Water Management
(329 FTEs)

- Office of Director
  (2 FTEs)
  - Utility Finance Manager
    (2 FTEs)
    - Business Operations
      (2 FTEs)
      - Customer Billing Services
        (25 FTEs)
    - Assistant Director Operations & Administration
      (5 FTEs)
      - Water Supply & Treatment
        (39 FTEs)
        - Wastewater Treatment & Laboratory
          (40 FTEs)
    - Utility Engineering
      (13 FTEs)
      - Regulatory Compliance
        (12 FTEs)
  - Assistant Director Maintenance
    (2 FTEs)
    - Plant Maintenance
      (49 FTEs)
      - Systems Maintenance & Construction
        (108 FTEs)
    - Meter Maintenance
      (30 FTEs)
WATER MANAGEMENT

Mission:
To deliver cost-effective water and sewer services in full compliance with all legal and regulatory requirements while meeting the community’s expectations for level of service and fiscal accountability. The department’s core services provide for the protection of public health and safety through effective resource management, infrastructure maintenance, adequate fire flows, environmental protection and natural resource management.

DEPARTMENT DESCRIPTION

Water and Sewer Fund: $40,490,270
328.5 FTEs

Solid Waste Fund: $277,726
0.5 FTE

The Department of Water Management provides critical, essential services necessary for public health and safety by providing water that is safe to drink and use for other key purposes, including fire protection. Additional critical functions include ensuring sustainable and reliable operations and maintenance of water supply and water and wastewater treatment facilities. Wastewater collection and treatment are core services that not only protect the public’s health and safety but also the environment. By delivering these core services, the department supports the City’s goals of maintaining a strong and diverse economy, providing a safe and secure community and thriving, livable neighborhoods. Attention to security for both water and wastewater facilities and systems remains an integral part of operations for reliable short and long term needs. Long range planning for expanding water resources and treatment capacities contributes to a sustainable, well-managed City. The department champions the City’s goal of stewardship of our physical assets through effective maintenance and improvement activities. The department pursues self-evaluation, benchmarking opportunities and other sound business practices in an effort to remain competitive with other cities and utilities, while promoting a positive image for the City and the services provided. Support for expanded automation of plant operations continues with the goal of maximizing chemical and power efficiencies, even in an environment of more stringent regulatory requirements and escalating energy costs, while improving reliability and maximizing staff deployment. Efforts to develop new sources of revenue include initiatives such as landfill gas development and use, as well as contract and reclaimed water sales. The department is committed to ensuring that Durham citizens live and work in a well-managed City with an efficient and accountable city government. Implementation of the 2005 Bond package will continue to be a focus for the next several years to promote stewardship of the City’s physical assets. Staff will continue to develop appropriate tools to expand departmental financial management strategies.

Administrative

Administration

Administration is tasked with the management, oversight and planning processes necessary for providing adequate water resources and treatment capacity as well as wastewater facilities to meet the needs of a growing community and providing the foundation for a prosperous economy. Personnel are responsible for the fiscal management of the Water and Sewer fund and administering a broad range of environmental programs to ensure that citizens are safe, enjoy a prosperous economy and healthy environment, and have an efficient and accountable government. These efforts provide critical services to the citizens of Durham related to water quality, wastewater treatment and industrial/commercial activity. Administrative staff is also responsible for coordinating public education/information activities and customer outreach programs.

Customer Billing Services

A core service area, this division is the first point of contact for most customers. Staff provides billing services for the utility, respond to customer inquiries, establish new accounts and authorize water and sewer connections and disconnections. Employees in the field services unit provide connection and disconnection services. With the implementation of Automated Meter Reading (FY10 and beyond), staff will transition to providing monthly billing for all customers.
Regulatory Compliance

This division provides a core service by addressing regulatory compliance issues, tracking legislative issues, and administering the City’s Industrial Waste Pretreatment/Fats, Oil and Grease Program that enforces the City’s Sewer Use Ordinance as well as the Cross Connection Control program which further insures the protection of the potable water system. The Water Conservation Program continues to have increased visibility with the implementation of the year-round water irrigation measures, administration of the water efficiency rebate programs and expanded advertising/marketing of water efficiency programs and practices.

