-32954, sponsored by Commissioner Alex J. Fernandez, which directed the Administration to prioritize, as part of the FY 2025 Budget process, funding for additional improvements to address the water quality concerns relating to the Park View Island Canal; and

WHEREAS, the Environment and Sustainability Department worked with Dr. Solo-Gabriele to conduct the Phase II study conducted during 2024; and

WHEREAS, the Phase II study included the following tasks:

- Collected stormwater before catch basins (catch system under grate before basin) to determine how much fecal bacteria is coming from the streets vs groundwater.
- Sampled groundwater directly utilizing direct push technology for samples of upper groundwater to determine the background levels of fecal bacteria.

- Tested within catch basins with biomarker source tracking (i.e. bird, dog, human) to determine how much fecal bacteria is coming into the system and from which source.
- Analyzed groundwater elevations to tie the elevation of the canal to groundwater, along with a comparison to pipe elevations.
- Reviewed and updated the City's historical data with information and testing that has been made available since the Phase I study concluded, from both Surfrider's Bluewater Task Force and the City's datasets

WHEREAS, the Phase II data was compiled, analyzed and presented in a final report; and

WHEREAS, The Phase II report notes that improvements have been observed since short term efforts such as air release valve replacements and pipe lining were conducted in 2023. Specifically, the fecal indicator bacteria enterococci values have dropped significantly between storm events due to this work ensuring that sanitary sewer leaks are no longer a source; and

WHEREAS, the Phase II study showed that the city's sanitary sewer leaks are no longer a source to the Park View Canal however there are additional private outfalls as sources; and

WHEREAS, the report further highlights that the main water type contributing to elevated enterococci levels in the Park View Canal is stormwater with the microbial source being birds, humans, and dogs from street runoff

WHEREAS, the City is committed to improving the quality of water in the Park View Island Canal and, since publication of the Phase II study, various resolutions have been adopted to implement measures in furtherance of this goal.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, that the Mayor and City Commission hereby direct the Administration to prioritize, as part of the FY 2026 budget process, funding for improvements to address the water quality concerns within Park View Island Canal.

PASSED and ADOPTED THIS ____ day of _____ 2025.

ATTEST:

Steven Meiner, Mayor

Rafael E. Granado, City Clerk

(Sponsored by Commissioner Alex J. Fernandez)

APPROVED AS TO
FORM & LANGUAGE
& FOR EXECUTION



City Attorney

4/16/2025

Date



PARK VIEW ISLAND CANAL
WATER QUALITY IMPROVEMENTS

FY23: Funded

- Surveys required for dredging - \$500K
- Lining wastewater pipes Park View Island - \$338,227
- Park View Sewer Rehab Phase I - \$640K

FY24: Funded

- Retrofit gravity stormwater treatment - \$200K
- Additional water quality study - \$75K
- Design of North Shore D (Town Center) Neighborhood Improvement Project - \$10M Grant
- North Beach Extended Area/ Park View Sewer Rehab Phase II - \$2.5M
 - Manholes - \$697K
 - Sanitary Sewer Evaluation Survey - \$1.35M
 - Closed Circuit Television Sewer Inspections - \$482K

FY25: Funded

- Retrofit gravity stormwater treatment - \$2M
- Dredge Canal - \$2M

FY27: Unfunded

- Construction/Replacement of stormwater/sanitary sewer - \$124.7M
(\$4M GOB Aboveground Components Funded)

RESOLUTION NO.

2024-32954

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, DIRECTING THE ADMINISTRATION TO PRIORITIZE, AS PART OF THE FY 2025 BUDGET PROCESS, FUNDING FOR IMPROVEMENTS TO ADDRESS THE WATER QUALITY CONCERNS RELATING TO THE PARK VIEW ISLAND CANAL.

