



**ADVERTISED
2018 ANNUAL BUDGET**

Draft
November 9, 2017

The Annual Budget covers the 61st year of operation of Fairfax Water and has been prepared pursuant to the General Trust Indenture dated October 1, 1992, under which all outstanding Water Revenue Bonds of Fairfax Water have been issued. Fairfax Water is considered an enterprise fund and the Annual Budget represents the financial plan of Fairfax Water for the calendar year. The Annual Budget includes the funds and accounts created by the General Trust Indenture and has been organized in accordance with the "flow of funds" provisions therein. There are five major divisions of the Budget: Revenue Fund, Debt Service Fund, Reserve Fund, Improvement Fund, and General Fund.

Reviewers of the Annual Budget should be aware that Fairfax Water is a single-purpose public agency charged with the responsibility to construct, operate, and maintain a water system in compliance with state and federal water quality regulations. Line items of current expenses and capital expenditures are estimates based on historical experience and current judgment as to cost trends and the labor, material and services required to operate, maintain, and expand the water system. Fairfax Water has very little latitude with respect to the level of service it must provide or the requirements imposed by various regulatory agencies. There are few discretionary programs within Fairfax Water's assigned scope of activity. As such, one of the more important purposes of the Annual Budget is to assess the adequacy of Fairfax Water's revenues to satisfy the requirements of the General Trust Indenture.

The revenues of the water system include payments from various wholesale customers under agreements, which include the purchase of capacity rights in Fairfax Water's system. Wholesale customers account for approximately 44% of the total water sales volume of Fairfax Water in 2018.

The 2018 Annual Budget contains a provision for revisions to certain rates, fees and charges proposed to be effective April 1, 2018. It is intended that these proposed charges would be considered for adoption at Fairfax Water's meeting of December 14, 2017, following a public hearing on the matter.

The General Trust Indenture requires Fairfax Water's Consulting Engineer to make an inspection of the water system annually and to submit a report on or before December 1 of each year setting forth findings as to the physical condition of the water system, recommendations as to the adequacy of the budgeted amounts for current expenses and capital expenditures, and any necessary or advisable revisions of the rates, fees, and charges.

The Annual Budget is contained on pages 2 through 8. Details and supporting data related to the Annual Budget are included on pages 9 through 53.

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2018

<u>REVENUE FUND</u>	<u>2017</u>		<u>2018</u>
	<u>Budget</u>	<u>Current Estimate</u>	<u>Budget</u>
<u>REVENUES</u>			
Wholesale Revenue (Fixed and Commodity) ⁽¹⁾			
Virginia-American Water Company			
Alexandria District	\$ 9,693,000	\$ 9,222,000	\$ 8,929,000
Prince William District	3,689,000	3,583,000	3,495,000
Prince William County Service Authority	10,748,000	36,982,000	12,603,000
Loudoun Water	8,240,000	7,948,000	9,160,000
Town of Herndon	1,215,000	1,173,000	1,313,000
Fort Belvoir	1,832,000	1,832,000	1,892,000
Dulles International Airport	388,000	383,000	408,000
Town of Vienna	1,537,000	1,558,000	1,569,000
Untreated			
Prince William County Park Authority	1,000	1,000	1,000
Vulcan Materials Company	14,000	18,000	18,000
Old Hickory Golf Course	7,000	6,000	6,000
Total - Wholesale Revenue	<u>37,364,000</u>	<u>62,706,000</u>	<u>39,394,000</u>
Retail Revenue (Commodity and Billing)	<u>108,420,000</u>	<u>111,883,000</u>	<u>112,959,000</u>
Total - Wholesale and Retail Revenue	<u>145,784,000</u>	<u>174,589,000</u>	<u>152,353,000</u>

⁽¹⁾ See Exhibit 1 (page 25) for a breakdown of commodity and fixed charges revenue.

	2017		2018 Budget
	Budget	Current Estimate	
<u>Other Revenues</u>			
Availability Charges	\$ 7,000,000	\$ 11,800,000	\$ 7,500,000
Local Facility Charges	600,000	1,100,000	800,000
Service Connection Charges	700,000	1,800,000	700,000
Account Charges	1,050,000	1,050,000	1,050,000
Delinquent Account Charges	450,000	460,000	460,000
Returned Check Charges	50,000	55,000	55,000
Sewer Service Billing Charges	6,800,000	6,100,000	6,600,000
Merchandising and Jobbing	50,000	200,000	200,000
Fire Hydrant Permit Fees	650,000	650,000	660,000
Laboratory Services	75,000	80,000	80,000
Investment Income	1,955,000	1,900,000	1,900,000
Non-Operating Income	1,150,000	1,300,000	1,400,000
Sale of Scrap Material	50,000	100,000	50,000
Bad Debt Recovery	10,000	10,000	10,000
Bond Subsidy	1,057,000	1,057,000	1,060,000
Miscellaneous	100,000	325,000	125,000
Total - Other Revenues	<u>21,747,000</u>	<u>27,987,000</u>	<u>22,650,000</u>
Rate Revisions ⁽¹⁾	<u>3,775,000</u>	<u>- -</u>	<u>3,655,000</u>
Total - Revenues	171,306,000	202,576,000	178,658,000

⁽¹⁾ The 2018 Annual Budget contains a provision for revisions to certain rates, fees, and charges proposed to be effective April 1, 2018.

	2017		
	<u>Budget</u>	<u>Current Estimate</u>	<u>2018 Budget</u>
<u>CURRENT EXPENSES</u>			
<u>Operation and Maintenance Expenses</u>			
Supply Facilities	\$ 9,778,000	\$ 11,756,000	\$ 10,776,000
Treatment Facilities	24,390,000	22,870,000	24,318,000
Transmission System	5,504,000	5,243,000	5,400,000
Distribution System	18,134,000	18,394,000	18,968,000
Administrative and General	<u>34,204,000</u>	<u>32,771,000</u>	<u>33,924,000</u>
Total - Operation and Maintenance Expenses	92,010,000	91,034,000	93,386,000
<u>Other Expenses</u>			
New Services and Meters	1,425,000	1,746,000	1,816,000
Merchandising and Jobbing	<u>9,000</u>	<u>--</u>	<u>9,000</u>
Total - Other Expenses	<u>1,434,000</u>	<u>1,746,000</u>	<u>1,825,000</u>
Total - Current Expenses	<u>93,444,000</u>	<u>92,780,000</u>	<u>95,211,000</u>
<u>NET REVENUES</u>			
Net Revenues Defined	77,862,000	109,796,000	83,447,000
Transfer from Reserve Fund	<u>--</u>	<u>--</u>	<u>1,621,000</u>
Total Net Revenues	<u>77,862,000</u>	<u>109,796,000</u>	<u>85,068,000</u>
<u>DEBT SERVICE COVERAGE</u>			
Net Revenues	77,862,000	109,796,000	85,068,000
Annual Principal and Interest Requirements	41,128,941	43,256,463	42,980,884
Coverage	1.89	2.54	1.98

	2017		2018 Budget
	Budget	Current Estimate	
<u>DEBT SERVICE FUND</u>			
<u>Balance Carried Forward from Prior Year</u>	\$ 31,181,582	\$ 31,181,582	\$ 31,307,037
<u>Receipts</u>			
Transfer from Revenue Fund	41,128,941	43,256,463	42,980,884
Investment Income	250,000	280,000	300,000
Total - Receipts	<u>41,378,941</u>	<u>43,536,463</u>	<u>43,280,884</u>
<u>Disbursements</u>			
Interest Payable - April 1 and October 1	20,240,667	18,904,233	22,052,094
Principal Payable - April 1	20,800,000	20,800,000	20,000,000
Transfer to Escrow	--	3,426,775	--
Transfer of Investment Income to Revenue Fund	250,000	280,000	300,000
Total - Disbursements	<u>41,290,667</u>	<u>43,411,008</u>	<u>42,352,094</u>
<u>Balance Carried Forward to Ensuing Year</u>	<u>31,269,856</u>	<u>31,307,037</u>	<u>32,235,827</u>

	2017		2018 Budget
	Budget	Current Estimate	
<u>RESERVE FUND</u>			
<u>Balance Carried Forward from Prior Year</u>	\$ 15,175,000	\$ 15,176,000	\$ 15,176,000
<u>Receipts</u>			
Investment Income	200,000	250,000	200,000
Total - Receipts	200,000	250,000	200,000
<u>Disbursements</u>			
Transfer of Investment Income to Revenue Fund	200,000	250,000	200,000
Transfer of Excess Requirement to Revenue Fund	--	--	1,621,000
Total - Disbursements	200,000	250,000	1,821,000
<u>Balance Carried Forward to Ensuing Year</u>	15,175,000	15,176,000	13,555,000