Operations

Water Supply and Treatment

This core service area is responsible for providing a safe, reliable, economical and sufficient supply of water to the citizens of Durham City and County. Through optimizing treatment processes, maximizing water transfer strategies and conducting monitoring activities, staff ensures that adequate supplies of consistently high quality drinking water are available. The Water Supply and Treatment Division operates and maintains two conventional water treatment facilities with a combined treatment capacity of 52 million gallons per day (MGD), and two surface water reservoirs with a combined safe yield of 37 MGD. Certified staff operates equipment and adjust treatment technologies to optimize the physical and chemical processes vital for effective water treatment and selects pumping scenarios to assure adequate supplies at economical costs.

Wastewater Treatment and Laboratory

This core service area provides the citizens of Durham with cost effective wastewater treatment and residuals management. This service is accomplished by efforts of certified staff to optimize the treatment processes so that the North Durham and South Durham facilities discharge consistently high quality effluent in compliance with State permit requirements. The North and South Durham workgroups operate and maintain state-of-the-art tertiary treatment facilities, each with a permitted capacity of 20 MGD. North Durham personnel assist with the department’s monitoring activities related to landfill post closure monitoring and management of the landfill gas collection system. The Laboratory Services Section of the department, located at the South Durham Facility, provides lab analysis for the water, wastewater, industrial waste and stormwater programs. This ensures that citizens enjoy an efficient and accountable city government while assuring that drinking water meets state and federal standards and that wastewater discharges meet permit limits which protect downstream users. This cost center also includes wastewater treatment expenses for city wastewater flows treated at the County wastewater treatment plant and the Orange Water and Sewer Authority facility.

Maintenance

This core service area provides the citizens of Durham with cost effective maintenance of water and sewer infrastructure including the distribution and collection systems, raw water lake facilities, water treatment and water reclamation facilities, pump stations and elevated storage tanks.

Systems Maintenance and Construction

The Systems Maintenance and Construction division provides routine and emergency maintenance to the water distribution and wastewater collection systems as well as the installation of new service lines. Tasks include the inspection, cleaning and repairing of water mains and sewer trunk lines. This division also operates and maintains fire hydrants and water valves, and installs and repairs water and sewer service connections. The Meter Shop is responsible for reading water meters and providing routine and emergency response to water meter problems, including leaks, unusual consumption rates and water pressure concerns. This division will transition to monthly meter reading with the on-going implementation of the Automated Meter Reading program.

Plant Maintenance

Plant Maintenance provides both major corrective maintenance and minor construction support for water and wastewater facilities, pump stations and other facilities. This division also has responsibility for long-term maintenance of the closed landfill. Expenses for support services are apportioned to the appropriate core services of water and wastewater as they relate to performance indicators.
Engineering

Utility Engineering

Utility Engineering manages the ongoing evaluation and improvement of departmental facilities and engineering projects for water and wastewater facilities as a part of the Capital Improvements Program. This unit also provides water distribution and wastewater collection system monitoring and analytical support necessary for detecting inflow and infiltration problems. The program also has oversight of manhole rehabilitation and replacement projects, supplemental flow studies and major pipeline reconstruction and renewal services for both the water distribution and wastewater collection systems.

