



Water & Wastewater Master and Facility Planning

Engineering and Construction Department

Tom Hilton, Planning Division Manager

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Agenda

1. Program Team
2. Goals and Objectives
3. Scope of Work
4. Keys to Success
5. Questions

Program Team

WSSC Water Program Team

Planning Division

Tom Hilton, Planning Division
Manager

TBD – Program Manager (Water)

TBD – Program Manager
(Wastewater)

Team Members

Departments and Divisions across
WSSC Water

- Engineering & Construction
- Production
- Operational Reliability and Resilience
- Utility Services
- General Services
- Police and Homeland Security
- County Staff

Goals and Objectives

Goals and Objectives

- In recent history, the Asset Management Program was driving recommendations for new Capital Improvement Plan programs and projects
- Prior to that, Facility Plans were the driver
- In the future, WSSC Water will be performing Master Planning and Facility Planning that will identify long, medium, short and immediate needs for placement into the Capital Improvement Plan Program annually
- The objective is to consolidate and expand upon all past and ongoing efforts associated with water and wastewater planning and to supplement and enhance this work to develop two comprehensive 20-Year Master Plans; one for the entire water system and one for the wastewater system as well as 10-Year Facility Plans
- To be living documents and updated continuously
- To be accomplished through 2 separate contracts (Water & Wastewater)

Scope of Work

Scope of Work – Water Contract



20-Year Water Master Plan

- Long-term, higher-level Planning Document
- To encompass the entire Water System as well as Support Buildings and Grounds

10-Year Elemental Facility Plans

- Much more detailed than Master Plans
- Not Traditional Facility Plans
- Water Supply Systems and Treatment (Potomac River, Patuxent Reservoirs and Dams, Potomac Water Filtration Plant, and Patuxent Water Filtration Plant)
- Finished Water Delivery System (Transmission, Pumping, Storage, Distribution)
- Support Buildings and Grounds (Depots, Lab, Support Center, Fleet Maintenance, Warehouse)
- Evaluation of Alternatives and Recommendations for inclusion in the Capital Improvements Program (CIP)

Past and On-Going Planning

- Water Modelling, Production Projections, Water Audit, Water Quality and Treatment Master Plan, Regional Water Supply Planning, County Water and Sewer Plans, Source Water Protection, Asset Management Program, Building Renovation Planning, and Risk and Resilience Assessment

Scope of Work – Wastewater Contract

20-Year Wastewater Master Plan

- Long-term, higher-level, Planning Document
- To encompass the Entire Wastewater System as well as Biosolids Management

10-Year Elemental Facility Plans

- Much more detailed than Master Plans
- Not Traditional Facility Plans
- Treatment and Biosolids Management (Parkway, Western Branch, Piscataway, Seneca, Damascus, Hyattstown)
- Conveyance (Collection, Pumping, Wet Weather Storage,)
- Evaluation of Alternatives and Recommendations for inclusion in the Capital Improvement Plan

Past and On-Going Planning

- Sewer Modelling, Flow Projections, Biosolids Master Plan, Water Reuse Feasibility Studies, County W&S Plans, Asset Management Program, Infiltration & Inflow Investigations, Optimatics Sewer Basin Evaluations, Climate Change Study, and Risk and Resilience Assessment

Scope of Work – General

Facility Plan shall incorporate the following:

- Filling in data gaps – condition assessments, etc.
- Performance assessments of processes and systems
- Evaluate Inflow and Infiltration (I/I) and recommend solutions for reduction
- Reduce business risk exposures
- Provide exceptional level of service while sustaining operational efficiency
- Enhance reliability and resilience
- Maximize system performance
- Comply with service and regulatory mandates
- Protect the health and safety of customers, employees, and the environment
- Maintain state of good repair of WSSC Water’s assets and systems
- Implement WSSC Water’s strategic initiatives, plans and policies
- Advance Prince George’s and Montgomery counties’ priorities.
- Incorporate diversity, equity, inclusion, and environmental justice
- Incorporate physical and cyber security to critical assets
- Consider new technologies and methodologies
- Consider research to evaluate innovative approaches

Keys to Success

Keys to Success

- Strong experience with developing master plans and facility plans
- Ability to thoroughly review, comprehend, and evaluate all planning-related work completed and currently underway within WSSC Water
- Ability to dedicate a team to complete all master planning and facility planning on schedule
- Ability to fully and actively engage all WSSC Water staff within all Departments and Divisions for full participation
- Ability to incorporate the WSSC Strategic Plan in all aspects of the two master plans



Questions?

Submit your questions to supplierdiversity@wsscwater.com

For past event's presentations and sign in sheets, visit www.wsscwater.com/work-us/procurement/outreach-events