	2017		2018 Budget
	Budget	Current Estimate	
<u>IMPROVEMENT FUND</u>			
<u>Balance Carried Forward from Prior Year</u>	\$ 930,000	\$ 843,000	\$ 17,347,000
<u>Receipts</u>			
Transfer from Revenue Fund	11,000,000	11,000,000	11,000,000
Transfer from General Fund	14,000,000	14,000,000	67,500,000
Bond Proceeds	75,000,000	75,531,000	- -
Advances for Construction	100,000	160,000	100,000
Contributions for Construction	1,000,000	820,000	1,000,000
Investment Income	764,000	293,000	178,000
Miscellaneous	50,000	140,000	50,000
Total - Receipts	<u>101,914,000</u>	<u>101,944,000</u>	<u>79,828,000</u>
<u>Disbursements</u>			
Part B Capital Improvement Program			
Materials and Supplies	90,000	50,000	90,000
Refunds - Advances for Construction	50,000	30,000	40,000
General Expenses	16,750,000	15,880,000	17,550,000
Subdivision and Other Development Projects	1,235,000	1,220,000	1,240,000
Extraordinary Maintenance and Repairs	40,293,000	22,650,000	42,262,000
Additions, Extensions and Betterments	33,915,000	35,450,000	31,449,000
General Studies	2,456,000	1,190,000	2,606,000
Part D Capital Improvement Program	6,643,000	7,680,000	874,000
Part E Capital Improvement Program	466,000	1,290,000	400,000
Total - Disbursements	<u>101,898,000</u>	<u>85,440,000</u>	<u>96,511,000</u>
<u>Balance Carried Forward to Ensuing Year</u>	<u>946,000</u>	<u>17,347,000</u>	<u>664,000</u>

	2017		2018
	Budget	Current Estimate	Budget
<u>GENERAL FUND</u>			
<u>Balance Carried Forward from Prior Year</u>	\$ 93,677,000	\$ 102,260,000	\$ 143,800,000
<u>Receipts</u>			
Transfer from Revenue Fund (Net Revenues)	25,733,000	55,540,000	31,087,000
Investment Income	1,500,000	1,400,000	1,400,000
Total - Receipts	<u>27,233,000</u>	<u>56,940,000</u>	<u>32,487,000</u>
<u>Disbursements</u>			
Transfer of Investment Income to Revenue Fund	1,500,000	1,400,000	1,400,000
Transfer to Improvement Fund	14,000,000	14,000,000	67,500,000
Total - Disbursements	<u>15,500,000</u>	<u>15,400,000</u>	<u>68,900,000</u>
<u>Balance Carried Forward to Ensuing Year</u>	<u>105,410,000</u>	<u>143,800,000</u>	<u>107,387,000</u>



DETAILS AND SUPPORTING DATA

ANNUAL BUDGET

FOR THE YEAR ENDING DECEMBER 31, 2018

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I. Highlights of 2018 Annual Budget

Category	2017 Budget	2017 Current Estimate	2018 Budget	% Increase (Decrease)
Retail Customer Accounts Added	300	125	300	140.0
Retail Equivalent 5/8" Units Added	1,710	2,880	1,830	(36.5)
Retail Customers - End of Year	281,324	280,844	281,144	0.1
Wholesale Water Sales (mg)	25,095	25,514	24,554	(3.8)
Retail Water Sales (mg)	31,200	31,200	31,500	1.0
Total Water Sales (mg)	56,295	56,714	56,054	(1.2)
Water Sales Revenue (\$ million)	149.232	174.589	155.834	(10.7)
Water Produced and Purchased (mg)	62,600	63,000	62,300	(1.1)
Water Produced and Purchased (mgd)	171.5	172.6	170.7	(1.1)
Total Revenues (\$ million)	171.306	202.576	178.658	(11.8)
Current Expenses (\$ million)	93.444	92.780	95.211	2.6
Net Revenues (\$ million)	77.862	109.796	85.068	(22.5)
Total Debt Service (\$ million)	41.129	43.256	42.981	(0.6)
Debt Service Coverage	1.89	2.54	1.98	(22.0)
Authorized Employees	475	475	475	--

Highlights of 2018 Annual Budget (Continued)

- ♦ 300 retail customers are projected to be added in 2018, 175 more than the number projected for 2017. A total of 281,144 customers are expected to be served at the end of 2018.
- ♦ Water sales are estimated to be 56.1 billion gallons in 2018, as compared to 56.7 billion gallons in 2017.
- ♦ Average daily production is expected to be 170.7 million gallons per day (mgd) in 2018, as compared to 172.6 mgd in 2017.
- ♦ Revenues are expected to be \$178.7 million in 2018, as compared to \$202.6 million in 2017.
- ♦ The 2018 Annual Budget contains a provision for revisions to certain rates, fees, and charges proposed to be effective April 1, 2018.
- ♦ Current Expenses are projected to be \$95.2 million in 2018, a 2.6% increase as compared to the 2017 Current Estimate and a 1.9% increase from the 2017 Budget.
- ♦ Net Revenues are projected to be \$85.1 million in 2018, as compared to \$109.8 million in 2017.
- ♦ Debt service coverage is projected at 1.98 in 2018, as compared to 2.54 in 2017.
- ♦ It is expected that the Improvement Fund will have a cash balance of \$17.3 million on January 1, 2018. Improvement Fund receipts are estimated at \$79.8 million and expenditures are estimated at \$96.5 million in 2018, resulting in an expected balance of \$0.7 million on December 31, 2018.
- ♦ It is expected that the General Fund will have a balance of \$107.4 million at the end of 2018.
- ♦ In 2018 the authorized staff complement is expected to remain constant at a total of 475 employees.
- ♦ Expected payroll costs of \$39.836 million in 2018 represents a 1.6% increase from the \$39.196 million budgeted in 2017.

II. Customer Growth

- ◆ Applications for new services in 2018 are projected to be 531 less than the number currently estimated for 2017 and 181 less than the actual number of applications received in 2016.
- ◆ 300 customer accounts are expected to be added in 2018.
- ◆ Single family and townhouse units comprise 94% of all retail customers.
- ◆ 46,541 customer accounts were added to the system with the acquisition of the cities of Falls Church and Fairfax in 2014.
- ◆ Sales per customer in 2014 does not include a full year billing cycle for the customer accounts acquired from Falls Church and Fairfax.

	<u>Actual</u>				<u>Current Estimate 2017</u>	<u>Budget 2018</u>
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>		
<u>Customers</u>						
Number of Applications Received	436	352	276	481	831	300
Number of Services Installed	307	454	498	538	614	300
Number of Customer Accounts Added (net)	184	46,584	192	(19)	125	300
Number of Equivalent 5/8" Units Added	1,628	2,721	3,290	2,941	2,880	1,830
 <u>Total Customers (End-of-Year)</u>						
Single Family	156,206	187,264	187,306	187,224	187,252	187,399
Townhouse	65,601	76,799	76,865	76,897	76,937	77,000
Apartment	3,272	4,003	4,028	4,039	4,062	4,098
Commercial/Industrial	7,726	11,010	11,065	11,085	11,119	11,173
Municipal/Institutional	1,087	1,400	1,404	1,404	1,404	1,404
Restricted Service	70	70	70	70	70	70
	<u>233,962</u>	<u>280,546</u>	<u>280,738</u>	<u>280,719</u>	<u>280,844</u>	<u>281,144</u>
 <u>Sales Per Customer</u>						
Retail Customers (Average)	233,870	280,525	280,642	280,729	280,782	280,994
Retail Water Sales (mg)	25,747	29,922	31,023	31,533	31,200	31,500
Sales Per Customer (1,000 gal)	110	107	111	112	111	112

III. Water Sales

- ♦ Total water sales are expected to decrease 1.2% in 2018 as compared to 2017.
- ♦ Total water sales are expected to decrease 0.6% in 2017 as compared to 2016.
- ♦ Total water sales increased 11.1% in 2014 as compared to 2013 due to the acquisition of the cities of Falls Church and Fairfax.

	Actual				Current Estimate 2017	Budget 2018
	2013	2014	2015	2016		
<u>Water Sales</u>						
<u>Wholesale</u>						
Million Gallons	23,318	24,587	24,529	25,533	25,514	24,554
Daily Average (mgd)	63.9	67.4	67.2	69.8	69.9	67.3
% of Total Sales	48	45	44	45	45	44
<u>Retail</u>						
Million Gallons	25,747	29,922	31,023	31,533	31,200	31,500
Daily Average (mgd)	70.5	82.0	85.0	86.2	85.5	86.3
% of Total Sales	52	55	56	55	55	56
<u>Total</u>						
Million Gallons	49,065	54,509	55,552	57,066	56,714	56,054
Daily Average (mgd)	134.4	149.3	152.2	155.9	155.4	153.6

IV. Water Production (Supply)

- ♦ Water production is expected to average 170.7 mgd in 2018, as compared to 172.6 mgd in 2017.
- ♦ Occoquan River water production is expected to account for 35.6% of total production in 2018.
- ♦ Potomac River water production is expected to account for 56.0% of total production in 2018.
- ♦ Purchased water from the Washington Aqueduct is expected to account for 8.4% of total production in 2018.

	Actual				Current Estimate 2017	Budget 2018
	2013	2014	2015	2016		
<u>Supply vs. Sales (mg)</u>						
Water Supply	52,638	59,584	59,814	62,622	63,000	62,300
Water Sales	49,065	54,509	55,552	57,066	56,714	56,054
Non-Revenue Water:						
Quantity	3,573	5,075	4,262	5,556	6,286	6,246
As a % of Supply	6.8	8.5	7.1	8.9	10.0	10.0
<u>Sources of Supply (mg)</u>						
Purchased	25	5,113	5,141	4,188	5,280	5,220
Occoquan:						
Treated	21,745	21,638	22,138	22,652	22,743	22,092
Untreated	72	80	74	80	94	94
	21,817	21,718	22,212	22,732	22,837	22,186
Potomac	30,796	32,753	32,461	35,702	34,883	34,894
Total Supply	52,638	59,584	59,814	62,622	63,000	62,300
<u>Daily Average (mgd)</u>						
Occoquan	59.8	59.5	60.9	62.1	62.6	60.8
Potomac	84.4	89.7	88.9	97.6	95.6	95.6
Washington Aqueduct	--	14.0	14.1	11.4	14.4	14.3
Total	144.2	163.2	163.9	171.1	172.6	170.7

V. Revenues

- ♦ 2018 total revenues are estimated at \$178.7 million, as compared to \$202.6 million in 2017.
- ♦ Revenues from total water sales (inclusive of proposed retail rate revisions) are expected to decrease by \$18.8 million or 10.7% in 2018.
- ♦ In 2018, revenues from connection charges are budgeted to decrease by 38.8% as compared to 2017.
- ♦ In 2014 and 2017, wholesale revenues includes \$29.8 million and \$26.6 million, respectively, from Prince William County Service Authority for the purchase of additional capacity in Fairfax Water's system.
- ♦ In 2014 and 2015, other revenue includes \$16.9 million and \$1.8 million, respectively, of payments from the City of Fairfax as required by the asset purchase agreement.

