

# Wastewater Management Program

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LOB #387:

## **WASTEWATER PLANNING AND MONITORING**

### **Purpose**

The Wastewater Planning and Monitoring Division assesses and monitors long-term planning needs for the Wastewater Management Program and conducts environmental monitoring for regulatory compliance and for protection of the wastewater system and the environment. The staff reviews development plans and determines and plans for infrastructure expansion requirements. Also, the staff determines and plans for financial demands of the entire wastewater system.

### **Description**

The Wastewater Planning and Monitoring Division performs a number of technical, administrative, and financial functions for the Wastewater Management Program. These functions include:

- Determines and plans for system expansion and additional treatment capacity needs for future growth in the County.
- Reviews and approves development plans for the construction of new sewer lines.
- Maintains an inventory of the system in GIS and develops GIS applications for efficient operation and maintenance of the system.
- Administers and manages the system's billing and procurement operations.
- Manages the Wastewater Management Program's finances.
- Forecasts financial needs of the Program and recommends sewer rates and fees accordingly.
- Administers the contract capacity at regional treatment plants providing wastewater treatment for the County.
- Manages the environmental monitoring of the County's collection system and treatment facility by analyzing samples for operational efficiency and permit compliance.
- Administers the industrial waste pretreatment program for compliance with permit requirements and to protect the system, the treatment process and the employees.

### **Benefits**

The Wastewater Planning and Monitoring LOB protects public health, aquatic life and the environment within Fairfax County. This LOB implements several vision elements in the 2015 Strategic Plan to Facilitate the Economic Success of Fairfax County, as noted below. The primary correlation to County vision elements includes:

- **Building Livable Spaces** - wastewater planning and monitoring allows for building livable spaces by ensuring sufficient capacity in the wastewater conveyance system and treatment facilities in order to allow for economic development and redevelopment.
- **Maintaining Healthy Economies** - wastewater planning and monitoring is a key element in providing economically priced wastewater services.
- **Exercising Corporate Stewardship** - wastewater planning and monitoring by maintaining the highest level of accountability provides quality wastewater services at one of the lowest cost in the region.

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## Mandates

This LOB complies with the following laws and mandates:

- Clean Water Act PL 92-500
- Clean Air Act
- 33USC 1251
- Code of Virginia §15.1-160, 15.1-166, and 15.1-167
- Code of Virginia §32.1-164
- Code of Virginia §62.1-44.19.32.1
- State Water Control Board VR355-17-02
- State Water Control Board VR680-14-01
- State Water Control Board VR680-14-02
- State Water Control Board VR680-14-03

## Trends and Challenges

The Wastewater Planning and Monitoring LOB is made up of three branches and each branch has its own set of unique trends and challenges.

Trends associated with the Financial Branch include debt coverage ratios, bond ratings, reserves and sewer rates. Financing the future expansion of sewer lines for Tysons Corner when needed, financing repair and replacement of aging infrastructure, and maintaining bond ratings are challenges for the Financial Branch.

Trends associated with the Engineering Branch include increases in zoning reports reviewed, plans reviewed and wastewater flows. The challenges include keeping up with zoning reports and plan reviews as part of the Land Development Services' revamp of the review process and anticipated activity in the Tysons area, and monitoring and the need for expansion of sewer lines to handle future flows from Tysons redevelopment.

Trends associated with the Environmental Monitoring Branch include the number of samples analyzed per year, required lab certifications, and industrial waste facilities permit compliance. The challenges include maintaining lab certifications, potential increased sample analyses from Stormwater, implementation of a fats, oils and grease control and pharmaceutical disposal minimization program, and expansion of outreach efforts such as the Sewer Science program related to primary and middle schools.

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## Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
<b>LOB #387: Wastewater Planning and Monitoring</b>			
<b>FUNDING</b>			
<u>Expenditures:</u>			
Compensation	\$3,620,484	\$3,700,711	\$4,133,017
Benefits	2,287,351	2,090,632	2,525,486
Operating Expenses	50,363,129	53,189,445	50,336,699
Work Performed for Others	(178,415)	(183,843)	(180,600)
Capital Equipment	47,466	0	49,894
<b>Total Expenditures</b>	<b>\$56,140,015</b>	<b>\$58,796,945</b>	<b>\$56,864,496</b>
<b>Total Revenue</b>	<b>\$56,140,015</b>	<b>\$58,796,945</b>	<b>\$56,864,496</b>
<b>POSITIONS</b>			
<i>Authorized Positions/Full-Time Equivalents (FTEs)</i>			
<u>Positions:</u>			
Regular	54 / 54	54 / 54	53 / 53
<b>Total Positions</b>	<b>54 / 54</b>	<b>54 / 54</b>	<b>53 / 53</b>

## Metrics

Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Average household sewer bill compared to other providers in the area	2nd lowest out of 7	2nd lowest out of 7	2nd lowest out of 7	2nd lowest out of 7	2nd lowest out of 7
Debt Coverage Ratio without Availability Fees	2.00	2.03	2.05	1.84	1.92
Debt to Net Plant in Service (Equity)	44.0%	43.7%	40.2%	48.5%	49.5%

The Wastewater Planning and Monitoring uses metrics to improve performance and ensure regulatory compliance. The three metrics used for this LOB demonstrate the commitment to maintaining the highest quality of work, regulatory compliance, and efficient operation.