

Memorandum



Date: August 6, 2013

To: Honorable Chairwoman Rebeca Sosa and Members
Board of County Commissioners

From: Carlos A. Gimenez
Mayor 

Subject: Ocean Outfall Legislation Compliance Plan

On June 28, 2013, the Miami-Dade Water and Sewer Department (WASD) submitted an Ocean Outfall Compliance Plan to the Secretary of the Florida Department of Environmental Protection, in accordance with Section 403.086(9)(e)(1), Florida Statutes. The Plan is available at: <http://www.miamidade.gov/water/>

In 2008, the Florida Legislature approved and the Governor signed a law requiring all wastewater utilities in southeast Florida utilizing ocean outfalls for disposal of treated wastewater to reduce nutrient discharges by 2018, cease using the outfalls by 2025, and reuse 60% of the wastewater flows by 2025. The statute was amended in 2013 to provide greater flexibility to meet the reuse requirements and to allow continued use of the outfalls for managing peak sewage flows not to exceed 5% of the annual baseline flows. The statute requires the affected utilities to submit a preliminary compliance plan by July 1, 2013.

WASD has analyzed several compliance options. Each option includes additional system capacity to meet average daily and peak flow demands anticipated in 2035. Each option includes additional treatment that is required to achieve reuse standards or disposal standards. This draft plan was presented to the community at an advertised meeting on June 5, 2013.

The proposed alternative includes a new West District Wastewater Treatment Plant with an average daily flow of 102 million gallons per day, reduced daily flows at the North and Central District Plants, and additional capacity at the South District Plant as previously planned. This approach recognizes physical site constraints at the North District Plant location and reduces storm surge risks by moving substantial treatment capacity to the west where storm surges are not an issue, while avoiding premature investment in completely replacing treatment capacity at coastal facilities that may not be required in the long term. In addition, the proposed alternative places treatment closer to locations of flows originating from the west to reduce pumping requirements and utilization of the ocean outfalls (at the North and Central District Plants) for more cost-effective peak flow management. The total capital cost of compliance for the proposed alternative is \$3.3 billion; however, the overall capital cost including provisions for growth is \$5.2 billion which is included in WASD's \$12.6 billion 15-Year Multi-Year Capital Plan.

The Outfall Statute requires reuse of 117.5 million gallons of treated wastewater per day which is 60% of the sewage flows previously discharged through the outfalls at the North and Central District Wastewater Treatment Plants as required by the Ocean Outfall Statute. This will be accomplished through a contract with Florida Power and Light to provide up to 90 million gallons per day of reuse water for cooling purposes at their Turkey Point facilities. An additional 27.5 million gallons per day of reuse water will be used to replenish the Floridan aquifer at the Central, South, and West District Wastewater Treatment plants.

Reuse is not needed to meet drinking water supply needs until at least 2035, according to current demand forecasts made by WASD and the South Florida Water Management District.

Detailed design and construction of the facilities is likely to require an 8 to 10 year time period. While provisions were made in the Outfall Statute to give priority to outfall projects for state project funding, state appropriations to fund water projects have not yet materialized, and the mandate remains unfunded at the state level. Revenue bonds will be the major funding source for these improvements in the absence of state and federal assistance. A more detailed financial plan will be prepared as part of the Consent Decree requirement for a financial plan as well as the department's regular updates of the Multi-Year Capital Improvements Plan.

This preliminary plan will be reviewed by the Florida Department of Environmental Protection to determine compliance with the requirements of the Outfall Statute. An update of the plan is due to the Florida Department of Environmental Protection no later than July 1, 2016. A more detailed implementation plan will need to be in place by that time, including actual construction of some plan components, to assure that the 2025 deadline is met.

Should you have any questions or require further information please contact WASD Director John W. Renfrow, P.E., at 786-552-8086 or me directly at 305-375-1880.

c: Alina T. Hudak, Deputy Mayor
Ed Marquez, Deputy Mayor
John W. Renfrow, P.E., Director, Miami-Dade Water and Sewer Department
Jennifer Moon, Director, Office of Management and Budget