Post-Closure Monitoring

This service area provides oversight for the monitoring and maintenance of the closed landfill and is supported by the Solid Waste Fund. With the implementation of the landfill gas to power project, there is now a revenue stream associated with this function.

| RESOURCE ALLOCATION |
|---------------------|-----------------|-----------------|-----------------|-----------------|
|                     | Actual          | Adopted         | Estimated       | Adopted         |
|                     | FY 2009-10      | FY 2010-11      | FY 2010-11      | FY 2011-12      | Change          |
| Appropriations      |                 |                 |                 |                 |                 |
| Personal Services   | $17,138,825     | $18,806,167     | $18,348,281     | $20,047,443     | 6.6%            |
| Operating           | 15,514,732      | 20,521,074      | 20,424,156      | 20,566,553      | 0.2%            |
| Capital             | 124,782         | 448,874         | 91,237          | 154,000         | -65.7%          |
| Total Appropriations | $32,778,339     | $39,776,115     | $38,863,674     | $40,767,996     | 2.5%            |
| Full Time Equivalents | 312            | 317             | 317             | 329             | 12              |
| Part Time           | -               | -               | -               | -               | -               |
| Revenues            |                 |                 |                 |                 |                 |
| Water & Sewer Fund  | $32,558,392     | $39,557,794     | $38,645,356     | $40,490,270     | 2.4%            |
| Solid Waste Disposal Fund | 219,947      | 218,321         | 218,318         | 277,726         | 27.2%           |
| Total Revenues      | $32,778,339     | $39,776,115     | $38,863,674     | $40,767,996     | 2.5%            |

DEPARTMENT PROGRAMS & PERFORMANCE MEASURES

ADMINISTRATION: Water and Sewer Fund: $1,696,407
13 FTEs

GOAL: Thriving Livable Neighborhoods & Stewardship of the City’s Physical Assets

1. OBJECTIVE: To sustain the community’s drinking water needs by maintaining water demand/supply capacity ratio at 80% or less.

   STRATEGY: To monitor annual demands, track daily and monthly demands and trends and project future raw water demands to meet system growth needs. Initiate planning for future expansion and/or increased allocation prior to reaching 80% benchmark.

   MEASURE: Average annual flow as a percentage of rated capacity
   
<table>
<thead>
<tr>
<th>Actual</th>
<th>Adopted</th>
<th>Estimated</th>
<th>Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2010</td>
<td>FY 2011</td>
<td>FY 2011</td>
<td>FY 2012</td>
</tr>
<tr>
<td>66.3%</td>
<td>&lt;80%</td>
<td>70%</td>
<td>&lt;80%</td>
</tr>
</tbody>
</table>

GOAL: Thriving Livable Neighborhoods & Stewardship of the City’s Physical Assets
1. **OBJECTIVE:** To preserve adequate wastewater treatment capacity for community needs by maintaining treatment plant discharges/treatment plant capacity ratio at 80% or less.

**STRATEGY:** Track monthly discharge flows and trends and monitor treatment flows as a percentage of the rated capacities and project future system needs for capacity and process treatment. Initiate planning for expansion or upgrades prior to reaching 80% benchmark.

<table>
<thead>
<tr>
<th>MEASURE: Average annual flow as a percentage of rated capacity</th>
<th>Actual FY 2010</th>
<th>Adopted FY 2011</th>
<th>Estimated FY 2011</th>
<th>Adopted FY 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50.9%</td>
<td>&lt;80%</td>
<td>55%</td>
<td>&lt;80%</td>
</tr>
</tbody>
</table>

**CUSTOMER BILLING SERVICES**

**GOAL: Well-Managed City**

1. **OBJECTIVE:** To provide accurate and timely billing for water and sewer services of the utility by maintaining billing accuracy of 99% or greater and ensuring that no bills are mailed/billed to customers with higher dollar amount error greater than 50% of normal bill.

**STRATEGY:** Institute reports, develop and/or conduct reviews and monitoring of processes to evaluate bills prior to billing customers.

<table>
<thead>
<tr>
<th>MEASURE: Billing accuracy rate (errors over 50% of the correct bill)</th>
<th>Actual FY 2010</th>
<th>Adopted FY 2011</th>
<th>Estimated FY 2011</th>
<th>Adopted FY 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>99.69%</td>
<td>99.8%</td>
<td>99.91%</td>
<td>99.8%</td>
</tr>
</tbody>
</table>

**GOAL: Well-Managed City**

1. **OBJECTIVE:** To enhance and increase customer responsiveness by resolving issues upon first contact with the office and reducing the percent of accounts/customers whose issues are not resolved with the first contact and are escalated to a Supervisor level or above.