WHEREAS, the City of Miami Beach is committed to maintaining and improving the quality of its waterways and Biscayne Bay as they are critical to environmental, economic, and recreational prosperity, and to the health, safety, and welfare of the citizens of the City of Miami Beach; and

WHEREAS, following a sanitary sewer overflow caused by a contractor in March of 2020, the high bacteria levels did not decrease to meet State parameters, and a "No Contact Advisory" has been issued for the Park View Canal Kayak Launch location since that time; and

WHEREAS, the City implemented various strategies to isolate potential sanitary sewer leaks, including multiple dye testing, deep cleaning of the stormwater lines, water quality testing throughout the stormwater system, sediment sampling in the canal, CCTV inspections, and smoke testing to determine potential illegal cross connections between private properties sewer lines and the City's stormwater system; and

WHEREAS, the City performed advanced gene biomarker analysis to identify fecal indicators for humans, dogs, or birds at locations within the canal, and the results of the analysis in 2020 and 2021 indicated that fecal coliform from dogs and birds were present at high concentrations in samples; and

WHEREAS, the City retained ESciences, a third-party consultant specializing in environmental investigations, to conduct a thorough analysis of the data which indicated more studies were necessary to draw conclusions in the data set, as trends could not be identified; and

WHEREAS, in light of the continued elevated levels, a proposal was presented for a specialized study in item R7M, sponsored by Commissioner Alex Fernandez on June 22, 2022 through which the City procured the services of Dr. Solo-Gabriele, Associate Dean for the University of Miami College of Engineering, a global water quality expert in evaluating microbes in water and sediments; and

WHEREAS, Dr. Solo-Gabriele and the University of Miami team conducted a four-month sampling study to help determine the geographic or point-source(s) of bacteria; and

WHEREAS, the study discovered that freshwater surface layer of the canal had

higher levels of bacteria, and that rainfall was the main predictor of poor water quality in the canal, with sediments from the canal shoreline, the streets, and sediments in catch basins, and shallow groundwater entering the canal from the 81-acre catchment area to the east and despite rigorous sanitary sewer testing, the system including private connections is aging and cannot be ruled out; and

WHEREAS, the study identified many sources contributing to degraded water quality including exotic and feral animal feces, the homeless population, dog waste, litter, and leaking dumpsters in commercial areas; and

WHEREAS, a community workshop was held in North Beach on January 24, 2023, and the draft final report with the study's recommendations was released via Letter to Commission (LTC) and on MBRisingAbove.com on January 23, 2023, for public comment through February 24, 2023; and

WHEREAS, City staff from several Departments have worked to address many of these findings by providing an increased level of services, and have developed an action plan that combines the study recommendations with actions that include both funded and unfunded items; and

WHEREAS, several impactful short-, mid- and long-term recommended actions were identified that include dredging within the Park View Canal to increase flushing and targeted stormwater and sanitary sewer infrastructure improvements; and

WHEREAS, the Environment and Sustainability department was allocated \$500K in funding in FY 2023 for Phase 1 of Park View Canal dredging which includes for planning, design, and permitting. The Department has procured and negotiated this work with a selected consultant and FY 2024/2025 tasks include pre-application meetings with environmental regulatory agencies, bathymetric survey, geotechnical analysis, hydraulic/flushing analysis, DERM/FDEP/ACOE permit application preparation, response to requests for additional information and permit issuance, construction plans and technical specifications, determination of probable cost to complete, and prepare bid package or assist the CMB in preparation; and

WHEREAS, the Environment and Sustainability department was allocated \$2 million in the FY 2024 - 2028 Capital Budget for Phase 2 of Park View Canal dredging with construction anticipated to be completed in FY 2026/2027; and

WHEREAS, the Public Works department was allocated \$510,000 in FY 2023 allocated funds and completed pipe lining to 95% of the gravity sanitary sewer pipes and 98% of the manholes in Park View Island and lining of Pump Station No. 23 in; and

WHEREAS, the Public Works department was allocated a total of \$2.5 million in FY 2024 for rehabilitation of manholes and additional pipe lining in the area east of Parkview Island (from 72nd St to 75th St) which contributes to the Park View system, lining of Pump Station No. 23, and 250 linear feet of force main replacement at Pump

Station 19 is anticipated to be completed in FY 2024. The Public Works department completed Park View Extended Area in January 2024, that consisted of lining every single pipe except a couple that were in great shape addressed all manholes needed rehabilitation.

