| <b>RESOL</b> | ON NOITU | • |
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A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AUTHORIZING 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.

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, since 2020, following a sanitary sewer overflow caused by a contractor, the water quality at the Park View kayak launch and canal has contained chronically elevated bacteria levels, and a "No Contact Advisory" has been issued for the Park View Canal Kayak Launch (the "Canal") 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,** 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, 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, there are several impactful short-, mid-, and long-term recommended actions that include dredging within the Park View Canal to increase flushing and target stormwater and sanitary sewer infrastructure improvements; and

**WHEREAS**, following the completion of proposed short-term remedial measures to improve the water quality in the Canal, the Mayor and City Commission wish to authorize the City Administration to procure the services of Dr. Solo-Gabriele to conduct a post-study on the water quality in the Canal in order to determine whether the water quality has improved, provided that the total amount of the study shall not exceed \$75,000.

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 authorize 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, provide that the total amount of the post-study shall not exceed \$75,000.

| PASSED AND ADOPTED this day of                     | , 2023.           |
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| ATTEST:  | Dan Gelber, Mayor |
| Rafael E. Granado, City Clerk                      | Dan Geiber, Mayor |
| (sponsored by Commissioner Kristen Rosen Gonzalez) |                   |

APPROVED AS TO FORM & LANGUAGE & FOR EXECUTION

City Attorney

4-17-27 Date