



2019 ANNUAL BUDGET

**Adopted
December 13, 2018**

The Annual Budget covers the 62nd 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 2019.

The 2019 Annual Budget contains a provision for revisions to certain rates, fees and charges proposed to be effective April 1, 2019. It is intended that these proposed charges would be considered for adoption at Fairfax Water's meeting of December 13, 2018, 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, 2019

<u>REVENUE FUND</u>	<u>2018</u>		<u>2019</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	\$ 8,929,000	\$ 9,385,000	\$ 9,670,000
Prince William District	3,495,000	3,607,000	3,693,000
Prince William County Service Authority	12,603,000	12,828,000	12,524,000
Loudoun Water	9,160,000	9,697,000	6,979,000
Town of Herndon	1,313,000	7,504,000	1,394,000
Fort Belvoir	1,892,000	1,861,000	1,880,000
Dulles International Airport	408,000	420,000	420,000
Town of Vienna	1,569,000	1,538,000	1,643,000
Untreated			
Prince William County Park Authority	1,000	1,000	1,000
Vulcan Materials Company	18,000	17,000	17,000
Old Hickory Golf Course	6,000	7,000	7,000
Total - Wholesale Revenue	<u>39,394,000</u>	<u>46,865,000</u>	<u>38,228,000</u>
Retail Revenue (Commodity and Billing)	<u>112,959,000</u>	<u>113,989,000</u>	<u>116,622,000</u>
Total - Wholesale and Retail Revenue	<u>152,353,000</u>	<u>160,854,000</u>	<u>154,850,000</u>

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

	2018		2019 Budget
	Budget	Current Estimate	
<u>Other Revenues</u>			
Availability Charges	\$ 7,500,000	\$ 11,200,000	\$ 9,000,000
Local Facility Charges	800,000	1,200,000	950,000
Service Connection Charges	700,000	1,100,000	750,000
Account Charges	1,050,000	1,100,000	1,100,000
Delinquent Account Charges	460,000	500,000	500,000
Returned Check Charges	55,000	55,000	55,000
Sewer Service Billing Charges	6,600,000	6,600,000	6,600,000
Merchandising and Jobbing	200,000	130,000	150,000
Fire Hydrant Permit Fees	660,000	660,000	680,000
Laboratory Services	80,000	70,000	80,000
Investment Income	1,900,000	1,950,000	2,100,000
Non-Operating Income	1,400,000	1,400,000	1,400,000
Sale of Scrap Material	50,000	152,000	50,000
Bad Debt Recovery	10,000	8,000	10,000
Bond Subsidy	1,060,000	1,060,000	1,065,000
Miscellaneous	125,000	110,000	125,000
Total - Other Revenues	<u>22,650,000</u>	<u>27,295,000</u>	<u>24,615,000</u>
Rate Revisions ⁽¹⁾	<u>3,655,000</u>	<u>- -</u>	<u>3,772,000</u>
Total - Revenues	178,658,000	188,149,000	183,237,000

⁽¹⁾ The 2019 Annual Budget contains a provision for revisions to certain rates, fees, and charges proposed to be effective April 1, 2019.

	2018		
	<u>Budget</u>	<u>Current Estimate</u>	<u>2019 Budget</u>
<u>CURRENT EXPENSES</u>			
<u>Operation and Maintenance Expenses</u>			
Supply Facilities	\$ 10,776,000	\$ 12,202,000	\$ 11,692,000
Treatment Facilities	24,318,000	23,355,000	24,517,000
Transmission System	5,400,000	5,036,000	5,208,000
Distribution System	18,968,000	20,657,000	21,269,000
Administrative and General	<u>33,924,000</u>	<u>33,388,000</u>	<u>34,710,000</u>
Total - Operation and Maintenance Expenses	93,386,000	94,638,000	97,396,000
<u>Other Expenses</u>			
New Services and Meters	1,816,000	1,365,000	1,415,000
Merchandising and Jobbing	<u>9,000</u>	<u>--</u>	<u>9,000</u>
Total - Other Expenses	<u>1,825,000</u>	<u>1,365,000</u>	<u>1,424,000</u>
Total - Current Expenses	<u>95,211,000</u>	<u>96,003,000</u>	<u>98,820,000</u>
<u>NET REVENUES</u>			
Net Revenues Defined	83,447,000	92,146,000	84,417,000
Transfer from Reserve Fund	<u>1,621,000</u>	<u>1,621,000</u>	<u>908,000</u>
Total Net Revenues	<u>85,068,000</u>	<u>93,767,000</u>	<u>85,325,000</u>
<u>DEBT SERVICE COVERAGE</u>			
Net Revenues	85,068,000	93,767,000	85,325,000
Annual Principal and Interest Requirements	42,980,884	42,980,884	42,987,573
Coverage	1.98	2.18	1.98

	2018		2019 Budget
	Budget	Current Estimate	
<u>DEBT SERVICE FUND</u>			
<u>Balance Carried Forward from Prior Year</u>	\$ 31,307,037	\$ 31,307,036	\$ 32,235,826
<u>Receipts</u>			
Transfer from Revenue Fund	42,980,884	42,980,884	42,987,573
Investment Income	300,000	320,000	250,000
Total - Receipts	<u>43,280,884</u>	<u>43,300,884</u>	<u>43,237,573</u>
<u>Disbursements</u>			
Interest Payable - April 1 and October 1	22,052,094	22,052,094	21,181,728
Principal Payable - April 1	20,000,000	20,000,000	21,345,000
Transfer of Investment Income to Revenue Fund	300,000	320,000	250,000
Total - Disbursements	<u>42,352,094</u>	<u>42,372,094</u>	<u>42,776,728</u>
<u>Balance Carried Forward to Ensuing Year</u>	<u>32,235,827</u>	<u>32,235,826</u>	<u>32,696,671</u>

	2018		2019 Budget
	Budget	Current Estimate	
<u>RESERVE FUND</u>			
<u>Balance Carried Forward from Prior Year</u>	\$ 15,176,000	\$ 15,266,000	\$ 13,645,000
<u>Receipts</u>			
Investment Income	200,000	100,000	150,000
Total - Receipts	<u>200,000</u>	<u>100,000</u>	<u>150,000</u>
<u>Disbursements</u>			
Transfer of Investment Income to Revenue Fund	200,000	100,000	150,000
Transfer of Excess Requirement to Revenue Fund	1,621,000	1,621,000	908,000
Total - Disbursements	<u>1,821,000</u>	<u>1,721,000</u>	<u>1,058,000</u>
<u>Balance Carried Forward to Ensuing Year</u>	<u>13,555,000</u>	<u>13,645,000</u>	<u>12,737,000</u>