	Actual				Current Estimate 2017	Budget 2018
	2013	2014	2015	2016		
----- \$ Million -----						
<u>Revenues</u>						
Water Sales						
Wholesale	45.535	76.499	42.220	35.643	62.706	39.394
Retail	74.393	95.555	104.235	108.479	111.883	112.959
Subtotal	119.928	172.054	146.455	144.122	174.589	152.353
Connection Charges:						
Availability	6.209	10.674	13.000	12.005	11.800	7.500
Local Facility	.682	.786	1.107	.684	1.100	.800
Service Connection	.496	.696	.639	1.055	1.800	.700
Investment Income	2.373	1.124	1.362	2.130	1.900	1.900
Sewer Service Billing Charges	5.890	6.064	6.544	7.118	6.100	6.600
Other Revenue	3.151	20.883	5.132	3.863	4.230	4.090
Bond Subsidy	1.086	1.053	1.052	1.058	1.057	1.060
Rate Revisions ⁽¹⁾	--	--	--	--	--	3.655
Total - Revenues	139.815	213.334	175.291	172.035	202.576	178.658

⁽¹⁾ The 2018 Annual Budget contains a provision for revisions to certain rates, fees and charges proposed to be effective April 1, 2018.

VI. Current Expenses - Exhibits 2, 3, and 4

- ♦ Current Expenses are projected to increase 2.6% in 2018 as compared to 2017.
- ♦ The increase is due to higher operation and maintenance costs such as employee payroll and benefits, chemicals, supplies and materials, and contractual services and is offset by lower purchased water from the Washington Aqueduct (mainly driven by timing of capital expenditures between 2016 and 2017).

	Actual				Current Estimate 2017	Budget 2018
	2013	2014	2015	2016		
----- \$ Million -----						
<u>Current Expenses</u>						
Operation and Maintenance	72.612	84.021	87.644	84.557	91.034	93.386
Other	.945	1.424	1.570	1.564	1.746	1.825
Total	73.557	85.445	89.214	86.121	92.780	95.211

Categories of Expense

Operation and Maintenance

Supply Facilities	4.847	8.883	10.668	8.113	11.756	10.776
Treatment Facilities	23.210	22.573	22.215	22.426	22.870	24.318
Transmission System	3.692	5.064	5.413	5.253	5.243	5.400
Distribution System	12.698	16.817	17.570	17.306	18.394	18.968
Administrative and General	28.165	30.684	31.778	31.459	32.771	33.924
Total	72.612	84.021	87.644	84.557	91.034	93.386

Current Expenses (Continued)

Operation and Maintenance Expenses

- ♦ The following table depicts costs for major items of Operation and Maintenance expenses for the years 2013-2018.

	Actual				Current Estimate 2017	Budget 2018
	2013	2014	2015	2016		
	----- \$ Million -----					
Operation and Maintenance	72.612	84.021	87.644	84.557	91.034	93.386
<u>Major Items of Expense</u>						
Personal Services	23.097	26.421	26.866	26.897	26.945	27.888
Employee Benefits	23.851	26.284	26.871	26.711	27.325	28.095
Power Purchased	9.346	9.135	9.141	9.211	9.163	9.300
Utilities	1.346	1.300	1.450	1.239	1.305	1.370
Water Treatment Chemicals	7.010	6.668	6.077	6.190	6.773	7.657
Residuals Management Chemicals	.074	.000	.074	.073	.073	.075
Purchased Water	.081	4.637	6.567	3.827	7.677	6.540
Supplies and Materials	4.188	4.456	5.092	5.133	4.850	5.102
Insurance	1.184	1.169	1.026	1.104	1.186	1.200
Gasoline and Fuel	.858	1.035	.631	.476	.595	.655
Postage	.508	.616	.624	.620	.611	.614
Printed Reports	.056	.062	.069	.060	.065	.070
Advertising	.056	.032	.048	.059	.058	.062
Customer Relations	.175	.258	.236	.246	.280	.265
Books, Periodicals and Dues	.134	.138	.140	.106	.107	.117
Contractual Services	8.015	9.113	9.430	9.964	11.252	11.610
Professional Services	.824	.789	1.086	.665	.990	1.025
Employee Training and Meetings	.339	.342	.377	.326	.412	.505
Programs	.865	1.012	1.093	.997	1.199	1.187
Miscellaneous	.218	.140	.415	.269	.159	.297
Subtotal	82.225	93.607	97.313	94.173	101.025	103.634
Transfer to Improvement Fund	(9.613)	(9.586)	(9.669)	(9.616)	(9.991)	(10.248)
Total - Operation and Maintenance	72.612	84.021	87.644	84.557	91.034	93.386

VII. Net Revenues - Coverage

- ♦ Net Revenues are funds remaining after Current Expenses are deducted from Revenues.
- ♦ Net Revenues are allocated to: (1) Reserve for Current Expenses; (2) Debt Service Fund; (3) Reserve Fund; (4) Improvement Fund; and (5) General Fund.
- ♦ The following table depicts Net Revenues for the years 2013-2018:

	Actual				Current Estimate 2017	Budget 2018
	2013	2014	2015	2016		
	----- \$ Million -----					
Revenues	139.815	213.334	175.291	172.035	202.576	178.658
Current Expenses	73.557	85.445	89.214	86.121	92.780	95.211
Net Revenues Defined	66.258	127.889	86.077	85.914	109.796	83.447
Transfer from Reserve Fund	.806	.668	.627	.522	--	1.621
Net Revenues - Total	67.064	128.557	86.704	86.436	109.796	85.068
 Debt Service	 38.969	 40.020	 39.915	 41.417	 43.256	 42.981
 Coverage	 1.72	 3.21	 2.17	 2.09	 2.54	 1.98

VIII. Debt Service Fund

- ♦ The Debt Service Fund was established to accumulate deposits necessary for the payment of the principal and interest on outstanding bond issues.
- ♦ In 2018, Fairfax Water's debt service will be \$42,980,884, which will provide a coverage ratio of 1.98. Coverage is derived by dividing Net Revenues by debt service.

IX. Reserve Fund

- ♦ The General Trust Indenture requires that the Reserve Fund be maintained at the "Reserve Requirement" which is defined in the Indenture to be an amount equal to the maximum amount of interest accruing on all outstanding bonds in the current or any future Bond Year. The current Reserve Requirement is \$21,635,884 which is funded with a Qualified Reserve Fund Substitute (Insurance) as well as approximately \$15 million in cash and securities.

X. Improvement Fund - Exhibit 5

The Improvement Fund is comprised of projects funded from Net Revenues and bond proceeds.

(1) Capital Improvement Program (Part A)

- ♦ The Part A Capital Improvement Program was completed in 2004.
- ♦ Financing requirements for this program were satisfied in 1994 by the issuance of \$76.3 million in Water Revenue Bonds.

(2) Capital Improvement Program (Part B)

- ♦ The Part B Capital Improvement Program includes projects in the Improvement Fund which are generally financed from Net Revenues, however, they may be funded from bond proceeds when appropriate. Projects include such items as major repairs to water mains, extensions of water mains, system improvements and the purchase of property and capital equipment, e.g., motor vehicles.

(3) Capital Improvement Program (Part C)

- ♦ The Part C Capital Improvement Program will be completed in 2017.
- ♦ Financing for this program was satisfied with the issuance of bonds and cash on hand.

(4) Capital Improvement Program (Part D)

- ♦ The Part D Capital Improvement Program is currently estimated to cost \$0.874 million in 2018 of which \$0.704 million relates to various transmission projects and \$0.170 million relates to General Plant Facilities.
- ♦ Financing for this program is from the issuance of revenue bonds and cash on hand.

(5) Capital Improvement Program (Part E)

- ♦ The Part E Capital Improvement Program is currently estimated to cost \$0.400 million in 2018 of which \$0.320 million relates to expansion of transmission facilities in Tysons Corner and \$0.080 million relates to General Plant Facilities.
- ♦ Financing for this program is from the issuance of revenue bonds and cash on hand.

(6) Summary of Improvement Fund Budget

- ♦ As depicted in the following table, it is expected that the Improvement Fund will have a balance of \$17.3 million on January 1, 2018. Improvement Fund receipts are estimated at \$79.8 million and expenditures are estimated at \$96.5 million, resulting in an expected balance of \$0.7 million on December 31, 2018.