WHEREAS, the Public Works department was allocated \$200K in FY 2023 for design and permitting and \$2M for construction to retrofit existing gravity stormwater system with water quality treatment devices to minimize litter and sediments from entering the waterway, anticipated to be completed in FY 2025;

WHEREAS, the North Beach Town Center- North Shore D Neighborhood Improvement Project will include design and replacement of the stormwater and sanitary sewer infrastructure in the catchment area; this would include outfall relocations and water quality treatment pump stations. The City was awarded \$10 million in Resilient Florida funding towards the design and an estimated \$124 million will need to be allocated for future construction, and

WHEREAS, on December 13, 2024 the City Commission authorized the City Administration to procure the services of Dr. Solo-Gabriele to conduct a post-study on the water quality in the Park View Island Canal, in order to determine whether the water quality has improved following the completion of proposed short-term remedial measures; and further, providing that the total amount of the post-study shall not exceed \$75,000; and

WHEREAS, the Environment and Sustainability Department has worked with Dr. Solo-Gabriele to finalize the scope of services for the study planned to be conducted during the summer of 2024; and

NOW, THEREFORE, BE IT DULY RESOLVED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, that the Mayor and City Commission hereby direct the Administration to prioritize, as part of the FY 2025 budget process, funding for improvements to address the water quality concerns within Park View Island Canal.

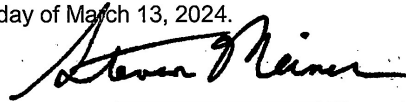
PASSED AND ADOPTED this ____ day of March 13, 2024.

ATTEST:



MAR 15 2024

Rafael E. Granado, City Clerk



Steven Meiner, Mayor

(sponsored by Commissioner Alex J. Fernandez)

APPROVED AS TO
FORM & LANGUAGE
& FOR EXECUTION


City Attorney

3-7-24
Date

MIAMI BEACH

COMMISSION MEMORANDUM

TO: Honorable Mayor and Members of the City Commission
FROM: Rafael A. Paz, City Attorney
DATE: March 13, 2024

SUBJECT: A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, DIRECTING THE ADMINISTRATION TO PRIORITIZE, AS PART OF THE FY 2025 BUDGET PROCESS, FUNDING FOR IMPROVEMENTS TO ADDRESS THE WATER QUALITY CONCERNS RELATING TO THE PARK VIEW ISLAND CANAL.

BACKGROUND/HISTORY

Was this Agenda Item initially requested by a lobbyist which, as defined in Code Sec. 2-481, includes a principal engaged in lobbying? No

If so, specify name of lobbyist(s) and principal(s): N/A

ANALYSIS

The attached Resolution was prepared at the request of the sponsor, Commissioner Alex Fernandez.

SUPPORTING SURVEY DATA

N/A

FINANCIAL INFORMATION

The sponsor of this item requests that the Administration be prepared to address the fiscal impact of this proposed measure as part of the FY2025 annual budget process.

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-14?

No

Does this item utilize G.O. Bond Funds?

No

Legislative Tracking

Office of the City Attorney

Sponsor

Commissioner Alex Fernandez

ATTACHMENTS:

Description

- Resolution



FROM THE OFFICE OF MIAMI BEACH

COMMISSIONER ALEX J. FERNANDEZ

PARK VIEW ISLAND CANAL WATER QUALITY IMPROVEMENTS

FY23: Funded

- Surveys required for dredging - \$500K
- Lining wastewater pipes Park View Island - \$338,227
- Park View Sewer Rehab Phase I - \$510K
 - Manholes - \$111K
 - Sanitary Sewer Evaluation Survey - \$399K

FY24: Funded

- Retrofit gravity stormwater treatment - \$200K
- Additional water quality study - \$75K
- Design of North Shore D (Town Center) Neighborhood Improvement Project - \$10M Grant
- North Beach Extended Area/ Park View Sewer Rehab Phase II - \$2.5M
 - Manholes - \$697K
 - Sanitary Sewer Evaluation Survey - \$1.35M
 - Closed Circuit Television Sewer Inspections - \$482K

FY25: Requested Funding

- Retrofit gravity stormwater treatment - \$2M
- Dredge Canal - \$2M

FY27: Unfunded

- Construction/Replacement of stormwater/sanitary sewer - \$124.7M
(*\$4M GOB Aboveground Components Funded*)