CAPITAL IMPROVEMENT PROGRAM (CIP)

Miami-Dade Water and Sewer Department (WASD) is the largest water and sewer utility in the southeastern United States, serving 2.3 million residents and thousands of tourists daily. WASD staff works 24/7 providing continuous delivery of high quality water and wastewater services that protect public health and the environment, while complying with all regulatory requirements.

In order to continue its vision, WASD has planned a systematic and responsible Multi-Year $13.5 billion CIP during the next 15 to 20 years. This plan will provide necessary upgrades to the system.

The following programs outline improvements and investments in infrastructure that WASD will implement to serve the Miami-Dade community while improving quality of life and creating jobs.

CONSENT DECREE PROGRAM MANAGEMENT CONSTRUCTION MANAGEMENT (CD-PMCM)

On April 9, 2014, the United States District Court for the Southern District of Florida authorized a Consent Decree between Miami-Dade County, the United States of America, the State of Florida, and the Florida Department of Environmental Protection, for improvements to the County’s wastewater collection and treatment system. During the past five (5) years, a number of aging pipeline failures has resulted in numerous sanitary sewer overflows. The Consent Decree requires a number of operational and maintenance improvements in accordance with the EPA’s Capacity, Management, Operations and Maintenance Program (CMOM) guidelines.

Program Description

- Complete tasks required by the Consent Decree that calls for expenditures in the amount $1.6 billion for improvements during a 15 year period.
- Develop and implement a comprehensive and technically sound long-term CMOM Program.
- Manage the design, procurement, construction, and commissioning of the 81 capital projects required in the Consent Decree.
- Ensure that the program components are technically, economically, and functionally consistent and are implemented in a manner that meets the specific deadlines and milestones of the Consent Decree and the requirements of the Clean Water Act, WASD’s National Pollutant Discharge Elimination Systems Permits, Florida Department of Environmental Protection regulations, and any additional applicable regulatory requirements.
- Establish a Small Business plan that will identify Community Small Business Enterprises (CSBE) available for trades needed for projects and for overall small business participation.
- Establish a Local Workforce program that will identify skills, trades and other job classifications for participation by local Miami-Dade residents.
OCEAN OUTFALL LEGISLATION PROGRAM (OOL)

In 2008, the Florida Legislature approved and the Governor signed a law requiring that all wastewater utilities in Southeast Florida that use ocean outfalls to dispose of treated wastewater to: reduce nutrients discharges by 2018, cease the use of outfalls by 2025, and reuse 60 percent of the wastewater flows by 2025. As a result of this mandate, Miami-Dade Water and Sewer Department (WASD) is implementing systemwide wastewater facility upgrades through the Ocean Outfall Legislation (OOL) Program. These upgrades include building one new wastewater treatment plant and reducing flows to two existing treatment plants.

Program Description

- Complete tasks required by the OOL with an investment of $3.3 billion during an 11 year period.
- Manage the design, procurement, construction and commissioning of 28 capital projects.
- Design and construct a 102 million gallon per day (mgd) West District wastewater treatment plant.
- Implement systemwide wastewater system improvements.
- Establish local workforce program with community leaders and partners.
- Implement a business plan that will identify and encourage Community Small Business Enterprises (CSBE) to provide the trade support needed for project implementation.
- Ensure that program components are technically, economically, and functionally consistent and are implemented in a manner that meets the deadlines and milestones of the OOL.

PUMP STATION IMPROVEMENT PROGRAM (PSIP)

In 2013, the Miami-Dade Water and Sewer Department (WASD) implemented a Pump Station Improvement Program (PSIP) to upgrade the County’s Wastewater Collection and Transmission System (WCTS) that includes sanitary sewer collection system, pump stations and force mains. As mandated by the United States Environmental Protection Agency, pump stations need to meet an established nominal operating time of less or equal to 10 hours per day, as well as other established criteria, and set completion deadlines. These upgrades include the design and construction of 112 existing pump stations and 24 related force mains.

Program Description

- Complete a total of 136 pump station and force main projects, and sanitary sewer collection system repairs in the amount of $212 million for the five year improvement program.
- Rehabilitate pump stations, force main and gravity lines (Infiltration and Inflow) to certify to EPA standards to ensure the program components are technically, economically, and functionally consistent and are implemented in a manner that meets the specific deadlines and milestones.
- Manage the design, procurement, construction and commission of the 112 pump stations so they operate within the required parameters.
- Coordinate work with OOL and CD-PMCM programs.