**STRATEGY:** Provide additional training and individual follow-up with each issue that is not resolved on first contact.

<table>
<thead>
<tr>
<th>MEASURE: # of Customers contacting office more than once concerning same issue</th>
<th>Actual FY 2010</th>
<th>Adopted FY 2011</th>
<th>Estimated FY 2011</th>
<th>Adopted FY 2012</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>TBD</td>
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</table>

**GOAL: Well-Managed City**

1. **OBJECTIVE:** Enforce ordinances and collection policies for water and sewer services and reduce the number of accounts delinquent more than 60 days to less than 10% of accounts billed.

**STRATEGY:** Aggressively enforce cut-offs for non-residential accounts. Review aging reports to monitor effectiveness of cut-off strategy.

<table>
<thead>
<tr>
<th>MEASURE: % of Accounts delinquent more than 60 days</th>
<th>Actual FY 2010</th>
<th>Adopted FY 2011</th>
<th>Estimated FY 2011</th>
<th>Adopted FY 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;10%</td>
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</table>

**PLANT MAINTENANCE**

**GOAL: Stewardship of City’s Physical Assets**

Water and Sewer Fund: $2,437,979 25 FTEs

Water and Sewer Fund: $4,270,758 49 FTEs
1. **OBJECTIVE:** To provide both maintenance and minor construction support of water and water reclamation facilities, pump stations and other Department facilities and structures by developing and creating an asset management system and culture that increases the availability of the facilities to efficiently and effectively produce safe, high quality drinking water and return reclaimed water back to the environment.

**STRATEGY:** Manage the spare parts inventory and backlog of work at the facilities to increase availability of the equipment.

**MEASURES:**

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<tbody>
<tr>
<td>% Inventory accuracy (random sampling test)</td>
<td>N/A</td>
<td>N/A</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>Ratio of the total # of work orders completed in a month to the total # of work orders generated per month</td>
<td>N/A</td>
<td>N/A</td>
<td>0.5</td>
<td>1</td>
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</table>

**REGULATORY COMPLIANCE**

**Water and Sewer Fund:** $1,437,167
12 FTEs

**Industrial Waste Pretreatment/FOG Program**
3.66 FTEs

**GOAL:** *Thriving Livable Neighborhoods & Stewardship of City’s Physical Assets*

1. **OBJECTIVE:** To protect the City’s sanitary sewer collection system and water reclamation facilities through proper implementation of the Pretreatment Program and Sewer Use Ordinance by managing users of the Sanitary Sewer system so that their discharges do not adversely impact the sewer system or the receiving wastewater treatment facilities.

**STRATEGY:** Conduct inspections and review analytical results of monitoring conducted by the City and Industrial Users for compliance with permits and the City’s Sewer Use Ordinance (SUO), conduct follow-up and enforcement activities as necessary.

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<tbody>
<tr>
<td>% of Users in compliance with permit limits and/or SUO (target ≥ 95%)</td>
<td>95%</td>
<td>95%</td>
<td>95%</td>
<td>95%</td>
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**Cross Connection Control**
4.66 FTEs

**GOAL:** *Stewardship of City’s Physical Assets*

1. **OBJECTIVE:** To protect the City’s potable water supply by implementing and enforcing the City’s Cross Connection Control Ordinance and to achieve 90% compliance with annual backflow preventer (BFP) testing as mandated by the City’s Cross Connection Control Ordinance.

**STRATEGY:** Maintain database, conduct inspections, mail notices and review test and maintenance submittals monthly to ensure compliance with ordinance requirements.

