

Public Utilities Fund

DESCRIPTION

The County's Department of Public Utilities owns, operates and maintains public water and wastewater systems in the Suburban Service Area, the Hanover Courthouse Area and five rural residential subdivisions (collectively, the "System"). The Suburban Service Area is the crescent shaped area north of the Chickahominy River, generally between and along Route 1 to the west and Creighton Road to the east, including the Town of Ashland, the Doswell area, and the Route 33 area adjacent to Henrico County. The County provides utility service to approximately 20,125 water customers and 18,367 wastewater customers.

The County operates the System as a self-supporting enterprise fund, the Utility Enterprise Fund, whereby the operations and capital expenditures are funded with revenues generated from customer user fees and one-time fees paid for capacity at the time of connection to the System. County General Fund tax dollars are not used to fund the operating or capital expenses of the System. The Utility Enterprise Fund reimburses the County's General Fund for direct services provided to support the Department of Public Utilities and also pays a service assessment charge to the General Fund in lieu of taxes for indirect Public Safety and Fire EMS Services. The Board of Supervisors establishes and revises both water and wastewater rates and fees as well as adopts the annual operating and capital improvements plan budgets.

The Department develops its overall operations, maintenance and capital construction plans for the System in support of Hanover's Comprehensive Plan which ensures operational reliability and adequate capacity. In addition, the utility capital needs are also impacted by compliance with local, State and Federal regulations. The Department of Public Utilities operates the System with County personnel and maintains the System with both County and private contractor personnel. The Department reads meters, prepares bills and maintains customer accounts. The Department's activities extend to providing assistance to other utility purveyors within the County, supporting economic development initiatives, and

participating in regional approaches to providing water and wastewater services. These activities are accomplished with 94.5 full-time employees.

MISSION

The Mission of the Department of Public Utilities is "to provide water and wastewater services that, within regulatory guidelines, meet or exceed our customers' needs and expectations for safety, quality and quantity; to provide these services at a competitive price and in a fair and equitable and environmentally responsible manner, and to provide opportunities for personal and professional development for employees at all levels of the department."

EXISTING FACILITIES & SERVICE AREA

The County's water system consists of eleven potable water wells, two surface water treatment plants, seven water pumping stations and eight storage facilities. The water transmission and distribution system is comprised of approximately 389 miles of waterline ranging in size from 2 to 30 inches in diameter. The Doswell Water Treatment Plant, rated at 4 million gallons per day (mgd), was constructed in 1974 and upgraded and expanded in 1991. The South Anna Water Treatment Plant is rated at 2.0 mgd and was constructed in the early 1960's. The South Anna plant is currently not in service and would require rehabilitation and upgrades to return it to service. Additional water supplies are provided by long-term contracts with City of Richmond and Henrico County, which serve the Suburban Service Area and the Route 33 area, respectively. In the Route 33 area, the County provides water service to Tyson Foods and a limited number of residential and commercial customers via a water purchase agreement with Henrico County. The County also has an interconnection with the Henrico County system along Route 1 at the Chickahominy River, which is not routinely utilized. Rural Systems operated by the County include Georgetown, Dianne Ridge, Oak Hill Estates, Strawhorn, Sinclair Manor, and Courthouse.

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The County's wastewater system consists of four wastewater treatment plants and thirty-eight wastewater pumping stations. The wastewater collection system is comprised of approximately 362 miles of sewer line. The Doswell Wastewater Treatment Plant, rated at 1.0 mgd, serves the Doswell area and was placed in service in 1975. Ashland is served by the 2.0 mgd Ashland Wastewater Treatment Plant, which was placed in service in 1992. The Hanover Courthouse area is served by the 0.08 mgd Courthouse Wastewater Treatment Plant, which has a 1978 in-service date. The Totopotomoy Wastewater Treatment Plant is rated at 5.0 mgd, was placed in service in September 2004 and serves a portion of the Suburban Service Area. The majority of wastewater generated in the Suburban Service Area is pumped from Hanover's Beaverdam Creek Wastewater Pump Station (5.4 mgd average capacity) to Henrico County's Strawberry Hill Wastewater Pump Station for conveyance to and treatment by Henrico's wastewater treatment plant.

WATER SUPPLY CONTRACTS

The County has purchased water from Henrico County since 1974. This water supply currently provides water for Hanover's Route 33 service area. On April 10, 1995, the County negotiated a new agreement with Henrico County to purchase up to 0.775 mgd. The term of the Henrico water contract is through June 30, 2014, and continues thereafter until terminated by either the County Manager of Henrico or the County Administrator of Hanover, upon giving the other party ten years written notice. On December 16, 2006 the Board of Supervisors approved the first Amendment to the Henrico Contract to revise and upgrade the

methodology for calculating the cost of capacity reserved for Hanover County.

