

MIAMI-DADE WATER AND SEWER DEPARTMENT ALTERNATIVE WATER SUPPLY MASTER PLAN

Client Name: *Miami-Dade Water & Sewer Department/CDM (Prime)*

Type of Service: *Water Master Plan*

The Miami-Dade Water and Sewer Department (MDWASD) selected the team of Milian, Swain & Associates, Inc. (MSA), Camp, Dresser & McKee, Inc., and CH2M HILL, and tasked the team to update its Water Facilities Master Plan. The scope of services includes, but is not limited to the following:

- Forecasting of average, maximum day and maximum hour flows for the entire water system for a 20-year planning horizon, including volume water customers
- An analysis of raw water supply, including groundwater modeling, water treatment, and finished water transmission
- Review of all pertinent legislative and regulatory requirements and an assessment of their impacts
- Transmission system analysis to identify projected growth including supply, treatment, high service pumping and major transmission lines
- Evaluation of system storage including the use of elevated storage in the event of high service pumping failures
- Evaluation of system upgrades to minimize system pressure during drought conditions
- Evaluation of the applicability of a model for the optimization of recommended facilities
- Prepare a Master Plan that meets all the requirements stipulated in the State of Florida Department of Environmental Regulation Revolving Loan funding, including but not limited to providing a detailed cost-effectiveness analysis for raw water supply, treatment and transmission systems, environmental assessment of the impact of the recommended plan, and a capital financing plan
- Coordination with other ongoing related planning efforts and resulting facilities, including the WASD Reuse Feasibility Study, South Florida Water Management District's Lower East Coast Regional Water Supply Plan, Wastewater Facilities Master Plan Update including Peak Flow Management Plan and the Miami-Dade County (County) Comprehensive Development Master Plan.
- Cost Estimates and Scheduling of the implementation of all recommended facilities.
- Presentation to a County Committee and various regulatory agencies.

As part of the team, MSA is responsible for taking the lead role in Stakeholder/Regulatory Coordination, the Capital Financing Plan, and providing the tie-in to MDWASD's current Reuse Feasibility Study. In addition, MSA is also responsible for providing technical assistance and review of those tasks where CDM and CH2MHILL have the lead role.

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MSA has already participated in the following tasks:

- Alternative Water Supply Investigation and Water Use Permitting Assistance
- Conduct investigation and prepare TM for recharge projects evaluation for South Miami Heights Wellfield and Conceptual-Level Barrier Submittal
- Provide assistance in evaluating future demands
- Attend periodic Working Group meetings
- Prepared TM – Alternative Water Supply and Water Use Permitting Assistance, Stormwater Storage and Recharge Options
- Prepare portions of Wellfield Operational Plan identifying wellfield capacities, limitations, well sites