

MIAMI BEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

COMMITTEE MEMORANDUM

TO: Sustainability and Resiliency Committee

FROM: Jimmy L. Morales, City Manager

DATE: October 23, 2019

SUBJECT: **DISCUSSION REGARDING THE FREQUENCY OF WATER TESTING IN MIAMI BEACH**

BACKGROUND

On September 11, 2019, the Mayor and City Commission referred a discussion to the Sustainability and Resiliency Committee (SRC) regarding the frequency of water testing in Miami Beach.

ANALYSIS

Water testing in Miami Beach occurs for two different purposes. On the beaches, ocean waters are tested to determine whether they are safe for swimming and recreation. The data is used to inform whether a swim advisory is warranted. On the bay, the water is tested to determine the health of Biscayne Bay and inform the city's decisions in stormwater management and pollution prevention. The data is used to determine where staff time, resources and funding will provide the greatest environmental benefit.

Beach Sampling for Recreation

The Miami-Dade County Department of Health (DOH) collects weekly water quality samples in the Atlantic Ocean off of select beach locations as part of the Florida Healthy Beaches program (<http://www.floridahealth.gov/environmental-health/beach-water-quality/index.html>). In Miami Beach, the DOH collects samples at four established sampling points: the beaches in the vicinity of 1st Street, 21st Street, 53rd Street, and 73rd Street. At the request of the city, DOH also samples the ocean water in the vicinity of 81st Street. The samples are tested for enterococcus, a type of fecal indicator bacteria that is used to determine the potential presence of disease-causing organisms in salt water. The results of the tests are available 24 hours after they are collected and are used to determine whether a swim advisory is warranted.

If enterococcus levels are present above the State's recreational water quality standard of 35 CFU/100mL in a sample, the DOH will issue a swim advisory for the affected beach. The City immediately alerts visitors and residents of the swim advisory through e-mail, press releases, hand delivered notices, and posted signage. The DOH will re-test the affected location the following day and will lift a swim advisory once enterococcus levels test below the State's recreational water quality standard.

Bay Sampling for Stormwater Management

Water quality testing in Biscayne Bay is conducted monthly by Pace Analytical, Inc. and City of Miami Beach staff at approximately 35 stations citywide. These sampling locations were added voluntarily by the City as an extension of the larger Biscayne Bay sampling network, which Miami-Dade County has been monitoring on a monthly basis for more than 40 years. Consistent with the County's methodology, the samples are analyzed for physical (i.e., temperature), chemical (i.e., nutrients) and biological (i.e., enterococcus) parameters. City staff reviews the sampling results as they come in each month, as well as annually to inform stormwater management decisions.

CONCLUSION

The current water testing frequencies for the beaches and the bay are consistent with industry standards for their intended purpose. The Administration recommends continuing weekly testing for the beaches as part of the Florida Healthy Beaches program and monthly testing for the bay through the city's water quality monitoring program.

SMT/ESW/MK