On July 1, 1994, the County entered into a contract with the City of Richmond, which established a long-term potable water supply for the Suburban Service Area. The term of the Richmond contract is through June 30, 2035, and continues thereafter until terminated by either the City Manager of Richmond by giving fifteen years written notice (such notice may not be given earlier than July 1, 2025), or the County Administrator by giving ten years notice (such notice may not be given earlier than July 1, 2020), unless a shorter time for notice is mutually agreed upon. The County's current available capacity from Richmond is 20 mgd and the final capacity purchase occurred in 2010.

WASTEWATER TREATMENT CONTRACT

While the County treats a portion of the wastewater it collects, since 1979 it has also purchased wastewater treatment services from Henrico County. On April 10, 1995, the two counties entered a new wastewater agreement, which provides long-term wastewater treatment for the Suburban Service Area. The term of the contract is through June 30, 2014, and continues thereafter until terminated by mutual agreement by the two counties in writing. The new agreement increased the capacity from 3.69 mgd to 5.4 mgd, which is based upon a 90-day rolling average. Wastewater is conveyed to Henrico County's Strawberry Hill Pump Station from Hanover's Beaverdam Creek Pump Station via a 20" force main.

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BUDGET SUMMARY

	FY10 Actual	FY11 Budget	FY12 Budget	FY11 to FY12
Expenditures				
Personnel	\$ 6,159,074	\$ 6,326,422	\$ 6,330,140	0.1%
Operating	6,039,633	11,107,530	10,925,779	(1.6%)
Operating Capital	344,877	494,524	472,675	(4.4%)
Reserve for Construction	-	-	10,178,108	100.0%
Debt Service				
Principal	2,222,400	2,685,931	2,712,546	1.0%
Interest	1,404,571	1,840,637	1,756,163	(4.6%)
Capital Improvements	10,454,557	19,437,483	2,772,281	(85.7%)
Total Expenditures	\$ 26,625,112	\$ 41,892,527	\$ 35,147,693	(16.1%)
Revenues				
Permits, Fees, and Licenses	\$ 172,889	\$ 244,000	\$ 253,400	3.9%
Use of Money and Property	350,797	400,000	200,000	(50.0%)
Charges for Services	20,893,840	20,151,725	21,761,363	8.0%
Miscellaneous Revenue	120,852	138,000	175,000	26.8%
Recovered Costs	267,509	239,833	257,930	7.5%
Non Operating Revenue	2,731,762	2,000,000	2,500,000	25.0%
Other Revenue	3,193,109	-	-	0.0%
Prior Year Balance	-	8,718,969	-	(100.0%)
Long-term debt	-	10,000,000	10,000,000	0.0%
Capital Grants	16,454	-	-	0.0%
Total Revenue	\$ 27,747,212	\$ 41,892,527	\$ 35,147,693	(16.1%)
Generated Revenue Percent	99.9%	55.3%	71.5%	
Full-time Positions	94	94	94	0.0%
Part-time Positions	1	1	1	0.0%
Full-time Equivalents	94.5	94.5	94.5	0.0%

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LARGEST CUSTOMERS

The following table provides annual data on the County's ten largest water customers for the fiscal year ended June 30, 2010:

	Water Usage*	Water Revenue	% of Total Revenue
Bear Island Paper Company, L.P.	462,336	\$ 935,643	8.26%
Tyson Food	279,102	\$ 208,768	1.84%
Kings Dominion	122,426	\$ 271,484	2.40%
Doswell Limited Partnership	89,911	\$ 185,779	1.64%
Hanover Medical Park	44,360	\$ 142,726	1.26%
Randolph - Macon College	22,802	\$ 102,533	0.91%
Aqua Virginia	19,716	\$ 75,505	0.67%
Covenant Woods	16,672	\$ 62,313	0.55%
Hanover Crossing Apartments	10,248	\$ 42,694	0.38%
Caroline County	10,144	\$ 42,774	0.38%
Total	1,077,717	\$ 2,070,219	18.28%

*in 1,000 gallons

The ten largest water customers together represent about 18.28% of total water operating and non-operating revenues, with the largest customer representing approximately 8.26% of that total.