	2018		2019 Budget
	Budget	Current Estimate	
<u>IMPROVEMENT FUND</u>			
<u>Balance Carried Forward from Prior Year</u>	\$ 17,347,000	\$ 23,642,000	\$ 592,000
<u>Receipts</u>			
Transfer from Revenue Fund	11,000,000	11,000,000	11,000,000
Transfer from General Fund	67,500,000	35,000,000	93,000,000
Advances for Construction	100,000	50,000	100,000
Contributions for Construction	1,000,000	700,000	1,000,000
Investment Income	178,000	540,000	10,000
Miscellaneous	50,000	620,000	50,000
Total - Receipts	<u>79,828,000</u>	<u>47,910,000</u>	<u>105,160,000</u>
<u>Disbursements</u>			
Part B Capital Improvement Program			
Materials and Supplies	90,000	50,000	90,000
Refunds - Advances for Construction	40,000	30,000	40,000
General Expenses	17,550,000	18,240,000	18,390,000
Subdivision and Other Development Projects	1,240,000	1,190,000	1,200,000
Extraordinary Maintenance and Repairs	42,262,000	34,030,000	46,542,000
Additions, Extensions and Betterments	31,449,000	14,240,000	35,445,000
General Studies	2,606,000	1,780,000	3,037,000
Part D Capital Improvement Program	874,000	1,340,000	364,000
Part E Capital Improvement Program	400,000	60,000	275,000
Total - Disbursements	<u>96,511,000</u>	<u>70,960,000</u>	<u>105,383,000</u>
<u>Balance Carried Forward to Ensuing Year</u>	<u>664,000</u>	<u>592,000</u>	<u>369,000</u>

	2018		2019
	Budget	Current Estimate	Budget
<u>GENERAL FUND</u>			
<u>Balance Carried Forward from Prior Year</u>	\$ 143,800,000	\$ 146,163,000	\$ 150,949,000
<u>Receipts</u>			
Transfer from Revenue Fund (Net Revenues)	31,087,000	39,786,000	31,337,000
Investment Income	1,400,000	1,430,000	1,700,000
Total - Receipts	<u>32,487,000</u>	<u>41,216,000</u>	<u>33,037,000</u>
<u>Disbursements</u>			
Transfer of Investment Income to Revenue Fund	1,400,000	1,430,000	1,700,000
Transfer to Improvement Fund	67,500,000	35,000,000	93,000,000
Total - Disbursements	<u>68,900,000</u>	<u>36,430,000</u>	<u>94,700,000</u>
<u>Balance Carried Forward to Ensuing Year</u>	<u>107,387,000</u>	<u>150,949,000</u>	<u>89,286,000</u>



DETAILS AND SUPPORTING DATA

ANNUAL BUDGET

FOR THE YEAR ENDING DECEMBER 31, 2019

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I. Highlights of 2019 Annual Budget

Category	2018 Budget	2018 Current Estimate	2019 Budget	% Increase (Decrease)
Retail Customer Accounts Added	300	217	300	38.2
Retail Equivalent 5/8" Units Added	1,830	2,700	2,170	(19.6)
Retail Customers - End of Year	281,144	281,107	281,407	0.1
Wholesale Water Sales (mg)	24,554	25,827	23,937	(7.3)
Retail Water Sales (mg)	31,500	30,300	31,000	2.3
Total Water Sales (mg)	56,054	56,127	54,937	(2.1)
Water Sales Revenue (\$ million)	155.834	160.854	158.276	(1.6)
Water Produced and Purchased (mg)	62,300	62,400	61,000	(2.2)
Water Produced and Purchased (mgd)	170.7	171.0	167.1	(2.3)
Total Revenues (\$ million)	178.658	188.149	183.237	(2.6)
Current Expenses (\$ million)	95.211	96.003	98.820	2.9
Net Revenues (\$ million)	85.068	93.767	85.325	(9.0)
Total Debt Service (\$ million)	42.981	42.981	42.988	--
Debt Service Coverage	1.98	2.18	1.98	(9.2)
Authorized Employees	475	475	475	--

Highlights of 2019 Annual Budget (Continued)

- ♦ 300 retail customers are projected to be added in 2019, 83 more than the number projected for 2018. A total of 281,407 customers are expected to be served at the end of 2019.
- ♦ Water sales are estimated to be 54.9 billion gallons in 2019, as compared to 56.1 billion gallons in 2018.
- ♦ Average daily production is expected to be 167.1 million gallons per day (mgd) in 2019, as compared to 171.0 mgd in 2018.
- ♦ Revenues are expected to be \$183.2 million in 2019, as compared to \$188.1 million in 2018.
- ♦ The 2019 Annual Budget contains a provision for revisions to certain rates, fees, and charges proposed to be effective April 1, 2019.
- ♦ Current Expenses are projected to be \$98.8 million in 2019, a 2.9% increase as compared to the 2018 Current Estimate and a 3.8% increase from the 2018 Budget.
- ♦ Net Revenues are projected to be \$85.3 million in 2019, as compared to \$93.8 million in 2018.
- ♦ Debt service coverage is projected at 1.98 in 2019, as compared to 2.18 in 2018.
- ♦ It is expected that the Improvement Fund will have a cash balance of \$0.6 million on January 1, 2019. Improvement Fund receipts are estimated at \$105.2 million and expenditures are estimated at \$105.4 million in 2019, resulting in an expected balance of \$0.4 million on December 31, 2019.
- ♦ It is expected that the General Fund will have a balance of \$89.3 million at the end of 2019.
- ♦ In 2019 the authorized staff complement is expected to remain constant at a total of 475 employees.
- ♦ Expected payroll costs of \$41.198 million in 2019 represents a 3.4% increase from the \$39.836 million budgeted in 2018.

II. Customer Growth

- ♦ Applications for new services in 2019 are projected to be 173 less than the number currently estimated for 2018 and 508 less than the actual number of applications received in 2017.
- ♦ 300 customer accounts are expected to be added in 2019.
- ♦ 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>				Current Estimate 2018	Budget 2019
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>		
<u>Customers</u>						
Number of Applications Received	352	276	481	808	473	300
Number of Services Installed	454	498	538	808	407	300
Number of Customer Accounts Added (net)	46,584	192	(19)	171	217	300
Number of Equivalent 5/8" Units Added	2,721	3,290	2,941	2,805	2,700	2,170
 <u>Total Customers (End-of-Year)</u>						
Single Family	187,264	187,306	187,224	187,207	187,243	187,387
Townhouse	76,799	76,865	76,897	77,010	77,150	77,278
Apartment	4,003	4,028	4,039	4,067	4,079	4,091
Commercial/Industrial	11,010	11,065	11,085	11,131	11,147	11,161
Municipal/Institutional	1,400	1,404	1,404	1,405	1,407	1,409
Restricted Service	70	70	70	70	81	81
	<u>280,546</u>	<u>280,738</u>	<u>280,719</u>	<u>280,890</u>	<u>281,107</u>	<u>281,407</u>
 <u>Sales Per Customer</u>						
Retail Customers (Average)	280,525	280,642	280,729	280,805	280,999	281,257
Retail Water Sales (mg)	29,922	31,023	31,533	30,590	30,300	31,000
Sales Per Customer (1,000 gal)	107	111	112	109	108	110

III. Water Sales

- ♦ Total water sales are expected to decrease 2.1% in 2019 as compared to 2018 as a result of an anticipated reduction in water sales to Loudoun Water.
- ♦ Total water sales are expected to increase 0.5% in 2018 as compared to 2017.

