Department of Watershed Management
ENGINEERING AND CONSTRUCTION MANAGEMENT SERVICES
Who we are

Department of Watershed Management
Scott A. Towler, PE

Construction and Maintenance Operations
- Water Treatment
- Water Reclamation
- Distribution Systems
- Collection Systems
- Pump and Lift Stations Management
- Warehouse Services
- Maintenance Operations

Administration and Finance
- Communications
- Finance
- Utility Customer Operations
- Performance and Accountability

Engineering and Construction Management Services
- Program Management
- Construction Management
- Design Services
- Technical Services
- Planning and Development
What we do

- Produce safe, clean drinking water
- Distribute drinking water to customers
- Collect wastewater from customers
- Treat wastewater and return to the environment
Reorganization

- **Refocus priorities to:**
  - Improve efficiencies by combining redundant services
  - Enhance public health and safety and environmental compliance
  - Ensure fiscal responsibility by prioritizing work flows and project delivery
  - Provide training and promotional opportunities for employees
  - Recruit and retain employees for new roles
Why is this needed?

- CIP – Contract management, engineering services, design, construction
- CDP – Contract management, engineering services, design, construction
- EAM – Contract management, engineering services, design, construction
- Compliance – Reporting and tracking of CD milestones, FOG Program, Backflow Program, engineering design reviews and approvals, etc.
Consolidation

Capital Improvements Program
Consent Decree Program
Engineering and Asset Management
Compliance

Engineering and Construction Management Services
ECM Services

Engineering and Construction Management Services

- Engineering Services
  - Program Management
  - Consent Decree
  - Capital Improvements
  - Renewal and Replacement
  - Modeling
    - Capacity Certifications
    - Flow monitoring
  - Design Services

- Technical Services
  - Construction Inspections
  - GIS Services
  - Utility Locates
  - Manhole Inspections and Survey
  - CCTV Review and Inspections

- Planning and Development
  - Plan Review
    - Engineering design review and approvals
  - FOG approvals and inspections
  - Backflow prevention approvals and inspections
Capital Improvement Program

- **Goal**
  - Maintain and preserve the County’s assets through renewal and extension

- **Implemented**
  - Condition assessment
  - Rehabilitation or replacement as needed
  - Adding assets to increase capacity

- **Includes**
  - Consent Decree Projects
  - Asset management rehab and replacement
  - Other water and treatment system projects
Consent Decree Program

- Federally mandated
- Goals met in 2015
- Milestones will be met in 2016
  - Lift stations - Columbia, Leeshire, Honey Creek, Lithonia
  - WAM work order implementation
  - Cost tracking, life cycle analysis
  - Warehouse improvements
  - Staff training requirements
CIP Projects

- **Move forward with critical water main rehab and replacement**
  - Repeated breaks
  - Continuous water quality problems
  - Maintain required pressures and quantity for fire flow

- **2016 Focus on IGA Projects**
  - Coordinate with other departments and agencies
  - Leverage joint projects
    - Repaving projects
      - GDOT 4-mile repaving project in Clarkston
    - Streetscape projects
  - Saves time and money and aggravation!
    - Cost share on repaving, excavations, etc.
    - Less disruption to citizens
      - Don’t have to dig twice
      - Avoid repeats of the Downtown Decatur Project
Remaining Projects

- **Need reevaluation**
  - Changes in growth projections and high density areas

- **Assess best use of funds**

- **Reprioritize needs**
  - Asset condition
  - Capacity requirements

- **Must develop a Water and Sewer Capacity Master Plan (W&SCMP)**!
Water and Sewer Capacity Master Plan

- **Provide a roadmap for a 20+ year planning horizon, updated regularly**

- **Provide goals to:**
  - Protect public health, quality of life, and the environment and comply with existing regulations
  - Be leaders in stewardship of water resources (conservation, reuse, consumptive use, etc.)
  - Proactively plan for water and sewer capacity to support economic development
  - Develop strong maintenance and rehabilitation programs to improve reliability and lower costs
  - Coordinate with stakeholders
  - Provide a high level of service at a responsible cost (with effective and efficient management)
  - Employ responsible long-term planning and financing for major projects
  - Provide opportunities for leadership and coordination with the Metro Water District and the State
Project Prioritization

- **Will use a Triple Bottom Line (TBL) approach**
  - Social benefits and impacts
    - Greenspace, streetscapes
    - Truck traffic, odors, noise
  - Environmental benefits and impacts
    - Sustainability
    - Compliance with regulations
  - Economic
    - Funding
    - Economic growth drivers
    - O&M impacts
W&SC MP Schedule

- Data gathering phase
- Coordination with Stakeholders
  - County departments
  - Cities
- Draft plans needed by end of 2016
Project Delivery

- **Various methods available**
  - In-house
    - Lower costs
    - Slow construction
    - Insufficient construction crews available
  - Design – Bid – Build
    - Slower process – many steps needed
    - Construction costs higher but lowest of outsourced methods since design is 100% (little unknowns)
  - Design/Build
    - Higher cost (more unknowns)
    - Fastest project delivery
    - D/B Contractor holds warranty and most liability
  - Construction Manager at Risk (CMAR)
    - Highest costs
    - CMAR Contractor holds liability
    - Moderate timeframe for delivery
2016 Focus

- Delivery of Consent Decree and critical projects
- Delivery of Master Plan major issues
- Prioritized ranking of CIP projects