The following table provides annual data on the County's ten largest wastewater customers for the fiscal year ended June 30, 2010:

	Wastewater Usage*	Wastewater Revenue	% of Total Revenue
Kings Dominion	104,348	\$ 437,679	3.40%
Hanover Medical Park	42,103	\$ 209,565	1.63%
Randolph - Macon College	19,899	\$ 113,889	0.89%
Covenant Woods	11,882	\$ 61,350	0.48%
Hanover Crossing Apartments	10,248	\$ 54,812	0.43%
Doswell All American Plaza	8,980	\$ 43,306	0.34%
Richfood	8,334	\$ 40,257	0.31%
Leadbetter, Inc	8,112	\$ 39,327	0.31%
Mill Trace Apartments	8,020	\$ 47,243	0.37%
Ramada Inn/Super 8	7,553	\$ 36,570	0.28%
Total	229,479	\$ 1,083,998	8.43%

*in 1,000 gallons

The ten largest wastewater customers together represent about 8.43% of total operating and non-operating wastewater revenues with the largest customer representing approximately 3.40% of that total. Water and wastewater usage by a specific customer may not be equal based upon the specific needs for each service.

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FINANCIAL AND BUDGETARY PROCEDURES

The Director of Public Utilities is responsible for budgeting, accounting, procurement, billing, collection activities, capital construction and financial and strategic planning for the System. Mr. Frank W. Harksen, Jr. has served as the Director of Public Utilities since January 1999. On January 13, 2011 it was announced that Mr. Harksen would be appointed Deputy County Administrator effective March 1, 2011. Mr. Harksen succeeds John H. Hodges who retired in December 2010.

The operating budget and the Capital Improvement Plan for the System are updated and presented annually to the County Administrator in December and the Board of Supervisors in March. Approval usually occurs in April.

In support of the County's Comprehensive Plan and the Voluntary Settlement Agreement with the Town of Ashland (which provided for annexation of certain territory and the merger of the Ashland and County water and wastewater systems), the Department of Public Utilities plans, implements and funds improvements to make water and wastewater capacity available to an expansion area and areas within the Town of Ashland sometime during the five year period after an area comes in to phase, typically toward the end of the five year period. When the County does make capacity available to an area, it is normally to a single point within or near the area. The County does not make water and wastewater service available to every parcel in an area when an area is in phase. The intent of the plan is that the Department make water and wastewater treatment capacity available so that every lot within the Suburban Service Area could be serviced by public water and wastewater if a property owner desired to extend public water and/or wastewater to their property.

The self-supporting Utility Enterprise Fund, which is funded by utility ratepayers, reimburses the County's General Fund through a calculated allocated payment for services such as procurement, finance, information technology, human resources, administration and legal that are

provided by other County departments to support the Department of Public Utilities. In addition, although the Department is a part of the County government and thus tax exempt, the County's General Fund also charges a service charge to the utility as a payment in lieu of taxes to recover costs associated with services provided by the Sheriff's Office and Public Safety Department, which are not a part of the calculated allocated payment.

The system is divided into four service routes and most customers are billed bi-monthly. Bills are due and payable upon receipt by the customer, with a past due notice mailed if the bill remains unpaid 30 days after the billing date. If payment is not made in accordance with the past due notice, the County Code requires that utility service be disconnected. A \$40 fee is assessed to all accounts where service has been discontinued due to nonpayment and a 10% late penalty fee is charged for all past due accounts. The County's annual losses from uncollected accounts have been less than 1% of total billings since 1990.

RATES, FEES, AND CHARGES

The principal sources of revenue for the Utilities Enterprise Fund are user fees and capacity fees. The user fee is a monthly or bi-monthly charge comprised of a base charge by meter size, levied regardless of usage, and a commodity charge that is typically based upon metered water consumption. The capacity fee is a one-time charge for each new connection to the water and wastewater systems. Capacity fees are based on the size of the water meter necessary to serve the new customer. In setting these fees, the goal is to cover projected operating, maintenance, general improvement, and rehabilitation costs with user fees. The projected capacity related capital improvement costs and the costs to support the Comprehensive Plan and Voluntary Settlement Agreement are funded with capacity fees. This practice generally allows growth in use of the County's services to pay for the costs of increasing the System capacity and expanding service territory. This rate structure applies to both water and wastewater services.

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Rate Structure

Water - Base Charges by Meter Size	FY11	FY12
5/8 inch & 3/4 inch	\$8.37	\$8.62
1 inch	20.98	21.61
1 1/2 inch	41.84	43.10
2 inch	66.94	68.95
3 inch	133.89	137.91
4 inch	209.20	215.48
6 inch	418.40	430.95

Water - Residential	FY11	FY12
Base charge by meter size (table above)		
Consumption charge as follows:		
0 to 4,000 gallons, per 1,000 gallons	\$1.33	\$1.37
4,001 to 15,000 gallons, per 1,000 gallons	4.05	4.17
15,001 and above, per 1,000 gallons	5.28	5.44