	Actual				Current Estimate 2018	Budget 2019
	2014	2015	2016	2017		
<u>Water Sales</u>						
<u>Wholesale</u>						
Million Gallons	24,587	24,529	25,533	25,233	25,827	23,937
Daily Average (mgd)	67.4	67.2	69.8	69.1	70.8	65.6
% of Total Sales	45	44	45	45	46	44
<u>Retail</u>						
Million Gallons	29,922	31,023	31,533	30,590	30,300	31,000
Daily Average (mgd)	82.0	85.0	86.2	83.8	83.0	84.9
% of Total Sales	55	56	55	55	54	56
<u>Total</u>						
Million Gallons	54,509	55,552	57,066	55,823	56,127	54,937
Daily Average (mgd)	149.3	152.2	155.9	152.9	153.8	150.5

IV. Water Production (Supply)

- ♦ Water production is expected to average 167.1 mgd in 2019, as compared to 171.0 mgd in 2018.
- ♦ Occoquan River water production is expected to account for 38.4% of total production in 2019.
- ♦ Potomac River water production is expected to account for 52.7% of total production in 2019.
- ♦ Purchased water from the Washington Aqueduct is expected to account for 8.9% of total production in 2019.

	Actual				Current Estimate 2018	Budget 2019
	2014	2015	2016	2017		
<u>Supply vs. Sales (mg)</u>						
Water Supply	59,584	59,814	62,622	62,169	62,400	61,000
Water Sales	54,509	55,552	57,066	55,823	56,127	54,937
Non-Revenue Water:						
Quantity	5,075	4,262	5,556	6,346	6,273	6,063
As a % of Supply	8.5	7.1	8.9	10.2	10.0	10.0
<u>Sources of Supply (mg)</u>						
Purchased	5,113	5,141	4,188	5,390	5,460	5,400
Occoquan:						
Treated	21,638	22,138	22,652	22,614	23,636	23,355
Untreated	80	74	80	95	92	92
	21,718	22,212	22,732	22,709	23,728	23,447
Potomac	32,753	32,461	35,702	34,070	33,212	32,153
Total Supply	59,584	59,814	62,622	62,169	62,400	61,000
<u>Daily Average (mgd)</u>						
Occoquan	59.5	60.9	62.1	62.2	65.0	64.2
Potomac	89.7	88.9	97.6	93.3	91.0	88.1
Washington Aqueduct	14.0	14.1	11.4	14.8	15.0	14.8
Total	163.2	163.9	171.1	170.3	171.0	167.1

V. Revenues

- ♦ 2019 total revenues are estimated at \$183.2 million, as compared to \$188.1 million in 2018.
- ♦ Revenues from total water sales (inclusive of proposed retail rate revisions) are expected to decrease by \$2.6 million or 1.6% in 2019, mainly due to a planned reduction in water sales to Loudoun Water.
- ♦ In 2019, revenues from connection charges are budgeted to decrease by 20.7% as compared to 2018.
- ♦ 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. The Town of Herndon purchased additional capacity for \$6.1 million in 2018.
- ♦ 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 2018	Budget 2019
	2014	2015	2016	2017		
----- \$ Million -----						
<u>Revenues</u>						
Water Sales						
Wholesale	76.499	42.220	35.643	64.574	46.865	38.228
Retail	95.555	104.235	108.479	111.265	113.989	116.622
Subtotal	172.054	146.455	144.122	175.839	160.854	154.850
Connection Charges:						
Availability	10.674	13.000	12.005	11.503	11.200	9.000
Local Facility	.786	1.107	.684	1.172	1.200	.950
Service Connection	.696	.639	1.055	1.782	1.100	.750
Investment Income	1.124	1.362	2.130	1.738	1.950	2.100
Sewer Service Billing Charges	6.064	6.544	7.118	5.973	6.600	6.600
Other Revenue	20.883	5.132	3.863	4.498	4.185	4.150
Bond Subsidy	1.053	1.052	1.058	1.057	1.060	1.065
Rate Revisions ⁽¹⁾	--	--	--	--	--	3.772
Total - Revenues	213.334	175.291	172.035	203.562	188.149	183.237

⁽¹⁾ The 2019 Annual Budget contains a provision for revisions to certain rates, fees and charges proposed to be effective April 1, 2019.

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

- ♦ Current Expenses are projected to increase 2.9% in 2019 as compared to 2018.
- ♦ The increase is due to higher operation and maintenance costs such as employee payroll and benefits, chemicals, contractual services, and power purchased.

	<u>Actual</u>				Current Estimate 2018	Budget 2019
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>		
----- \$ Million -----						
<u>Current Expenses</u>						
Operation and Maintenance	84.021	87.644	84.557	89.234	94.638	97.396
Other	1.424	1.570	1.564	1.927	1.365	1.424
Total	<u>85.445</u>	<u>89.214</u>	<u>86.121</u>	<u>91.161</u>	<u>96.003</u>	<u>98.820</u>
<u>Categories of Expense</u>						
<u>Operation and Maintenance</u>						
Supply Facilities	8.883	10.668	8.113	11.372	12.202	11.692
Treatment Facilities	22.573	22.215	22.426	22.460	23.355	24.517
Transmission System	5.064	5.413	5.253	5.186	5.036	5.208
Distribution System	16.817	17.570	17.306	17.913	20.657	21.269
Administrative and General	<u>30.684</u>	<u>31.778</u>	<u>31.459</u>	<u>32.303</u>	<u>33.388</u>	<u>34.710</u>
Total	84.021	87.644	84.557	89.234	94.638	97.396

Current Expenses (Continued)

Operation and Maintenance Expenses

- ♦ The following table depicts costs for major items of Operation and Maintenance expenses for the years 2014-2019.

	Actual				Current Estimate 2018	Budget 2019
	2014	2015	2016	2017		
----- \$ Million -----						
Operation and Maintenance	84.021	87.644	84.557	89.234	94.638	97.396
<u>Major Items of Expense</u>						
Personal Services	26.421	26.866	26.897	26.966	27.905	28.939
Employee Benefits	26.284	26.871	26.711	27.250	28.029	28.645
Power Purchased	9.135	9.141	9.211	9.144	9.400	9.700
Utilities	1.300	1.450	1.239	1.259	1.355	1.402
Water Treatment Chemicals	6.668	6.077	6.190	6.370	6.846	7.452
Residuals Management Chemicals	.000	.074	.073	.073	.112	.080
Purchased Water	4.637	6.567	3.827	7.272	7.810	7.155
Supplies and Materials	4.456	5.092	5.133	4.837	5.261	5.444
Insurance	1.169	1.026	1.104	1.151	.955	1.075
Gasoline and Fuel	1.035	.631	.476	.557	.700	.728
Postage	.616	.624	.620	.592	.603	.612
Printed Reports	.062	.069	.060	.060	.067	.070
Advertising	.032	.048	.059	.062	.038	.042
Customer Relations	.258	.236	.246	.245	.255	.260
Books, Periodicals and Dues	.138	.140	.106	.123	.108	.115
Contractual Services	9.113	9.430	9.964	10.697	12.481	12.974
Professional Services	.789	1.086	.665	.973	1.001	1.065
Employee Training and Meetings	.342	.377	.326	.398	.395	.500
Programs	1.012	1.093	.997	1.047	1.337	1.211
Miscellaneous	.140	.415	.269	.149	.228	.307
Subtotal	93.607	97.313	94.173	99.225	104.886	107.776
Transfer to Improvement Fund	(9.586)	(9.669)	(9.616)	(9.991)	(10.248)	(10.380)
Total - Operation and Maintenance	84.021	87.644	84.557	89.234	94.638	97.396