Improvement Fund (Continued)

	Actual				Current Estimate 2017	Budget 2018
	2013	2014	2015	2016		
----- \$ Million -----						
Balance Carried Forward - January 1	3.900	1.085	0.166	1.298	.843	17.347
<u>Receipts</u>						
Transfer from Revenue Fund	11.000	11.000	11.000	11.000	11.000	11.000
Transfer from General Fund	42.000	57.000	45.000	50.000	14.000	67.500
Bond Proceeds	.346	--	--	--	75.531	--
Investment Income and Other	1.067	1.087	1.200	1.056	1.413	1.328
Total - Receipts	<u>54.413</u>	<u>69.087</u>	<u>57.200</u>	<u>62.056</u>	<u>101.944</u>	<u>79.828</u>
<u>Disbursements</u>						
Part B Capital Improvement Program						
Materials and Supplies	(.164)	1.663	(.054)	.520	.050	.090
Refunds of Advances	.049	.024	.007	.027	.030	.040
General Expenses	12.463	12.566	13.309	17.122	15.880	17.550
Subdivision/Development Projects	1.117	1.126	1.126	1.189	1.220	1.240
Extraordinary Maintenance and Repair	20.755	20.853	22.728	19.891	22.650	42.262
Additions, Extensions and Betterments	5.781	5.286	3.883	20.560	35.450	31.449
General Studies	2.095	9.820	2.238	1.205	1.190	2.606
Part C Capital Improvement Program	.802	1.358	3.916	.001	--	--
Part D Capital Improvement Program	10.902	15.797	8.064	1.607	7.680	.874
Part E Capital Improvement Program	3.428	1.513	.851	.389	1.290	.400
Total - Disbursements	<u>57.228</u>	<u>70.006</u>	<u>56.068</u>	<u>62.511</u>	<u>85.440</u>	<u>96.511</u>
Balance Carried Forward - December 31	1.085	.166	1.298	.843	17.347	.664

XI. General Fund

- ♦ The General Fund was established to provide funding for special activities of Fairfax Water.
- ♦ Generally, Net Revenues in excess of those required to be deposited to the Debt Service Fund and Improvement Fund are deposited to the General Fund. It is expected that these funds will be subsequently transferred to the Improvement Fund.

	Actual				Current Estimate 2017	Budget 2018
	2013	2014	2015	2016		
	----- \$ Million -----					
General Fund Balance Forward						
January 1	128.808	109.955	97.041	118.731	102.260	143.800
December 31	109.955	97.041	118.731	102.260	143.800	107.387

XII. Personnel Requirements - Exhibits 6, 7, and 8

- ◆ The personnel complement is expected to remain constant in 2018 at a total of 475 authorized positions.
- ◆ Total 2018 personal services costs are estimated at \$39.836 million, of which \$29.211 million and \$10.625 million are estimated to be charged to the Revenue and Improvement Funds, respectively.
- ◆ The 2018 total budgeted personal services cost of \$39.836 million includes a cost-of-living adjustment of 0.7% effective the first pay period of 2018 based on the CPI-U for the 12-month period ending July 31, 2017.

	Actual				Current Estimate 2017	Budget 2018
	2013	2014	2015	2016		
Number of Employees Added	--	58	--	--	--	--
Total Employees Authorized	417	475	475	475	475	475
Total Payroll Cost (\$ Million)	32.931	36.937	37.761	37.709	38.483	39.836
 <u>Employees by Division</u>						
Management	49	49	50	50	50	50
Finance	91	108	108	109	109	109
Planning and Engineering	64	66	65	64	64	64
Technology	45	45	46	46	46	46
Production	82	82	82	82	82	82
Transmission and Distribution	86	125	124	124	124	124
Total	417	475	475	475	475	475

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2018
DETAILS OF WATER SALES REVENUE

	2017 Budget				2017 Current Estimate				2018 Budget				% Increase / (Decrease)		
	Volume (MG)	Sales Revenue (\$1,000)	Demand Charges (\$1,000)	Total (\$1,000)	Volume (MG)	Sales Revenue (\$1,000)	Demand Charges (\$1,000)	Total (\$1,000)	Volume (MG)	Sales Revenue (\$1,000)	Demand Charges (\$1,000)	Total (\$1,000)	Volume	Sales Revenue	Demand Charges
Wholesale Water Sales															
Virginia-American Water															
Alexandria District	5,800	7,018	2,675	9,693	5,700	6,897	2,325	9,222	5,700	6,954	1,975	8,929	--	0.8	(15.1)
Prince William District	1,730	2,093	1,596	3,689	1,730	2,093	1,490	3,583	1,730	2,111	1,384	3,495	--	0.9	(7.1)
Dulles International Airport	285	319	69	388	280	314	69	383	280	339	69	408	--	8.0	--
Fort Belvoir	660	739	1,093	1,832	660	739	1,093	1,832	660	799	1,093	1,892	--	8.1	--
PWCSA	8,200	9,922	826	10,748	8,500	10,285	26,697	36,982	8,500	10,370	2,233	12,603	--	0.8	(91.6)
Town of Herndon	780	944	271	1,215	810	980	193	1,173	810	988	325	1,313	--	0.8	68.4
Loudoun Water	6,800	5,576	2,664	8,240	6,900	5,589	2,359	7,948	6,000	4,860	4,300	9,160	(13.0)	(13.0)	82.3
Town of Vienna	760	920	617	1,537	840	1,016	542	1,558	780	952	617	1,569	(7.1)	(6.3)	13.8
Untreated															
Vulcan Materials	53	14	--	14	70	18	--	18	70	18	--	18	--	--	--
PWCPA	2	1	--	1	2	1	--	1	2	1	--	1	--	--	--
Old Hickory	25	7	--	7	22	6	--	6	22	6	--	6	--	--	--
Total - Wholesale	25,095	27,553	9,811	37,364	25,514	27,938	34,768	62,706	24,554	27,398	11,996	39,394	(3.8)	(1.9)	(65.5)
Retail Water Sales *	31,200	111,868	--	111,868	31,200	111,883	--	111,883	31,500	116,440	--	116,440	1.0	4.1	--
Total - Water Sales	56,295	139,421	9,811	149,232	56,714	139,821	34,768	174,589	56,054	143,838	11,996	155,834	(1.2)	2.9	(65.5)

* Budget columns include revenue associated with proposed retail rate revisions.

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2018
DETAILS OF CURRENT EXPENSES

Item	2017		2018	% Increase (Decrease)
	Budget	Current Estimate	Budget	
<u>Personal Services</u>				
Salaries-Regular	\$ 25,754,000	\$ 24,858,000	\$ 25,726,000	3.5
Salaries-Overtime	2,867,000	2,711,000	2,800,000	3.3
Salaries-Stand-By	90,000	100,000	110,000	10.0
Salaries-Summer	315,000	310,000	325,000	4.8
Salaries-Part-Time/Temporary	250,000	240,000	250,000	4.2
Subtotal	29,276,000	28,219,000	29,211,000	3.5
<u>Employee Benefits</u>				
OASDI-FICA	2,842,000	2,790,000	2,888,000	3.5
Health Insurance	5,868,000	5,810,000	5,810,000	--
Life Insurance	706,000	661,000	687,000	3.9
Disability Program	60,000	75,000	80,000	6.7
Retirement Program	18,236,000	17,897,000	18,535,000	3.6
Educational Reimbursement	65,000	62,000	65,000	4.8
Employee Assistance Program	12,000	12,000	12,000	--
Employee Awards Program	12,000	18,000	18,000	--
Subtotal	27,801,000	27,325,000	28,095,000	2.8
<u>Power Purchased</u>				
Electricity - Production/Transmission Facilities	9,200,000	9,163,000	9,300,000	1.5
<u>Utilities</u>				
Electricity - Administrative Facilities	300,000	297,000	300,000	1.0
Water and Sewer	251,000	260,000	260,000	--
Heating Oil	50,000	48,000	50,000	4.2
Heating Gas	442,000	393,000	440,000	12.0
Telephone	257,000	242,000	252,000	4.1
Trash Removal	72,000	65,000	68,000	4.6
Subtotal	1,372,000	1,305,000	1,370,000	5.0

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
Chemicals				
<i>Coagulants:</i>				
Poly Aluminum Chloride	\$ 2,364,000	\$ 2,356,000	\$ 2,498,000	6.0
Polymers	147,000	122,000	129,000	5.7
	2,511,000	2,478,000	2,627,000	6.0
<i>Disinfectant/Oxidant:</i>				
Sodium Hypochlorite	1,254,000	1,208,000	1,281,000	6.0
Ammonium Hydroxide	204,000	216,000	229,000	6.0
Liquid Oxygen	677,000	692,000	733,000	5.9
Potassium Permanganate	464,000	459,000	487,000	6.1
	2,599,000	2,575,000	2,730,000	6.0
<i>pH Adjustment:</i>				
Caustic Soda	448,000	380,000	403,000	6.1
Sulfuric Acid	171,000	190,000	201,000	5.8
	619,000	570,000	604,000	6.0
<i>Corrosion Inhibitor:</i>				
Phosphoric Acid	400,000	411,000	436,000	6.1
<i>Oral Health:</i>				
Hydrofluosilicic Acid (Fluoride)	297,000	284,000	301,000	6.0
<i>Ozone Quenching/Reducing Agent:</i>				
Calcium Thiosulfate	66,000	33,000	35,000	6.1
Sodium Bisulfate	26,000	22,000	24,000	9.1
	92,000	55,000	59,000	7.3
<i>Algaecide:</i>				
Copper Sulfate	173,000	--	100,000	100.0
	173,000	--	100,000	100.0
<i>Filter Media:</i>				
Granular Activated Carbon	800,000	400,000	800,000	100.0
	800,000	400,000	800,000	100.0
Subtotal	7,491,000	6,773,000	7,657,000	13.1