Water - Commercial Schedule I Rates	FY11	FY12
Base charge by meter size (table above)		
Consumption charge as follows:		
0 to 15,000 gallons, per 1,000 gallons	\$3.59	\$3.70
15,001 to 1,000,000 gallons, per 1,000 gallons	4.05	4.17
Above 1,000,000 gallons, per 1,000 gallons	2.25	2.32
Separate irrigation meter, per 1,000 gallons	4.99	5.14

Water - Commercial Schedule II Rates	FY11	FY12
Base charge	\$128.74	\$132.60
Consumption charge as follows:		
All usage, per 1,000 gallons	2.10	2.16
Peak Use Fee, per 1,000 gallons greater than 150% of previous fiscal year average	1.29	1.33

Water - Commercial Schedule III Rates	FY11	FY12
Base Charge	\$12,874	\$13,260
Consumption charge as follows:		
All usage, per 1,000 gallons	1.71	1.76
Peak Use Fee, per 1,000 gallons greater than 150% of previous fiscal year average	1.29	1.33

Wastewater - Base charges by meter size	FY11	FY12
5/8 inch	\$19.06	\$19.44
3/4 inch	19.06	19.44
1 inch	19.06	19.44
1 1/2 inch	19.06	19.44
2 inch	95.31	97.22
3 inch	95.31	97.22
4 inch	95.31	97.22
6 inch	95.31	97.22

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Wastewater - Residential	FY11	FY12
Base charge by meter size (table above)		
Consumption charge as follows:		
0 to 4,000 gallons, per 1,000 gallons	\$5.12	\$5.22
4,001 and above, per 1,000 gallons	6.43	6.56
Flat Rate Wastewater	90.80	90.80

Wastewater - Commercial Schedule I Rates	FY11	FY12
Base charge by meter size (table above)		
Consumption charge as follows:		
0 to 50,000 gallons, per 1,000 gallons	\$5.96	\$6.08
Above 50,000, per 1,000 gallons	4.77	4.87

Wastewater - Commercial Schedule II Rates	FY11	FY12
Base charge	\$1,191.48	\$1,215.31
Consumption charge as follows:		
All usage, per 1,000 gallons	3.93	4.01
Peak Use Fee (per 1,000 gallons greater than 150% of previous fiscal year average)	1.19	1.21

Capacity Fees

Capacity fees are the fees charged to customers when initially connected to the County's system. The detailed fee schedule is listed below.

Residential Water

In FY11 single and multi-family units are charged \$5,161 for a standard connection. There will be no increase in the per unit fee for a standard connection in FY12.

Commercial, Industrial, and Public Facilities Water	FY11	FY12
All capacity fees for these entities are based on meter size		
5/8 inch	\$5,161	\$5,161
1 inch	12,903	12,903
1 1/2 inch	25,806	25,806
2 inch	41,290	41,290
3 inch	82,579	82,579
4 inch	129,030	129,030
6 inch	258,061	258,061
8 inch	412,897	412,897

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Residential Wastewater

In FY11 single and multi-family units are charged \$7,838 for a standard connection. There will be no increase in the per unit fee for a standard connection in FY12.

Commercial, Industrial, and Public Facilities	FY11	FY12
All capacity fees for these entities are based on meter size		
5/8 inch	\$7,838	\$7,838
1 inch	19,593	19,593
1 1/2 inch	39,187	39,187
2 inch	62,699	62,699
3 inch	125,399	125,399
4 inch	195,935	195,935
6 inch	391,870	391,870
8 inch	626,992	626,992

OBJECTIVES

- Provide reliable water and wastewater service in accordance with all applicable regulatory requirements;
- Maintain fiscal integrity to provide for system growth, adequate maintenance, and replacement of capital to ensure quality service, system reliability and to control future costs;
- Emphasize continuing education to maintain staff competency ensuring EPA regulatory compliance;
- Continue implementing Capital Improvement Plan, meeting customer capacity needs, Comprehensive Plan requirements and economic development; and
- Receive NACWA (National Association of Clean Water Agencies) Peak Performance Awards.

SERVICE LEVELS	FY10	FY11	FY11	FY12
	<u>Actual</u>	<u>Budget</u>	<u>Forecast</u>	<u>Budget</u>
Water customers	20,125	20,020	20,129	20,330
Wastewater customers	18,367	18,118	18,359	18,543
Customer calls	19,865	34,902	39,071	39,500
Plans reviewed	358	600	500	500
Water distributed (mgd)	8.70	8.30	8.21	8.30
Wastewater collected (mgd)	6.93	7.01	6.94	7.01
Miles of water line maintained	387	390	393	393
Miles of sewer line maintained	360	363	367	367