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 2014-2019:

	Actual				Current Estimate 2018	Budget 2019
	2014	2015	2016	2017		
----- \$ Million -----						
Revenues	213.334	175.291	172.035	203.562	188.149	183.237
Current Expenses	85.445	89.214	86.121	91.161	96.003	98.820
Net Revenues Defined	127.889	86.077	85.914	112.401	92.146	84.417
Transfer from Reserve Fund	.668	.627	.522	- -	1.621	.908
Net Revenues - Total	128.557	86.704	86.436	112.401	93.767	85.325
 Debt Service	 40.020	 39.915	 41.417	 43.257	 42.981	 42.988
 Coverage	 3.21	 2.17	 2.09	 2.60	 2.18	 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 2019, Fairfax Water's debt service will be \$42,987,573, 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 \$20,727,573 which is funded with a Qualified Reserve Fund Substitute (Insurance) as well as approximately \$13 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 was completed in 2017.
- ♦ Financing for this program was satisfied with the issuance of revenue bonds and cash on hand.

(4) Capital Improvement Program (Part D)

- ♦ The Part D Capital Improvement Program is currently estimated to cost \$0.364 million in 2019 of which \$0.304 million relates to various transmission projects and \$0.060 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 \$0.275 million in 2019 of which \$0.225 million relates to expansion of transmission facilities in Tysons Corner and \$0.050 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 \$0.6 million on January 1, 2019. Improvement Fund receipts are estimated at \$105.2 million and expenditures are estimated at \$105.4 million, resulting in an expected balance of \$0.4 million on December 31, 2019.

Improvement Fund (Continued)

	Actual				Current Estimate 2018	Budget 2019
	2014	2015	2016	2017		
----- \$ Million -----						
Balance Carried Forward - January 1	1.085	.166	1.298	.843	23.642	.592
<u>Receipts</u>						
Transfer from Revenue Fund	11.000	11.000	11.000	11.000	11.000	11.000
Transfer from General Fund	57.000	45.000	50.000	14.000	35.000	93.000
Bond Proceeds	--	--	--	75.531	--	--
Investment Income and Other	1.087	1.200	1.056	1.279	1.910	1.160
Total - Receipts	<u>69.087</u>	<u>57.200</u>	<u>62.056</u>	<u>101.810</u>	<u>47.910</u>	<u>105.160</u>
<u>Disbursements</u>						
Part B Capital Improvement Program						
Materials and Supplies	1.663	(.054)	.520	.417	.050	.090
Refunds of Advances	.024	.007	.027	.022	.030	.040
General Expenses	12.566	13.309	17.122	16.378	18.240	18.390
Subdivision/Development Projects	1.126	1.126	1.189	1.170	1.190	1.200
Extraordinary Maintenance and Repair	20.853	22.728	19.891	22.396	34.030	46.542
Additions, Extensions and Betterments	5.286	3.883	20.560	29.235	14.240	35.445
General Studies	9.820	2.238	1.205	1.214	1.780	3.037
Part C Capital Improvement Program	1.358	3.916	.001	--	--	--
Part D Capital Improvement Program	15.797	8.064	1.607	6.848	1.340	.364
Part E Capital Improvement Program	1.513	.851	.389	1.331	.060	.275
Total - Disbursements	<u>70.006</u>	<u>56.068</u>	<u>62.511</u>	<u>79.011</u>	<u>70.960</u>	<u>105.383</u>
Balance Carried Forward - December 31	.166	1.298	.843	23.642	.592	.369

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 2018	Budget 2019
	2014	2015	2016	2017		
	----- \$ Million -----					
General Fund Balance Forward						
January 1	109.955	97.041	118.731	102.260	146.163	150.949
December 31	97.041	118.731	102.260	146.163	150.949	89.286

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

- ♦ The personnel complement is expected to remain constant in 2019 at a total of 475 authorized positions.
- ♦ Total 2019 personal services costs are estimated at \$41.198 million, of which \$30.149 million and \$11.049 million are estimated to be charged to the Revenue and Improvement Funds, respectively.
- ♦ The 2019 total budgeted personal services cost of \$41.198 million includes a cost-of-living adjustment of 2.5% effective the first pay period of 2019 based on the CPI-U for the 12-month period ending July 31, 2018.

	Actual				Current Estimate 2018	Budget 2019
	2014	2015	2016	2017		
Number of Employees Added	58	--	--	--	--	--
Total Employees Authorized	475	475	475	475	475	475
Total Payroll Cost (\$ Million)	36.937	37.761	37.709	38.548	39.721	41.198

Employees by Division

Management	49	50	50	50	48	48
Finance	108	108	109	109	110	110
Planning and Engineering	66	65	64	64	64	64
Technology	45	46	46	46	46	46
Production	82	82	82	82	82	82
Transmission and Distribution	125	124	124	124	125	125
Total	475	475	475	475	475	475

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2019
DETAILS OF WATER SALES REVENUE

	2018 Budget				2018 Current Estimate				2019 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	5,700	6,954	1,975	8,929	5,700	7,410	1,975	9,385	5,700	7,695	1,975	9,670	--	3.8	--
Prince William District	1,730	2,111	1,384	3,495	1,710	2,223	1,384	3,607	1,710	2,309	1,384	3,693	--	3.9	--
Dulles International Airport	280	339	69	408	290	351	69	420	290	351	69	420	--	--	--
Fort Belvoir	660	799	1,093	1,892	635	768	1,093	1,861	650	787	1,093	1,880	2.4	2.5	--
PWCSA	8,500	10,370	2,233	12,603	8,500	10,965	1,863	12,828	8,700	11,745	779	12,524	2.4	7.1	(58.2)
Town of Herndon	810	988	325	1,313	835	1,069	6,435	7,504	835	1,127	267	1,394	--	5.4	(95.9)
Loudoun Water	6,000	4,860	4,300	9,160	7,300	6,059	3,638	9,697	5,200	4,420	2,559	6,979	(28.8)	(27.1)	(29.7)
Town of Vienna	780	952	617	1,569	765	926	612	1,538	760	1,026	617	1,643	(0.7)	10.8	0.8
Untreated															
Vulcan Materials	70	18	--	18	65	17	--	17	65	17	--	17	--	--	--
PWCPA	2	1	--	1	2	1	--	1	2	1	--	1	--	--	--
Old Hickory	22	6	--	6	25	7	--	7	25	7	--	7	--	--	--
Total - Wholesale	24,554	27,398	11,996	39,394	25,827	29,796	17,069	46,865	23,937	29,485	8,743	38,228	(7.3)	(1.0)	(48.8)
Retail Water Sales *	31,500	116,440	--	116,440	30,300	113,989	--	113,989	31,000	120,048	--	120,048	2.3	5.3	--
Total - Water Sales	56,054	143,838	11,996	155,834	56,127	143,785	17,069	160,854	54,937	149,533	8,743	158,276	(2.1)	4.0	(48.8)

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

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2019
DETAILS OF CURRENT EXPENSES