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<tbody>
<tr>
<td>% of BFP owners conducting &amp; submitting reports as required</td>
<td>80%</td>
<td>85%</td>
<td>85%</td>
<td>90%</td>
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</tbody>
</table>

**Water Efficiency/Conservation**
3.68 FTEs

**GOAL:** *Thriving Livable Neighborhoods & Stewardship of the City’s Physical Assets*
1. **OBJECTIVE:** To promote water efficient behaviors and practices among all customers to reduce demands (or reduce increases in demands) on the City’s water supplies and treatment facilities, achieving customer compliance of 95% or better with City’s year round irrigation schedule.

**STRATEGY:** Educate customers regarding all aspects of the Water Efficiency Ordinance, manage and implement the Alternate Day Irrigation Schedule during normal weather conditions by deploying Conservation Field Assistant daily.

<table>
<thead>
<tr>
<th>MEASURE: Customer compliance with irrigation scheduled (target ≥ 98%)</th>
<th>Actual FY 2010</th>
<th>Adopted FY 2011</th>
<th>Estimated FY 2011</th>
<th>Adopted FY 2012</th>
</tr>
</thead>
</table>

WATER SUPPLY AND TREATMENT

**GOAL:** Stewardship of City’s Physical Assets

1. **OBJECTIVE:** To provide customers with a sufficient and aesthetically pleasing supply of safe drinking water, meeting all regulatory requirements, in a cost efficient manner.

**STRATEGY:** To produce drinking water that meets all regulatory requirements, while monitoring operations at the reservoirs and water treatment facilities to ensure cost efficiencies are consistently applied.

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<tr>
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<tbody>
<tr>
<td>Treatment cost per million gallons of treated water.</td>
<td>$829.23</td>
<td>$919.00</td>
<td>$844.79</td>
<td>$867.57</td>
</tr>
</tbody>
</table>

2. **OBJECTIVE:** To provide water that is free from taste and odors and is aesthetically pleasing.

**STRATEGY:** Monitor the distribution system and respond to customer complaints and concerns regarding water quality, evaluate results and make adjustments as appropriate.

|--------------------------------------------------------------------------------------------------|----------------|----------------|------------------|----------------|

WASTEWATER TREATMENT

**GOAL:** Thriving Livable Neighborhoods & Stewardship of City’s Physical Assets

1. **OBJECTIVE:** To provide citizens with cost effective wastewater treatment and residuals management while ensuring compliance with all applicable state, federal and local regulatory requirements and minimizing discharges of organic wastes & ammonia nitrogen to the receiving streams.

**STRATEGY:** Optimize processes to discharge a higher quality of water than required by permits.

|-------------------------------------------------------------------------------|----------------|----------------|------------------|----------------|

|-------------------------------------------------------------------------------|----------------|----------------|------------------|----------------|

Water and Sewer Fund: $8,008,809

39 FTEs

Water and Sewer Fund: $8,302,475

31 FTEs
LABORATORY SERVICES

GOAL: Well-Managed City & Stewardship of City’s Physical Assets

1. OBJECTIVE: To provide high quality laboratory analysis for water, wastewater, industrial waste and stormwater program, providing results in timely manner, and to complete laboratory analyses in the City’s certified lab to meet deadlines specified by its customers.

   STRATEGY: To support the various operations branches of the department and City by providing appropriate/requested turn-around-time of analytical results to Laboratory Services’ customers.

   MEASURE: % Laboratory results reported to customers on or before due date

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<tbody>
<tr>
<td>98%</td>
<td>98%</td>
<td>98%</td>
<td>99%</td>
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WSM/SYSTEMS MAINTENANCE & CONSTRUCTION

GOAL: Stewardship of City’s Physical Assets

1. OBJECTIVE: To ensure the operational functionality of the City’s sanitary sewer collection system by providing timely and efficient routine maintenance, reducing instances of emergency maintenance, and controlling Sanitary Sewer Overflows (SSOs), to the extent practicable, so that wastewater flows from customers reach water reclamation facilities for appropriate treatment.