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Residuals Management Chemicals</u>				
Polymers	\$ 75,000	\$ 73,000	\$ 75,000	2.7
Subtotal	75,000	73,000	75,000	2.7
<u>Purchased Water</u>				
Loudoun Water	12,000	12,000	12,000	- -
Washington Aqueduct	5,564,000	7,665,000	6,528,000	(14.8)
Subtotal	5,576,000	7,677,000	6,540,000	(14.8)
<u>Supplies</u>				
Cleaning and Custodial	27,000	28,000	29,000	3.6
Vehicle and Automotive	418,000	338,000	352,000	4.1
Laboratory	583,000	572,000	575,000	0.5
Office	102,000	100,000	104,000	4.0
Computer	398,000	306,000	400,000	30.7
Mechanical and Electrical	208,000	162,000	200,000	23.5
Safety	219,000	208,000	215,000	3.4
Telephone and Communication	20,000	5,000	7,000	40.0
Photographic and Reproduction	79,000	82,000	82,000	- -
Small Tools	245,000	259,000	260,000	0.4
Construction and Maintenance	952,000	761,000	791,000	3.9
Meter Parts and Supplies	75,000	89,000	92,000	3.4
Uniforms and Clothing	80,000	76,000	80,000	5.3
Security	50,000	25,000	50,000	100.0
Miscellaneous	100,000	90,000	100,000	11.1
Subtotal	3,556,000	3,101,000	3,337,000	7.6

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Materials</u>				
Service Connection	\$ 386,000	\$ 560,000	\$ 560,000	--
Meters	150,000	146,000	150,000	2.7
Hydrants and Appurtenances	155,000	148,000	151,000	2.0
Pipe and Appurtenances	191,000	279,000	285,000	2.2
Valves and Appurtenances	138,000	164,000	169,000	3.0
Pumps and Appurtenances	59,000	68,000	70,000	2.9
Instrumentation and SCADA	201,000	234,000	240,000	2.6
Automotive	14,000	10,000	12,000	20.0
Electrical and Electronics	248,000	219,000	228,000	4.1
Mechanical	127,000	204,000	208,000	2.0
HVAC	81,000	87,000	89,000	2.3
Lube and Fluids	20,000	19,000	20,000	5.3
Miscellaneous General Materials	87,000	83,000	85,000	2.4
Subtotal	1,857,000	2,221,000	2,267,000	2.1
<u>Insurance</u>				
Workmen's Compensation	380,000	390,000	450,000	15.4
Liability	350,000	413,000	350,000	(15.3)
Motor Vehicle	120,000	82,000	85,000	3.7
Property	295,000	248,000	262,000	5.6
Unemployment Compensation	24,000	20,000	20,000	--
Miscellaneous Insurance	32,000	33,000	33,000	--
Subtotal	1,201,000	1,186,000	1,200,000	1.2
<u>Gasoline and Fuel</u>				
Gasoline	514,000	482,000	530,000	10.0
Diesel Fuel	101,000	105,000	115,000	9.5
Other Fuel	10,000	8,000	10,000	25.0
Subtotal	625,000	595,000	655,000	10.1

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Postage and Parcel Service</u>				
Postage	\$ 620,000	\$ 575,000	\$ 578,000	0.5
Parcel Service	34,000	36,000	36,000	--
Subtotal	654,000	611,000	614,000	0.5
<u>Reports</u>				
Annual Report	5,000	5,000	5,000	--
Consumer Confidence Report	65,000	60,000	65,000	8.3
Subtotal	70,000	65,000	70,000	7.7
<u>Advertising</u>				
Recruiting	36,000	40,000	42,000	5.0
Other Advertising	28,000	18,000	20,000	11.1
Subtotal	64,000	58,000	62,000	6.9
<u>Customer Relations</u>				
Visitor Education Center	10,000	10,000	10,000	--
Special Tours and Programs	55,000	70,000	55,000	(21.4)
Printed Literature	70,000	70,000	70,000	--
Miscellaneous Customer Relations	130,000	130,000	130,000	--
Subtotal	265,000	280,000	265,000	(5.4)
<u>Books, Periodicals and Dues</u>				
Reference Materials	20,000	8,000	15,000	87.5
Periodical Subscriptions	45,000	24,000	25,000	4.2
Association Dues	72,000	75,000	77,000	2.7
Subtotal	137,000	107,000	117,000	9.3

Item	2017		2018	% Increase
	Budget	Current Estimate	Budget	(Decrease)
<u>Contractual Services</u>				
Equipment Maintenance	\$ 990,000	\$ 1,205,000	\$ 1,000,000	(17.0)
Building/Grounds Maintenance	1,407,000	959,000	1,007,000	5.0
Computer Hosting Services	650,000	661,000	800,000	21.0
Equipment Rental	27,000	40,000	40,000	--
Uniform Rental	160,000	160,000	162,000	1.3
Computer Application Support and Licensing	1,387,000	1,580,000	1,700,000	7.6
Telephone and Communication	715,000	635,000	715,000	12.6
Residuals Management	405,000	310,000	350,000	12.9
Hazardous Waste Disposal	41,000	24,000	40,000	66.7
Pavement Replacement	2,533,000	2,995,000	3,025,000	1.0
Security	938,000	785,000	805,000	2.5
Electrical	142,000	277,000	220,000	(20.6)
Diving	65,000	62,000	64,000	3.2
Safety and Health	170,000	156,000	162,000	3.8
Temporary Staffing	50,000	20,000	50,000	150.0
Bill Print Services	315,000	290,000	310,000	6.9
Information Technology	122,000	380,000	430,000	13.2
Spoil Disposal	338,000	433,000	450,000	3.9
Lease - Central Maintenance Facility	180,000	180,000	180,000	--
Other Contractual Services	36,000	100,000	100,000	--
Subtotal	10,671,000	11,252,000	11,610,000	3.2
<u>Professional Services</u>				
Banking	225,000	176,000	180,000	2.3
Insurance	15,000	5,000	10,000	100.0
Financial	250,000	268,000	280,000	4.5
Legal	150,000	245,000	250,000	2.0
Trustee	40,000	36,000	40,000	11.1
Management Consultants	150,000	172,000	175,000	1.7
Advocacy Services	70,000	68,000	70,000	2.9
Other Professional Services	10,000	20,000	20,000	--
Subtotal	910,000	990,000	1,025,000	3.5

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Employee Training and Meetings</u>				
Employee Training	\$ 325,000	\$ 260,000	\$ 350,000	34.6
Professional Meetings	62,000	80,000	70,000	(12.5)
Board Travel	10,000	2,000	10,000	400.0
Miscellaneous Travel and Meetings	78,000	70,000	75,000	7.1
Subtotal	475,000	412,000	505,000	22.6
<u>Programs</u>				
Cross Connection Control	648,000	696,000	680,000	(2.3)
Utilities Notification	148,000	150,000	152,000	1.3
Potomac River Reservoirs	158,000	158,000	158,000	--
Virginia Technical Assistance Fund (State User Fees)	160,000	160,000	160,000	--
Water Supply Stakeholder Outreach Program	35,000	35,000	37,000	5.7
Subtotal	1,149,000	1,199,000	1,187,000	(1.0)
<u>Miscellaneous</u>				
Highway Permits	24,000	18,000	20,000	11.1
Professional Licenses	5,000	7,000	7,000	--
Injuries and Damages	225,000	68,000	200,000	194.1
Miscellaneous	70,000	66,000	70,000	6.1
Subtotal	324,000	159,000	297,000	86.8
Subtotal - Current Expenses	102,749,000	102,771,000	105,459,000	2.6
Less: Reimbursable Services	(9,305,000)	(9,991,000)	(10,248,000)	2.6
Total - Current Expenses	93,444,000	92,780,000	95,211,000	2.6

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2018
SUMMARY OF CURRENT EXPENSES

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Operation and Maintenance Expenses</u>				
<u>Supply</u>				
<u>Occoquan</u>				
Personal Services	\$ 233,000	\$ 228,000	\$ 236,000	3.5
Power Purchased	1,003,000	1,035,000	1,050,000	1.4
Water Treatment Chemicals	51,000	40,000	40,000	--
Supplies and Materials	38,000	43,000	45,000	4.7
Contractual Services	69,000	70,000	75,000	7.1
Programs	35,000	35,000	37,000	5.7
Subtotal	1,429,000	1,451,000	1,483,000	2.2
<u>Potomac</u>				
Personal Services	270,000	290,000	300,000	3.4
Power Purchased	2,027,000	2,006,000	2,036,000	1.5
Utilities	54,000	53,000	56,000	5.7
Supplies and Materials	113,000	54,000	57,000	5.6
Gasoline and Fuel	9,000	8,000	9,000	12.5
Contractual Services	112,000	23,000	100,000	334.8
Programs	158,000	158,000	158,000	--
Subtotal	2,743,000	2,592,000	2,716,000	4.8

<u>Item</u>	<u>2017</u>		<u>2018</u> <u>Budget</u>	<u>% Increase</u> <u>(Decrease)</u>
	<u>Budget</u>	<u>Current</u> <u>Estimate</u>		
<u>Purchased</u>				
Personal Services	\$ 27,000	\$ 33,000	\$ 34,000	3.0
Purchased Water	5,576,000	7,677,000	6,540,000	(14.8)
Contractual Services	3,000	3,000	3,000	- -
Subtotal	<u>5,606,000</u>	<u>7,713,000</u>	<u>6,577,000</u>	<u>(14.7)</u>
Total - Supply	9,778,000	11,756,000	10,776,000	(8.3)