Item	2018		2019	% Increase (Decrease)
	Budget	Current Estimate	Budget	
<u>Personal Services</u>				
Salaries-Regular	\$ 25,726,000	\$ 25,212,000	\$ 26,459,000	4.9
Salaries-Overtime	2,800,000	3,294,000	3,000,000	(8.9)
Salaries-Stand-By	110,000	112,000	115,000	2.7
Salaries-Summer	325,000	300,000	325,000	8.3
Salaries-Part-Time/Temporary	250,000	150,000	250,000	66.7
Subtotal	29,211,000	29,068,000	30,149,000	3.7
<u>Employee Benefits</u>				
OASDI-FICA	2,888,000	2,880,000	2,987,000	3.7
Health Insurance	5,810,000	5,886,000	5,888,000	--
Life Insurance	687,000	659,000	463,000	(29.7)
Disability Program	80,000	50,000	80,000	60.0
Retirement Program	18,535,000	18,480,000	19,139,000	3.6
Educational Reimbursement	65,000	50,000	60,000	20.0
Employee Assistance Program	12,000	13,000	13,000	--
Employee Awards Program	18,000	11,000	15,000	36.4
Subtotal	28,095,000	28,029,000	28,645,000	2.2
<u>Power Purchased</u>				
Electricity - Production/Transmission Facilities	9,300,000	9,400,000	9,700,000	3.2
<u>Utilities</u>				
Electricity - Administrative Facilities	300,000	325,000	335,000	3.1
Water and Sewer	260,000	240,000	260,000	8.3
Heating Oil	50,000	48,000	50,000	4.2
Heating Gas	440,000	460,000	460,000	--
Telephone	252,000	220,000	232,000	5.5
Trash Removal	68,000	62,000	65,000	4.8
Subtotal	1,370,000	1,355,000	1,402,000	3.5

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
Chemicals				
<i>Coagulants:</i>				
Poly Aluminum Chloride	\$ 2,498,000	\$ 2,449,000	\$ 2,633,000	7.5
Polymers	129,000	111,000	115,000	3.6
	<u>2,627,000</u>	<u>2,560,000</u>	<u>2,748,000</u>	<u>7.3</u>
<i>Disinfectant/Oxidant:</i>				
Sodium Hypochlorite	1,281,000	1,297,000	1,300,000	0.2
Ammonium Hydroxide	229,000	222,000	230,000	3.6
Liquid Oxygen	733,000	825,000	830,000	0.6
Potassium Permanganate	487,000	419,000	435,000	3.8
	<u>2,730,000</u>	<u>2,763,000</u>	<u>2,795,000</u>	<u>1.2</u>
<i>pH Adjustment:</i>				
Caustic Soda	403,000	506,000	515,000	1.8
Sulfuric Acid	201,000	156,000	162,000	3.8
	<u>604,000</u>	<u>662,000</u>	<u>677,000</u>	<u>2.3</u>
<i>Corrosion Inhibitor:</i>				
Phosphoric Acid	436,000	449,000	455,000	1.3
<i>Oral Health:</i>				
Hydrofluosilicic Acid (Fluoride)	301,000	241,000	250,000	3.7
<i>Ozone Quenching/Reducing Agent:</i>				
Calcium Thiosulfate	35,000	51,000	53,000	3.9
Sodium Bisulfate	24,000	20,000	24,000	20.0
	<u>59,000</u>	<u>71,000</u>	<u>77,000</u>	<u>8.5</u>
<i>Algaecide:</i>				
Copper Sulfate	100,000	--	50,000	100.0
	<u>100,000</u>	<u>--</u>	<u>50,000</u>	<u>100.0</u>
<i>Filter Media:</i>				
Granular Activated Carbon	800,000	100,000	400,000	300.0
	<u>800,000</u>	<u>100,000</u>	<u>400,000</u>	<u>300.0</u>
Subtotal	<u>7,657,000</u>	<u>6,846,000</u>	<u>7,452,000</u>	<u>8.9</u>

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Residuals Management Chemicals</u>				
Polymers	\$ 75,000	\$ 112,000	\$ 80,000	(28.6)
Subtotal	75,000	112,000	80,000	(28.6)
<u>Purchased Water</u>				
Loudoun Water	12,000	12,000	12,000	- -
Washington Aqueduct	6,528,000	7,798,000	7,143,000	(8.4)
Subtotal	6,540,000	7,810,000	7,155,000	(8.4)
<u>Supplies</u>				
Cleaning and Custodial	29,000	26,000	28,000	7.7
Vehicle and Automotive	352,000	324,000	337,000	4.0
Laboratory	575,000	575,000	580,000	0.9
Office	104,000	98,000	100,000	2.0
Computer	400,000	530,000	550,000	3.8
Mechanical and Electrical	200,000	203,000	208,000	2.5
Safety	215,000	208,000	215,000	3.4
Telephone and Communication	7,000	20,000	20,000	- -
Photographic and Reproduction	82,000	88,000	90,000	2.3
Small Tools	260,000	278,000	282,000	1.4
Construction and Maintenance	791,000	850,000	860,000	1.2
Meter Parts and Supplies	92,000	172,000	175,000	1.7
Uniforms and Clothing	80,000	83,000	85,000	2.4
Security	50,000	25,000	50,000	100.0
Miscellaneous	100,000	95,000	100,000	5.3
Subtotal	3,337,000	3,575,000	3,680,000	2.9

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Materials</u>				
Service Connection	\$ 560,000	\$ 350,000	\$ 360,000	2.9
Meters	150,000	255,000	268,000	5.1
Hydrants and Appurtenances	151,000	142,000	150,000	5.6
Pipe and Appurtenances	285,000	200,000	210,000	5.0
Valves and Appurtenances	169,000	150,000	160,000	6.7
Pumps and Appurtenances	70,000	52,000	55,000	5.8
Instrumentation and SCADA	240,000	190,000	200,000	5.3
Automotive	12,000	10,000	12,000	20.0
Electrical and Electronics	228,000	202,000	210,000	4.0
Mechanical	208,000	140,000	150,000	7.1
HVAC	89,000	85,000	88,000	3.5
Lube and Fluids	20,000	32,000	30,000	(6.3)
Miscellaneous General Materials	85,000	80,000	85,000	6.3
Subtotal	2,267,000	1,888,000	1,978,000	4.8
<u>Insurance</u>				
Workmen's Compensation	450,000	323,000	360,000	11.5
Liability	350,000	248,000	300,000	21.0
Motor Vehicle	85,000	86,000	90,000	4.7
Property	262,000	261,000	280,000	7.3
Unemployment Compensation	20,000	5,000	10,000	100.0
Miscellaneous Insurance	33,000	32,000	35,000	9.4
Subtotal	1,200,000	955,000	1,075,000	12.6
<u>Gasoline and Fuel</u>				
Gasoline	530,000	540,000	562,000	4.1
Diesel Fuel	115,000	150,000	156,000	4.0
Other Fuel	10,000	10,000	10,000	--
Subtotal	655,000	700,000	728,000	4.0