   STRATEGY: To maintain sewer collection system in good condition and meet sewer collection system permit requirements.

   MEASURES: # of Repeat SSOs

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<tr>
<td>N/A</td>
<td>N/A</td>
<td>4</td>
<td>3</td>
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   MEASURES: % of Total sewer system cleaned per year to meet regulatory requirement

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<tr>
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</thead>
<tbody>
<tr>
<td>0%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
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</table>

GOAL: Stewardship of City’s Physical Assets

1. OBJECTIVE: To ensure the delivery of safe drinking water via the water distribution system to customers by providing timely and efficient routine maintenance and reducing instances requiring emergency maintenance.

   STRATEGY: To maintain/sustain the reliability and viability of the water distribution system.

   MEASURES: % of Hydrants needing repair found during the hydrant preventive maintenance program

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<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>10%</td>
<td>6%</td>
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</table>

   MEASURES: % of Valves needing repair found during the valve exercising preventive maintenance program

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<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

GOAL: Well-Managed City & Stewardship of City’s Physical Assets

1. OBJECTIVE: To provide excellent customer service for the installation of new water and wastewater service lines within a defined time period.
STRATEGY: To keep the time between a customer paying for a new service and installation of a new service to within 30 days.

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<tr>
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<tbody>
<tr>
<td>% of New sewer service installations</td>
<td>N/A</td>
<td>N/A</td>
<td>95%</td>
<td>98%</td>
</tr>
<tr>
<td>completed in 30 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of New water service installations</td>
<td>N/A</td>
<td>N/A</td>
<td>95%</td>
<td>98%</td>
</tr>
<tr>
<td>completed in 30 days</td>
<td></td>
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</tbody>
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WSM/METER MAINTENANCE  
Water and Sewer Fund: $2,586,415  
30 FTEs

GOAL: Well-Managed City

1. OBJECTIVE: To ensure that the city measures the amount of water sold accurately and responsibly.

STRATEGY: Track AMR meter failures and regularly test large meters to ensure accuracy in both large and residential meters.

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<tbody>
<tr>
<td>% of AMR meter failures</td>
<td>N/A</td>
<td>N/A</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>% of 1-1/2&quot; and greater meters tested</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>per month within AWWA recommendations for</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>accuracy</td>
<td>N/A</td>
<td>N/A</td>
<td>99%</td>
<td>100%</td>
</tr>
</tbody>
</table>

UTILITY ENGINEERING  
Water and Sewer Fund: $1,457,078  
12.5 FTEs

GOAL: Stewardship of the City's Physical Assets

1. OBJECTIVE: To maintain the integrity of the City’s sewer Collections system by managing/administering rehabilitation programs and repair initiatives by completing at least 85% of repairs within 180 days following analysis when using traditional methods (TRAM) and at least 85% of repairs within 120 days using trenchless methods.

STRATEGY: Identify and complete needed repairs throughout the Sewer collection system by trenchless or traditional repair methodologies.

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<tbody>
<tr>
<td>% of Repairs by traditional methods</td>
<td>N/A</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>completed within 180 days following analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Repairs by trenchless methods</td>
<td>N/A</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>completed within 120 days following analysis</td>
<td></td>
<td></td>
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</tbody>
</table>