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Treatment</u>				
<u>Griffith</u>				
Personal Services	\$ 3,649,000	\$ 3,557,000	\$ 3,682,000	3.5
Power Purchased	1,224,000	1,266,000	1,285,000	1.5
Utilities	166,000	135,000	142,000	5.2
Water Treatment Chemicals	3,909,000	3,509,000	3,953,000	12.7
Supplies and Materials	389,000	440,000	463,000	5.2
Contractual Services	892,000	808,000	835,000	3.3
Programs	80,000	80,000	80,000	--
Miscellaneous	5,000	8,000	8,000	--
Subtotal	10,314,000	9,803,000	10,448,000	6.6
<u>Corbalis</u>				
Personal Services	4,685,000	4,256,000	4,406,000	3.5
Power Purchased	2,475,000	2,448,000	2,485,000	1.5
Utilities	571,000	546,000	573,000	4.9
Water Treatment Chemicals	3,531,000	3,224,000	3,664,000	13.6
Waste Disposal Chemicals	75,000	73,000	75,000	2.7
Supplies and Materials	1,159,000	1,107,000	1,166,000	5.3
Contractual Services	1,488,000	1,321,000	1,409,000	6.7
Programs	80,000	80,000	80,000	--
Miscellaneous	12,000	12,000	12,000	--
Subtotal	14,076,000	13,067,000	13,870,000	6.1
Total - Treatment	24,390,000	22,870,000	24,318,000	6.3

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Transmission</u>				
<u>Transmission System</u>				
Personal Services	\$ 2,168,000	\$ 2,145,000	\$ 2,220,000	3.5
Power Purchased	2,471,000	2,408,000	2,444,000	1.5
Utilities	28,000	21,000	22,000	4.8
Supplies and Materials	220,000	249,000	262,000	5.2
Contractual Services	555,000	362,000	389,000	7.5
Programs	30,000	30,000	30,000	--
Subtotal	5,472,000	5,215,000	5,367,000	2.9
<u>Wholesale Customer Accounts</u>				
Personal Services	28,000	28,000	29,000	3.6
Supplies and Materials	4,000	--	4,000	100.0
Subtotal	32,000	28,000	33,000	17.9
Total - Transmission	5,504,000	5,243,000	5,400,000	3.0
<u>Distribution</u>				
<u>Distribution System</u>				
Personal Services	3,827,000	3,694,000	3,824,000	3.5
Utilities	5,000	5,000	5,000	--
Supplies and Materials	974,000	1,049,000	1,105,000	5.3
Contractual Services	2,644,000	3,034,000	3,063,000	1.0
Programs	766,000	816,000	802,000	(1.7)
Miscellaneous	38,000	39,000	39,000	--
Subtotal	8,254,000	8,637,000	8,838,000	2.3

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Retail Customer Accounts</u>				
Personal Services	\$ 7,542,000	\$ 7,333,000	\$ 7,587,000	3.5
Utilities	9,000	9,000	9,000	--
Supplies and Materials	553,000	547,000	567,000	3.7
Postage and Parcel Service	591,000	545,000	545,000	--
Reports	65,000	60,000	65,000	8.3
Contractual Services	1,111,000	1,254,000	1,348,000	7.5
Miscellaneous	9,000	9,000	9,000	--
Subtotal	9,880,000	9,757,000	10,130,000	3.8
Total - Distribution	18,134,000	18,394,000	18,968,000	3.1
 <u>Administrative and General</u>				
<u>Office Building</u>				
Personal Services	275,000	219,000	227,000	3.7
Utilities	349,000	346,000	364,000	5.2
Supplies and Materials	184,000	56,000	59,000	5.4
Contractual Services	281,000	243,000	261,000	7.4
Subtotal	1,089,000	864,000	911,000	5.4
 <u>Shop and Storage Yards</u>				
Personal Services	317,000	404,000	418,000	3.5
Utilities	186,000	186,000	195,000	4.8
Supplies and Materials	155,000	159,000	167,000	5.0
Contractual Services	394,000	393,000	395,000	0.5
Subtotal	1,052,000	1,142,000	1,175,000	2.9

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Vehicles and Equipment</u>				
Personal Services	\$ 751,000	\$ 699,000	\$ 723,000	3.4
Supplies and Materials	539,000	414,000	436,000	5.3
Gasoline and Fuel	616,000	587,000	646,000	10.1
Contractual Services	58,000	44,000	47,000	6.8
Subtotal	1,964,000	1,744,000	1,852,000	6.2
<u>Administrative</u>				
Personal Services	4,235,000	4,059,000	4,202,000	3.5
Employee Benefits	27,801,000	27,325,000	28,095,000	2.8
Utilities	4,000	4,000	4,000	--
Supplies and Materials	920,000	732,000	771,000	5.3
Insurance	1,201,000	1,186,000	1,200,000	1.2
Postage and Parcel Service	63,000	66,000	69,000	4.5
Reports	5,000	5,000	5,000	--
Advertising	64,000	58,000	62,000	6.9
Customer Relations	265,000	280,000	265,000	(5.4)
Books, Periodicals and Dues	137,000	107,000	117,000	9.3
Contractual Services	3,064,000	3,697,000	3,685,000	(0.3)
Professional Services	910,000	990,000	1,025,000	3.5
Employee Training and Meetings	475,000	412,000	505,000	22.6
Miscellaneous	260,000	91,000	229,000	151.6
Subtotal	39,404,000	39,012,000	40,234,000	3.1
Total - Administrative and General	43,509,000	42,762,000	44,172,000	3.3
Less: Reimbursable Services	(9,305,000)	(9,991,000)	(10,248,000)	2.6
Total - Administrative and General	34,204,000	32,771,000	33,924,000	3.5
Total - Operation and Maintenance Expenses	92,010,000	91,034,000	93,386,000	2.6

Item	2017		2018 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Other Expenses</u>				
<u>New Services and Meters</u>				
Personal Services	\$ 1,265,000	\$ 1,274,000	\$ 1,319,000	3.5
Supplies and Materials	160,000	472,000	497,000	5.3
Subtotal	1,425,000	1,746,000	1,816,000	4.0
<u>Merchandising and Jobbing</u>				
Personal Services	4,000	--	4,000	100.0
Supplies and Materials	5,000	--	5,000	100.0
Subtotal	9,000	--	9,000	100.0
Total - Other Expenses	1,434,000	1,746,000	1,825,000	4.5
Total - Current Expenses	93,444,000	92,780,000	95,211,000	2.6

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2018
ALLOCATION OF ADMINISTRATIVE EXPENSES BETWEEN
REVENUE FUND AND IMPROVEMENT FUND

	<u>Total</u>	<u>Allocated to Improvement Fund</u>	
		<u>Amount</u>	<u>% Total</u>
Personal Services Cost	\$ 39,836,000	\$ 10,625,000	27
Number of Motor Vehicles	305	27	9
<hr/>			
	<u>Total</u>	<u>Allocated to Improvement Fund</u>	
		<u>Percent</u>	<u>Amount</u>
<u>Administrative</u>			
Office Facilities	\$ 911,000	27	\$ 246,000
Shop and Storage Yard Facilities	1,175,000	9	106,000
Maintenance of Equipment	1,852,000	9	167,000
Administrative and General			
Personal Services	4,202,000	--	--
Other Administrative Expenses	<u>36,032,000</u>	<u>27</u>	<u>9,729,000</u>
Total	44,172,000	23	10,248,000

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2018
DETAILS OF IMPROVEMENT FUND

Item	Cash Receipts 2018
<u>Balance Carried Forward - January 1, 2017</u>	\$ 17,347,000
<u>Receipts</u>	
Transfer from Revenue Fund	11,000,000
Transfer from General Fund	67,500,000
Bonds Proceeds	--
Advances for Construction	100,000
Contributions for Construction	1,000,000
Investment Income	178,000
Miscellaneous Income	50,000
Total - Receipts	79,828,000
<u>Balance Carried Forward and Receipts</u>	97,175,000

<u>Item</u>	<u>Total Project Cost</u>	<u>Disbursements Prior to Jan. 1, 2018</u>	<u>Cash Disbursements 2018</u>
Disbursements - Part B Capital Improvement Program			
<u>General and Administrative</u>			
Project 1194-General Expenses			
Personal Services	\$ 6,679,000	\$ --	\$ 6,679,000
Transfer to Revenue Fund (Administrative)	10,248,000	--	10,248,000
Materials (Inventory)	90,000	--	90,000
Refunds of Advances	40,000	--	40,000
Trust Engineer - Basic Ordering Agreement	50,000	--	50,000
Miscellaneous	823,000	--	823,000
Subtotal	17,930,000	--	17,930,000
Transfer to Part D Capital Improvement Program	(170,000)	--	(170,000)
Transfer to Part E Capital Improvement Program	(80,000)	--	(80,000)
Total - General and Administrative - Part B	17,680,000	--	17,680,000
<u>Subdivision and Other Development Projects</u>			
Project 1195-Subdivision Expenses			
Personal Services	1,220,000	--	1,220,000
Supplies and Materials	15,000	--	15,000
Miscellaneous	5,000	--	5,000
Total - Subdivision and Other Development Projects	1,240,000	--	1,240,000