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Postage and Parcel Service</u>				
Postage	\$ 578,000	\$ 563,000	\$ 570,000	1.2
Parcel Service	36,000	40,000	42,000	5.0
Subtotal	614,000	603,000	612,000	1.5
<u>Reports</u>				
Annual Report	5,000	2,000	5,000	150.0
Consumer Confidence Report	65,000	65,000	65,000	--
Subtotal	70,000	67,000	70,000	4.5
<u>Advertising</u>				
Recruiting	42,000	20,000	22,000	10.0
Other Advertising	20,000	18,000	20,000	11.1
Subtotal	62,000	38,000	42,000	10.5
<u>Customer Relations</u>				
Visitor Education Center	10,000	5,000	10,000	100.0
Special Tours and Programs	55,000	50,000	50,000	--
Printed Literature	70,000	70,000	70,000	--
Miscellaneous Customer Relations	130,000	130,000	130,000	--
Subtotal	265,000	255,000	260,000	2.0
<u>Books, Periodicals and Dues</u>				
Reference Materials	15,000	8,000	10,000	25.0
Periodical Subscriptions	25,000	20,000	25,000	25.0
Association Dues	77,000	80,000	80,000	--
Subtotal	117,000	108,000	115,000	6.5

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Contractual Services</u>				
Equipment Maintenance	\$ 1,000,000	\$ 1,180,000	\$ 1,100,000	(6.8)
Building/Grounds Maintenance	1,007,000	960,000	1,020,000	6.3
Computer Hosting Services	800,000	700,000	600,000	(14.3)
Equipment Rental	40,000	51,000	52,000	2.0
Uniform Rental	162,000	172,000	175,000	1.7
Computer Application Support and Licensing	1,700,000	1,730,000	1,890,000	9.2
Telephone and Communication	715,000	575,000	800,000	39.1
Residuals Management	350,000	360,000	450,000	25.0
Hazardous Waste Disposal	40,000	28,000	30,000	7.1
Pavement Replacement	3,025,000	3,920,000	3,950,000	0.8
Security	805,000	793,000	800,000	0.9
Electrical	220,000	320,000	300,000	(6.3)
Diving	64,000	58,000	62,000	6.9
Safety and Health	162,000	158,000	160,000	1.3
Temporary Staffing	50,000	138,000	150,000	8.7
Bill Print Services	310,000	235,000	250,000	6.4
Information Technology	430,000	318,000	400,000	25.8
Spoil Disposal	450,000	515,000	500,000	(2.9)
Lease - Central Maintenance Facility	180,000	180,000	185,000	2.8
Other Contractual Services	100,000	90,000	100,000	11.1
Subtotal	11,610,000	12,481,000	12,974,000	4.0
<u>Professional Services</u>				
Banking	180,000	155,000	160,000	3.2
Insurance	10,000	5,000	10,000	100.0
Financial	280,000	288,000	290,000	0.7
Legal	250,000	300,000	300,000	--
Trustee	40,000	38,000	40,000	5.3
Management Consultants	175,000	125,000	175,000	40.0
Advocacy Services	70,000	70,000	70,000	--
Other Professional Services	20,000	20,000	20,000	--
Subtotal	1,025,000	1,001,000	1,065,000	6.4

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Employee Training and Meetings</u>				
Employee Training	\$ 350,000	\$ 243,000	\$ 340,000	39.9
Professional Meetings	70,000	68,000	70,000	2.9
Board Travel	10,000	4,000	10,000	150.0
Miscellaneous Travel and Meetings	75,000	80,000	80,000	--
Subtotal	505,000	395,000	500,000	26.6
<u>Programs</u>				
Cross Connection Control	680,000	836,000	706,000	(15.6)
Utilities Notification	152,000	156,000	158,000	1.3
Potomac River Reservoirs	158,000	150,000	150,000	--
Virginia Technical Assistance Fund (State User Fees)	160,000	160,000	160,000	--
Water Supply Stakeholder Outreach Program	37,000	35,000	37,000	5.7
Subtotal	1,187,000	1,337,000	1,211,000	(9.4)
<u>Miscellaneous</u>				
Highway Permits	20,000	18,000	20,000	11.1
Professional Licenses	7,000	7,000	7,000	--
Injuries and Damages	200,000	123,000	200,000	62.6
Miscellaneous	70,000	80,000	80,000	--
Subtotal	297,000	228,000	307,000	34.6
Subtotal - Current Expenses	105,459,000	106,251,000	109,200,000	2.8
Less: Reimbursable Services	(10,248,000)	(10,248,000)	(10,380,000)	1.3
Total - Current Expenses	95,211,000	96,003,000	98,820,000	2.9

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2019
SUMMARY OF CURRENT EXPENSES

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Operation and Maintenance Expenses</u>				
<u>Supply</u>				
<u>Occoquan</u>				
Personal Services	\$ 236,000	\$ 255,000	\$ 264,000	3.5
Power Purchased	1,050,000	1,046,000	1,079,000	3.2
Water Treatment Chemicals	40,000	42,000	46,000	9.5
Supplies and Materials	45,000	27,000	28,000	3.7
Contractual Services	75,000	46,000	48,000	4.3
Programs	37,000	35,000	37,000	5.7
Subtotal	1,483,000	1,451,000	1,502,000	3.5
<u>Potomac</u>				
Personal Services	300,000	339,000	352,000	3.8
Power Purchased	2,036,000	2,049,000	2,114,000	3.2
Utilities	56,000	78,000	81,000	3.8
Supplies and Materials	57,000	57,000	59,000	3.5
Gasoline and Fuel	9,000	5,000	5,000	--
Contractual Services	100,000	219,000	228,000	4.1
Programs	158,000	150,000	150,000	--
Subtotal	2,716,000	2,897,000	2,989,000	3.2

<u>Item</u>	<u>2018</u>		<u>2019</u> <u>Budget</u>	<u>% Increase</u> <u>(Decrease)</u>
	<u>Budget</u>	<u>Current</u> <u>Estimate</u>		
<u>Purchased</u>				
Personal Services	\$ 34,000	\$ 41,000	\$ 43,000	4.9
Purchased Water	6,540,000	7,810,000	7,155,000	(8.4)
Contractual Services	3,000	3,000	3,000	- -
Subtotal	<u>6,577,000</u>	<u>7,854,000</u>	<u>7,201,000</u>	<u>(8.3)</u>
Total - Supply	10,776,000	12,202,000	11,692,000	(4.2)

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Treatment</u>				
<u>Griffith</u>				
Personal Services	\$ 3,682,000	\$ 3,691,000	\$ 3,828,000	3.7
Power Purchased	1,285,000	1,276,000	1,317,000	3.2
Utilities	142,000	165,000	171,000	3.6
Water Treatment Chemicals	3,953,000	3,686,000	4,012,000	8.8
Supplies and Materials	463,000	415,000	430,000	3.6
Contractual Services	835,000	691,000	718,000	3.9
Programs	80,000	80,000	80,000	--
Miscellaneous	8,000	5,000	7,000	40.0
Subtotal	10,448,000	10,009,000	10,563,000	5.5
<u>Corbalis</u>				
Personal Services	4,406,000	4,276,000	4,435,000	3.7
Power Purchased	2,485,000	2,500,000	2,580,000	3.2
Utilities	573,000	519,000	537,000	3.5
Water Treatment Chemicals	3,664,000	3,118,000	3,394,000	8.9
Waste Disposal Chemicals	75,000	112,000	80,000	(28.6)
Supplies and Materials	1,166,000	1,112,000	1,151,000	3.5
Contractual Services	1,409,000	1,617,000	1,681,000	4.0
Programs	80,000	80,000	80,000	--
Miscellaneous	12,000	12,000	16,000	33.3
Subtotal	13,870,000	13,346,000	13,954,000	4.6
Total - Treatment	24,318,000	23,355,000	24,517,000	5.0