POST CLOSURE MONITORING  
Solid Waste Fund: $277,726  
0.5 FTEs

BUDGET ISSUES FOR FY 2011-2012

- Maintain current levels of water and wastewater services. Energy and chemical costs constitute a substantial portion of water and wastewater treatment costs. Increasing energy and chemical costs due to increasingly stringent standards have significant impacts. Expanded sampling for compliance with existing regulations or for evaluation of strategies for requirements for nutrient removal will be costly.
- Efforts to improve revenue for the utility will continue to address CIP funding and the long-term financial health of the Water & Sewer Fund.
• Evaluate opportunities to enhance revenue streams through on-going improvements and enhancements to MUNIS Utility Billing System and expanded delinquent account collection practices.
• Efforts to enhance long range plans for system reliability and water supply, both raw and treated water, will require additional CIP funding. Predicted changes in weather patterns and climate may impact the reliability of current sources.
• Funding of infrastructure rehabilitation and replacement continues to be an issue of concern for the utility.
• Increasing public education and outreach programs for water conservation/efficiency and the Fats, Oils and Grease efforts; maintaining and expanding water efficiency incentive programs.
• To continue to fund new operational improvements to meet new regulatory requirements.
• Continue to build the foundational Plant Maintenance programs into an asset management system which include a computerized maintenance management system (CMMS) and enhancing the preventive maintenance (PM) system.
• Develop a plan to continue to integrate Water and Sewer Maintenance systems into an asset management system.

**COMPLETED INITIATIVES FOR FY 2010-2011**

• Expanded program for Automated Meter Reading (AMR) by completing Phase I of the Residential Meter Replacement Project and starting Phase II.
• Begin utilizing AMR and staffing initiatives to move toward monthly billing of water and sewer customers.
• Continued participation in Regional Water Supply Planning project with Jordan Lake Partners in support of seeking additional allocation of the Jordan Lake water supply/storage pool and direct access to Jordan Lake.
• Completed environmental permitting and started design of Teer Quarry water supply storage reservoir project (emergency supply during water shortage).
• Completed design phase and begin the permitting phase of the Water Treatment Regulatory Compliance Project.
• Completed several sewer replacement and rehabilitation projects at numerous sites.
• Completed design on the new Angier elevated storage tank.
• Completed construction on the new North Durham WRF sludge pad cover project.
• Completed updates of emergency action plans for both dams.
• Completed construction of Hillendale Dual Water Lines Replacement project – Phase I.
• Completed rehabilitation of filters at Brown Water Treatment Plant.
• Complete construction of North Durham Aeration Basin and UV facilities by end of fiscal year.
• Complete design of numerous rehabilitation projects at North and South Durham WRFs.
• Complete construction of Water Plant Improvements Project.
• Completed design of Phase II of the Southern Reinforcing Main Project.
• Began master planning and energy audits of water reclamation facilities.
• Expanded eligibility requirements for Toilet Rebate Program.
• Participate in AWWA Benchmarking Performance Indicators Water and Wastewater Utilities Survey.
• Interconnections with several neighboring water providers strengthened.

**DEPARTMENT INITIATIVES FOR FY 2011-12**

• Continue expansion of Automated Meter Reading (AMR) program by completing Phase II of the Residential Meter Replacement Project and starting Phase III.
• Continue utilizing AMR and staffing initiatives to move toward monthly billing of water and sewer customers.
• Continue participation in Regional Water Supply Planning project with Jordan Lake Partners in support of seeking additional allocation of the Jordan Lake water supply/storage pool and direct access to Jordan Lake.
• Expand or implement billing initiatives such as e-billing, group billing and budget billing pending implementation of new Munis version.
• Complete several sewer replacement and rehabilitation projects at numerous sites.
• Complete CCTV inspection and point repairs in advance of all Street Bond Paving projects.
• Begin construction of the New Angier elevated storage tank.
• Complete design of Phase II of the Southern Reinforcing Main Project.
• Complete the permitting phase and begin the construction of the Water Treatment Regulatory Compliance Project.
• Begin construction of Hillendale Dual Water Lines Replacement project – Phase II.
• Continue participation in implementation of the City’s strategic plan; update departmental strategic plan.
• Initiate succession planning effort for department, focusing on key/critical positions as a part of employee development and leadership development within the department.
• Continue the implementation of an asset management system and integration of asset management culture into the Department.
• Continue support of professional development and certification (increase beyond current 50%).
• Maintain emphasis on working safe, enhancing safety training to ensure worker safety while protecting the City's/department's investment in equipment/vehicles.