Item	Total Project Cost	Disbursements Prior to Jan. 1, 2018	Cash Disbursements 2018
<u>Extraordinary Maintenance and Repairs</u>			
Supply Facilities			
Project 577 Major Repairs-Reservoirs, Dams, Intakes, Etc.	\$ 326,000	\$ --	\$ 326,000
Project 1251 Potomac River Reservoirs-Renew/Replace	41,000	--	41,000
Project 1662 Annual Inspections-Upper/Lower Occoquan Dams	30,000	--	30,000
Subtotal	397,000	--	397,000
Treatment Facilities			
Project 579 Major Repairs-Treatment Facilities	9,723,000	--	9,723,000
Project 2350 Corbalis WTP-Solids Dewatering Equipment	24,400,000	4,646,000	--
Subtotal	34,123,000	--	9,723,000
Transmission Facilities			
Project 186A Major Repairs-Transmission Mains	570,000	--	570,000
Project 215A Major Repairs-Transmission Pumping	1,410,000	--	1,410,000
Project 631A Major Repairs-Transmission Storage	2,922,000	--	2,922,000
Project 648B Major Repairs-Sales Meters	30,000	--	30,000
<u>Transmission Mains Relocation Projects</u>			
Projects Previously Authorized	11,034,000	4,595,000	1,560,000
Other Anticipated Relocations - Distribution	9,983,000	--	520,000
Subtotal	25,949,000	4,595,000	7,012,000

EXHIBIT 5

Item			Total Project Cost	Disbursements Prior to Jan. 1, 2018	Cash Disbursements 2018
Distribution Facilities					
Project	186B	Major Repairs-Distribution Mains	\$ 900,000	\$ --	\$ 900,000
Project	215B	Major Repairs-Pumping Facilities	10,000	--	10,000
Project	631B	Major Repairs-Storage Facilities	10,000	--	10,000
Project	648C	Major Repairs-Distribution Meters Over 2"	131,000	--	131,000
Project	648D	Major Repairs-Distribution Meters 2" and Smaller	770,000	--	770,000
Project	649	Major Repairs/Repainting-Fire Hydrants	100,000	--	100,000
Project	1107B	Self Insurance Program/Water Main Breaks	750,000	--	750,000
Project	2200	Distribution System Sustainability Program	338,265,000	111,665,000	18,400,000
 <u>Distribution Mains Relocation Projects</u>					
Projects Previously Authorized			519,000	73,000	417,000
Other Anticipated Relocations - Distribution			7,750,000	--	550,000
Subtotal			<u>349,205,000</u>	<u>111,738,000</u>	<u>22,038,000</u>
 General Plant Facilities					
Project	234	Major Repairs-Motor Vehicles	40,000	--	40,000
Project	650	Major Repairs-Shop and Yard Facilities	200,000	--	200,000
Project	800	Major Repairs-Construction Equipment	10,000	--	10,000
Project	801	Major Repairs-Office Facilities	980,000	--	980,000
Project	2351	Surplus Property Demolition and Disposal	280,000	160,000	12,000
Project	2609	Willard Road Maintenance Facility	42,107,000	6,957,000	1,850,000
Subtotal			<u>43,617,000</u>	<u>7,117,000</u>	<u>3,092,000</u>
 Total - Extraordinary Maintenance and Repairs			453,291,000	123,450,000	42,262,000

Item			Total Project Cost	Disbursements Prior to Jan. 1, 2018	Cash Disbursements 2018
<u>Additions, Extensions and Betterments</u>					
Supply Facilities					
Project	1244	Jennings Randolph Reservoir	\$ 537,000	\$ --	\$ 537,000
Project	1460A	Major Additions-Metering Facilities-Purchased Water	10,000	--	10,000
Project	1499	Improvements-Supply Facilities	600,000	--	600,000
Project	2071	Future Water Supply Sources	1,401,000	1,076,000	100,000
Project	2352	Quarry Acquisition	18,902,000	13,423,000	5,479,000
	Subtotal		21,450,000	14,499,000	6,726,000
Treatment Facilities					
Project	915	Improvements to Treatment Facilities	540,000	--	540,000
	Subtotal		540,000	--	540,000
Transmission Facilities					
Project	1285	Additions and Improvements-Pumping Facilities	1,330,000	--	1,330,000
Project	1286	Additions and Improvements-Storage Facilities	10,000	--	10,000
Project	1460B	Major Additions-Metering Facilities-Sales	20,000	--	20,000
Project	1719	Cathodic Protection Transmission Water Mains	200,000	--	200,000
Project	1877	Pumping Station Modifications	21,454,000	6,630,000	--
Project	2111	Water Main Extension Program-Transmission System	6,797,000	2,064,000	141,000
Project	2377	Prince William County Transmission Improvements	10,094,000	--	--
	General Transmission System Reinforcement		2,111,000	139,000	772,000
	Subtotal		42,016,000	8,833,000	2,473,000
Distribution Facilities					
Project	1287	Additions and Improvements-Pumping Facilities	10,000	--	10,000
Project	1288	Additions and Improvements-Storage Facilities	10,000	--	10,000
Project	2100	Water Main Extension Program-Distribution System	7,767,000	4,755,000	300,000
	General Distribution System Reinforcement		3,000,000	--	300,000
	Subtotal		10,787,000	4,755,000	620,000
General Plant Facilities					
Project	597	Additions and Alterations-Shop Facilities	10,000	--	10,000
Project	803	Additions and Alterations-Office Facilities	100,000	--	100,000
Project	2366	Electronic Security Surveillance Improvements	300,000	--	300,000
Project	2608	Central Maintenance Facility	31,655,000	12,615,000	1,040,000
Project	3652	Capital Equipment Purchases	2,600,000	--	2,600,000
	Subtotal		34,665,000	12,615,000	4,050,000

EXHIBIT 5

<u>Item</u>			<u>Total Project Cost</u>	<u>Disbursements Prior to Jan. 1, 2018</u>	<u>Cash Disbursements 2018</u>
System Integration Transmission Facilities					
Project	2539	Colshire Drive Water Main	\$ 473,000	\$ 438,000	\$ 35,000
Project	2545	Lee Highway Transmission Main	9,405,000	1,145,000	6,195,000
Project	2546	Braddock Road Transmission Main	6,217,000	2,083,000	4,134,000
Project	2547	University Tank Replacement	10,387,000	730,000	2,457,000
Project	2548	Seven Corners Tank Replacement	11,437,000	538,000	500,000
Project	2549	Second High Storage Elevation	3,950,000	143,000	200,000
Project	2559	Griffith Road and Pimmit Drive System Improvement	1,817,000	1,402,000	415,000
Project	2589	Seven Corners Connector	835,000	--	145,000
Project	xxxx	Chain Bridge Pumping Station Upgrades	3,183,000	--	343,000
Project	xxxx	West Fairfax Connector	5,051,000	--	--
Project	xxxx	Pickett Road Transmission Main-Phase I	9,257,000	--	--
Project	xxxx	Lyndhurst Elevated Tank	13,475,000	--	--
Project	xxxx	Seven Corners Route 50 Connector	1,820,000	--	--
	Subtotal		<u>77,307,000</u>	<u>6,479,000</u>	<u>14,424,000</u>
System Integration Distribution Facilities					
Project	2560	Haycock- Poplar Heights Pressure Zone Modifications	<u>4,073,000</u>	<u>1,457,000</u>	<u>2,616,000</u>
	Subtotal		<u>4,073,000</u>	<u>1,457,000</u>	<u>2,616,000</u>
Total - Additions, Extensions and Betterments			190,838,000	48,638,000	31,449,000

Item	Total Project Cost	Disbursements Prior to Jan. 1, 2018	Cash Disbursements 2018
<u>General Studies and Programs</u>			
Supply Facilities			
Project 390 Watershed Management Activities	\$ 1,014,000	\$ --	\$ 1,014,000
Project 2368 Water Supply Planning	10,000	--	10,000
Subtotal	1,024,000	--	1,024,000
Treatment Facilities			
Project 1401 Water Quality Improvement Studies	100,000	--	100,000
Subtotal	100,000	--	100,000
General and Administrative			
Project 1477 Water Research Foundation	135,000	--	135,000
Project 2273 Energy Management	60,000	--	60,000
Project 2324 Enterprise Geographical Information System	6,577,000	4,277,000	300,000
Project 2422 Environmental Permitting and Compliance	10,000	--	10,000
Project 2424 Vulnerability Assessment and Emergency Response Plan	--	--	--
Project 2426 ERP Enhancements and Upgrade	3,076,000	624,000	841,000
Project 2441 Communication Lease Handling	10,000	--	10,000
Project 2508 Water Quality and Security Program	1,845,000	370,000	125,000
Project 2566 River Mill Park	26,000	16,000	1,000
Subtotal	11,739,000	5,287,000	1,482,000
Total - General Studies and Programs	12,863,000	5,287,000	2,606,000
Total - Part B Capital Improvement Program	675,912,000	177,375,000	95,237,000

Item	Total Project Cost	Disbursements Prior to Jan. 1, 2018	Cash Disbursements 2018
Disbursements - Part D Capital Improvement Program			
Transmission Facilities			
Project xxxx Penderwood Site No. 1 Tank Valve Upgrades	\$ 367,000	\$ --	\$ 204,000
Project xxxx Griffith FWPS First High Pumps	<u>3,500,000</u>	<u>--</u>	<u>500,000</u>
Subtotal	3,867,000	--	704,000
General Plant Facilities			
Project 2199 General and Administrative - Part D	<u>53,067,000</u>	<u>52,167,000</u>	<u>170,000</u>
Subtotal	<u>53,067,000</u>	<u>52,167,000</u>	<u>170,000</u>
Total - Part D Capital Improvement Program	<u>56,934,000</u>	<u>52,167,000</u>	<u>874,000</u>