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Transmission</u>				
<u>Transmission System</u>				
Personal Services	\$ 2,220,000	\$ 2,030,000	\$ 2,105,000	3.7
Power Purchased	2,444,000	2,529,000	2,610,000	3.2
Utilities	22,000	19,000	19,000	--
Supplies and Materials	262,000	205,000	212,000	3.4
Contractual Services	389,000	179,000	186,000	3.9
Programs	30,000	31,000	32,000	3.2
Subtotal	5,367,000	4,993,000	5,164,000	3.4
<u>Wholesale Customer Accounts</u>				
Personal Services	29,000	39,000	40,000	2.6
Supplies and Materials	4,000	4,000	4,000	--
Subtotal	33,000	43,000	44,000	2.3
Total - Transmission	5,400,000	5,036,000	5,208,000	3.4
<u>Distribution</u>				
<u>Distribution System</u>				
Personal Services	3,824,000	4,226,000	4,384,000	3.7
Utilities	5,000	5,000	5,000	--
Supplies and Materials	1,105,000	983,000	1,018,000	3.6
Contractual Services	3,063,000	4,361,000	4,533,000	3.9
Programs	802,000	961,000	832,000	(13.4)
Miscellaneous	39,000	50,000	67,000	34.0
Subtotal	8,838,000	10,586,000	10,839,000	2.4

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Retail Customer Accounts</u>				
Personal Services	\$ 7,587,000	\$ 7,473,000	\$ 7,747,000	3.7
Utilities	9,000	5,000	5,000	--
Supplies and Materials	567,000	699,000	719,000	2.9
Postage and Parcel Service	545,000	530,000	538,000	1.5
Reports	65,000	65,000	68,000	4.6
Contractual Services	1,348,000	1,290,000	1,341,000	4.0
Miscellaneous	9,000	9,000	12,000	33.3
Subtotal	<u>10,130,000</u>	<u>10,071,000</u>	<u>10,430,000</u>	<u>3.6</u>
Total - Distribution	18,968,000	20,657,000	21,269,000	3.0
<u>Administrative and General</u>				
<u>Office Building</u>				
Personal Services	227,000	240,000	249,000	3.8
Utilities	364,000	368,000	381,000	3.5
Supplies and Materials	59,000	54,000	56,000	3.7
Contractual Services	261,000	372,000	387,000	4.0
Subtotal	<u>911,000</u>	<u>1,034,000</u>	<u>1,073,000</u>	<u>3.8</u>
<u>Shop and Storage Yards</u>				
Personal Services	418,000	466,000	483,000	3.6
Utilities	195,000	191,000	198,000	3.7
Supplies and Materials	167,000	301,000	312,000	3.7
Contractual Services	395,000	435,000	452,000	3.9
Subtotal	<u>1,175,000</u>	<u>1,393,000</u>	<u>1,445,000</u>	<u>3.7</u>

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Vehicles and Equipment</u>				
Personal Services	\$ 723,000	\$ 718,000	\$ 745,000	3.8
Supplies and Materials	436,000	407,000	422,000	3.7
Gasoline and Fuel	646,000	695,000	723,000	4.0
Contractual Services	47,000	50,000	52,000	4.0
Subtotal	1,852,000	1,870,000	1,942,000	3.9
<u>Administrative</u>				
Personal Services	4,202,000	4,111,000	4,264,000	3.7
Employee Benefits	28,095,000	28,029,000	28,645,000	2.2
Utilities	4,000	5,000	5,000	--
Supplies and Materials	771,000	997,000	1,033,000	3.6
Insurance	1,200,000	955,000	1,075,000	12.6
Postage and Parcel Service	69,000	73,000	74,000	1.4
Reports	5,000	2,000	2,000	--
Advertising	62,000	38,000	42,000	10.5
Customer Relations	265,000	255,000	260,000	2.0
Books, Periodicals and Dues	117,000	108,000	115,000	6.5
Contractual Services	3,685,000	3,218,000	3,345,000	3.9
Professional Services	1,025,000	1,001,000	1,065,000	6.4
Employee Training and Meetings	505,000	395,000	500,000	26.6
Miscellaneous	229,000	152,000	205,000	34.9
Subtotal	40,234,000	39,339,000	40,630,000	3.3
Total - Administrative and General	44,172,000	43,636,000	45,090,000	3.3
Less: Reimbursable Services	(10,248,000)	(10,248,000)	(10,380,000)	1.3
Total - Administrative and General	33,924,000	33,388,000	34,710,000	4.0
Total - Operation and Maintenance Expenses	93,386,000	94,638,000	97,396,000	2.9

Item	2018		2019 Budget	% Increase (Decrease)
	Budget	Current Estimate		
<u>Other Expenses</u>				
<u>New Services and Meters</u>				
Personal Services	\$ 1,319,000	\$ 1,163,000	\$ 1,206,000	3.7
Supplies and Materials	497,000	202,000	209,000	3.5
Subtotal	1,816,000	1,365,000	1,415,000	3.7
<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	1,825,000	1,365,000	1,424,000	4.3
Total - Current Expenses	95,211,000	96,003,000	98,820,000	2.9

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2019
ALLOCATION OF ADMINISTRATIVE EXPENSES BETWEEN
REVENUE FUND AND IMPROVEMENT FUND

	Total	Allocated to Improvement Fund	
		Amount	% Total
Personal Services Cost	\$ 41,198,000	\$ 11,049,000	27
Number of Motor Vehicles	322	27	8

	Total	Allocated to Improvement Fund	
		Percent	Amount
<u>Administrative</u>			
Office Facilities	\$ 1,073,000	27	\$ 290,000
Shop and Storage Yard Facilities	1,445,000	8	116,000
Maintenance of Equipment	1,942,000	8	155,000
Administrative and General			
Personal Services	4,264,000	--	--
Other Administrative Expenses	36,366,000	27	9,819,000
Total	45,090,000	23	10,380,000

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2019
DETAILS OF IMPROVEMENT FUND

Item	Cash Receipts 2019
<u>Balance Carried Forward - January 1, 2019</u>	\$ 592,000
 <u>Receipts</u>	
Transfer from Revenue Fund	11,000,000
Transfer from General Fund	93,000,000
Bonds Proceeds	--
Advances for Construction	100,000
Contributions for Construction	1,000,000
Investment Income	10,000
Miscellaneous Income	50,000
Total - Receipts	105,160,000
 <u>Balance Carried Forward and Receipts</u>	 105,752,000