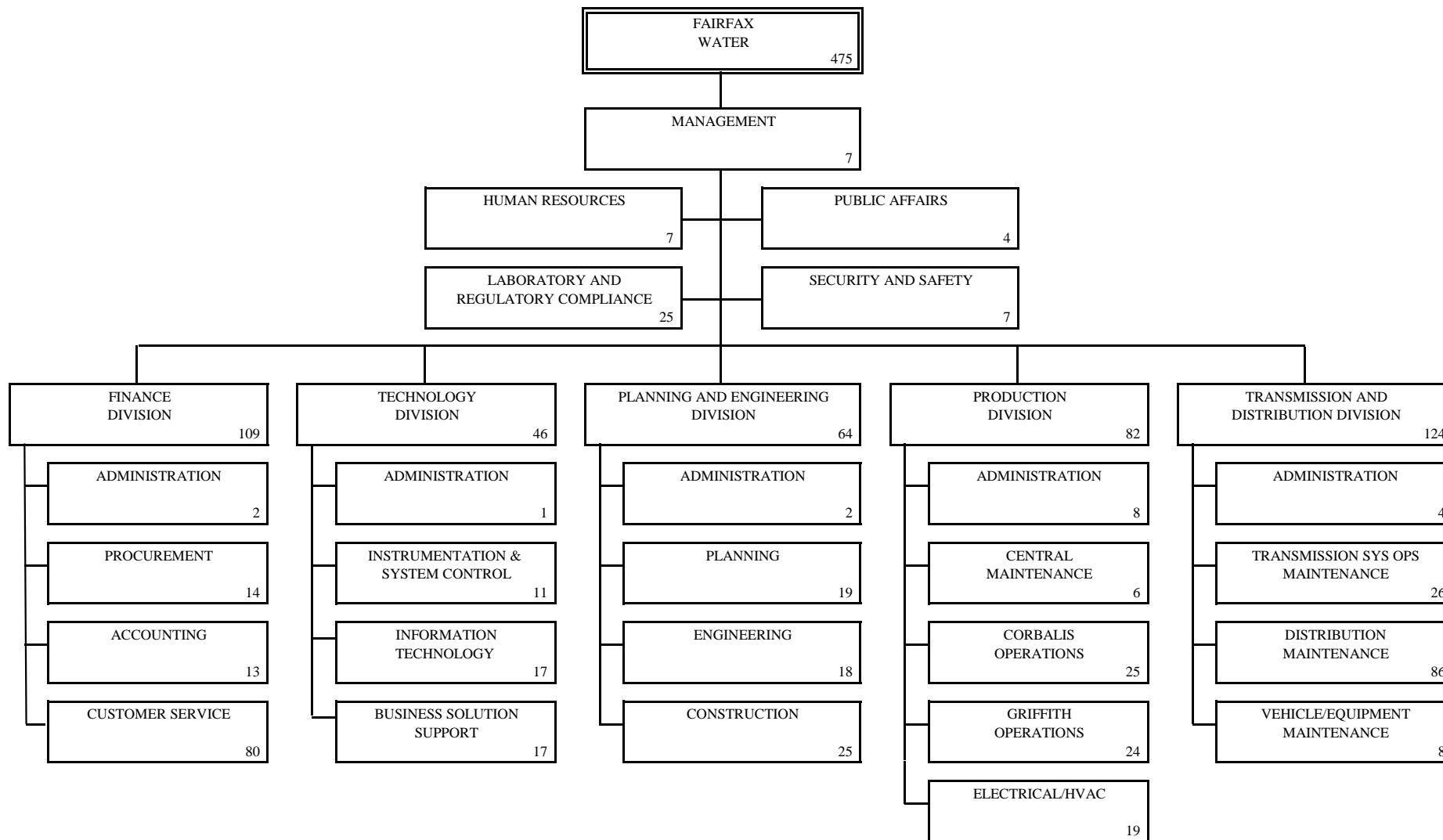
EXHIBIT 5

<u>Item</u>	<u>Total Project Cost</u>	<u>Disbursements Prior to Jan. 1, 2018</u>	<u>Cash Disbursements 2018</u>
Disbursements - Part E Capital Improvement Program			
Transmission Facilities			
Project 2481 Tysons East Transmission Main	\$ 9,680,000	\$ 5,770,000	\$ 320,000
Subtotal	9,680,000	5,770,000	320,000
General Plant Facilities			
Project 2517 General and Administrative - Part E	1,600,000	--	80,000
Subtotal	1,600,000	--	80,000
Total - Part E Capital Improvement Program	11,280,000	5,770,000	400,000
<u>Total - Improvement Fund</u>	<u>744,126,000</u>	<u>235,312,000</u>	<u>96,511,000</u>
<u>Balance Carried Forward - December 31, 2018</u>			<u>664,000</u>

FAIRFAX WATER

PERSONNEL ORGANIZATION PLAN

FOR THE YEAR ENDING DECEMBER 31, 2018



FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2018
DERIVATION OF PERSONAL SERVICES COSTS

<u>Base Salaries</u>	<u>2017 Budget</u>		<u>2017 Current Estimate ⁽¹⁾</u>		<u>2018 Budget</u>	
Management (Includes Members' Fees)	50	\$ 4,705,000	50	\$ 4,241,000	50	\$ 4,775,000
Finance Division	108	6,901,000	109	6,698,000	109	6,991,000
Planning and Engineering Division	65	6,218,000	64	6,035,000	64	6,285,000
Technology Division	46	5,133,000	46	4,449,000	46	5,192,000
Transmission and Distribution Division	124	7,593,000	124	7,292,000	124	7,771,000
Production Division	82	6,385,000	82	5,822,000	82	6,460,000
Subtotal - Base Salaries	<u>475</u>	<u>36,935,000</u>	<u>475</u>	<u>34,537,000</u>	<u>475</u>	<u>37,474,000</u>
 <u>Adjustments</u>						
Less Allowance for Vacancies		<u>(2,189,000)</u>		<u>--</u>		<u>(1,886,000)</u>
Subtotal		34,746,000		34,537,000		35,588,000
Plus Overtime		3,250,000		3,300,000		3,325,000
Plus Salaries for Summer/Temporary Employees		<u>642,000</u>		<u>646,000</u>		<u>650,000</u>
Subtotal		38,638,000		38,483,000		39,563,000
Plus Allowance for 0.7% Cost-of-Living Increase Effective the First Pay Period of 2018		<u>558,000</u>		<u>--</u>		<u>273,000</u>
Total - Personal Services		<u><u>39,196,000</u></u>		<u><u>38,483,000</u></u>		<u><u>39,836,000</u></u>

⁽¹⁾ Base salaries for 2017 Current Estimate include a 1.4% cost-of-living increase.

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2018
ALLOCATION OF PERSONAL SERVICES COSTS
REVENUE AND IMPROVEMENT FUNDS

	2017		2018 Budget
	Budget	Current Estimate	
<u>REVENUE FUND</u>			
<u>Operation and Maintenance</u>			
Supply			
Occoquan	\$ 233,000	\$ 228,000	\$ 236,000
Potomac	270,000	290,000	300,000
Purchased	27,000	33,000	34,000
	<u>530,000</u>	<u>551,000</u>	<u>570,000</u>
Treatment			
Griffith	3,649,000	3,557,000	3,682,000
Potomac	4,685,000	4,256,000	4,406,000
	<u>8,334,000</u>	<u>7,813,000</u>	<u>8,088,000</u>
Transmission			
Transmission System	2,168,000	2,145,000	2,220,000
Wholesale Accounts	28,000	28,000	29,000
	<u>2,196,000</u>	<u>2,173,000</u>	<u>2,249,000</u>
Distribution			
Distribution System	3,827,000	3,694,000	3,824,000
Retail Accounts	7,542,000	7,333,000	7,587,000
	<u>11,369,000</u>	<u>11,027,000</u>	<u>11,411,000</u>
Administrative			
General Plant	1,343,000	1,322,000	1,368,000
Administrative	4,235,000	4,059,000	4,202,000
	<u>5,578,000</u>	<u>5,381,000</u>	<u>5,570,000</u>
Total - Operations and Maintenance	<u>28,007,000</u>	<u>26,945,000</u>	<u>27,888,000</u>

	2017		2018 Budget
	Budget	Current Estimate	
<u>Other</u>			
New Services and Meters	\$ 1,265,000	\$ 1,274,000	\$ 1,319,000
Merchandising and Jobbing	4,000	- -	4,000
Total - Other	<u>1,269,000</u>	<u>1,274,000</u>	<u>1,323,000</u>
Total - Revenue Fund	29,276,000	28,219,000	29,211,000
 <u>IMPROVEMENT FUND</u>			
General	6,645,000	6,567,000	6,679,000
Subdivision and Development	1,215,000	1,064,000	1,220,000
Extraordinary Maintenance	1,485,000	1,722,000	1,783,000
Additions and Extensions	373,000	703,000	728,000
Special Studies	202,000	208,000	215,000
Total - Improvement Fund	<u>9,920,000</u>	<u>10,264,000</u>	<u>10,625,000</u>
Total - Personal Services	<u><u>39,196,000</u></u>	<u><u>38,483,000</u></u>	<u><u>39,836,000</u></u>