Item	Total Project Cost	Disbursements Prior to Jan. 1, 2019	Cash Disbursements 2019
Disbursements - Part B Capital Improvement Program			
<u>General and Administrative</u>			
Project 1194-General Expenses			
Personal Services	\$ 6,888,000	\$ --	\$ 6,888,000
Transfer to Revenue Fund (Administrative)	10,380,000	--	10,380,000
Materials (Inventory)	90,000	--	90,000
Refunds of Advances	40,000	--	40,000
Trust Engineer - Basic Ordering Agreement	50,000	--	50,000
Miscellaneous	1,182,000	--	1,182,000
Subtotal	18,630,000	--	18,630,000
Transfer to Part D Capital Improvement Program	(60,000)	--	(60,000)
Transfer to Part E Capital Improvement Program	(50,000)	--	(50,000)
Total - General and Administrative - Part B	18,520,000	--	18,520,000
<u>Subdivision and Other Development Projects</u>			
Project 1195-Subdivision Expenses			
Personal Services	1,180,000	--	1,180,000
Supplies and Materials	15,000	--	15,000
Miscellaneous	5,000	--	5,000
Total - Subdivision and Other Development Projects	1,200,000	--	1,200,000

Item	Total Project Cost	Disbursements Prior to Jan. 1, 2019	Cash Disbursements 2019
<u>Extraordinary Maintenance and Repairs</u>			
Supply Facilities			
Project 577 Major Repairs-Reservoirs, Dams, Intakes, Etc.	\$ 400,000	\$ --	\$ 400,000
Project 1251 Potomac River Reservoirs-Renew/Replace	35,000	--	35,000
Project 1662 Annual Inspections-Upper/Lower Occoquan Dams	25,000	--	25,000
Subtotal	460,000	--	460,000
Treatment Facilities			
Project 579 Major Repairs-Treatment Facilities	11,810,000	--	11,810,000
Project 2350 Corbalis WTP-Solids Dewatering Equipment	24,400,000	4,645,000	--
Subtotal	36,210,000	4,645,000	11,810,000
Transmission Facilities			
Project 186A Major Repairs-Transmission Mains	570,000	--	570,000
Project 215A Major Repairs-Transmission Pumping	510,000	--	510,000
Project 631A Major Repairs-Transmission Storage	2,500,000	--	2,500,000
Project 648B Major Repairs-Sales Meters	30,000	--	30,000
<u>Transmission Mains Relocation Projects</u>			
Projects Previously Authorized	10,943,000	859,000	5,441,000
Other Anticipated Relocations - Distribution	12,090,000	--	110,000
Subtotal	26,643,000	859,000	9,161,000

EXHIBIT 5

Item	Total Project Cost	Disbursements Prior to Jan. 1, 2019	Cash Disbursements 2019
<u>Distribution Facilities</u>			
Project 186B Major Repairs-Distribution Mains	\$ 1,210,000	\$ --	\$ 1,210,000
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"	236,000	--	236,000
Project 648D Major Repairs-Distribution Meters 2" and Smaller	790,000	--	790,000
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	360,329,000	122,929,000	19,100,000
 <u>Distribution Mains Relocation Projects</u>			
Projects Previously Authorized	693,000	90,000	543,000
Other Anticipated Relocations - Distribution	8,250,000	--	600,000
Subtotal	372,378,000	123,019,000	23,349,000
 <u>General Plant Facilities</u>			
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	1,000,000	--	1,000,000
Project 2351 Surplus Property Demolition and Disposal	290,000	170,000	12,000
Project 2609 Willard Road Maintenance Facility	50,250,000	7,910,000	500,000
Subtotal	51,790,000	8,080,000	1,762,000
 Total - Extraordinary Maintenance and Repairs	 487,481,000	 136,603,000	 46,542,000

Item	Total Project Cost	Disbursements Prior to Jan. 1, 2019	Cash Disbursements 2019
<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	85,000	--	85,000
Project 2071 Future Water Supply Sources	1,329,000	1,079,000	25,000
Project 2352 Quarry Acquisition	20,640,000	16,829,000	3,811,000
Subtotal	22,601,000	17,908,000	4,468,000
Treatment Facilities			
Project 915 Improvements to Treatment Facilities	1,035,000	--	1,035,000
Subtotal	1,035,000	--	1,035,000
Transmission Facilities			
Project 1285 Additions and Improvements-Pumping Facilities	1,288,000	--	1,288,000
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	21,224,000	6,629,000	--
Project 2111 Water Main Extension Program-Transmission System	10,403,000	2,064,000	2,150,000
Project 2377 Prince William County Transmission Improvements	10,511,000	142,000	1,140,000
Project 2617 Dulles Toll Road Crossing at Innovation Center	3,006,000	212,000	745,000
General Transmission System Reinforcement	3,179,000	56,000	1,163,000
Herndon Additional Capacity Transmission Improvements	3,400,000	--	400,000
Subtotal	53,241,000	9,103,000	7,116,000
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	7,599,000	4,587,000	300,000
General Distribution System Reinforcement	3,000,000	--	300,000
Subtotal	10,619,000	4,587,000	620,000

EXHIBIT 5

Item			Total Project Cost	Disbursements Prior to Jan. 1, 2019	Cash Disbursements 2019
General Plant Facilities					
Project	597	Additions and Alterations-Shop Facilities	\$ 10,000	\$ --	\$ 10,000
Project	803	Additions and Alterations-Office Facilities	130,000	--	130,000
Project	2366	Electronic Security Surveillance Improvements	150,000	--	150,000
Project	2608	Central Maintenance Facility	40,426,000	13,210,000	1,000,000
Project	3652	Capital Equipment Purchases	987,000	--	987,000
Project	3653	Vehicles and Heavy Equipment	1,454,000	--	1,454,000
Subtotal			43,157,000	13,210,000	3,731,000
System Integration Transmission Facilities					
Project	2539	Colshire Drive Water Main	872,000	837,000	35,000
Project	2545	Lee Highway Transmission Main	9,558,000	2,877,000	6,263,000
Project	2547	University Tank Replacement	9,917,000	2,205,000	6,986,000
Project	2548	Seven Corners Tank Replacement	11,442,000	831,000	1,287,000
Project	2549	Second High Storage Elevation	16,639,000	196,000	1,250,000
Project	2589	Seven Corners Connector	870,000	--	--
Project	xxxx	Chain Bridge Pumping Station Upgrades	3,183,000	--	343,000
Project	xxxx	Second High Vaults/Scada Improvements	489,000	--	489,000
Project	xxxx	George Mason Pumping Station Bypass	250,000	--	250,000
Project	xxxx	West Fairfax Connector	5,051,000	--	--
Project	xxxx	Pickett Road Transmission Main-Phase I	9,257,000	--	--
Project	xxxx	Lyndhurst Elevated Tank	14,526,000	--	--
Project	xxxx	Braddock Road Transmission Main-Phase II	1,345,000	--	--
Project	xxxx	Seven Corners Route 50 Connector	1,614,000	--	--
Subtotal			85,013,000	6,946,000	16,903,000
System Integration Distribution Facilities					
Project	2560	Haycock- Poplar Heights Pressure Zone Modifications	3,832,000	2,260,000	1,572,000
Subtotal			3,832,000	2,260,000	1,572,000
Total - Additions, Extensions and Betterments			219,498,000	54,014,000	35,445,000

EXHIBIT 5

Item	Total Project Cost	Disbursements Prior to Jan. 1, 2019	Cash Disbursements 2019
<u>General Studies and Programs</u>			
Supply Facilities			
Project 390 Watershed Management Activities	\$ 1,056,000	\$ --	\$ 1,056,000
Subtotal	1,056,000	--	1,056,000
Treatment Facilities			
Project 1401 Water Quality Improvement Studies	100,000	--	100,000
Project 2594 WRF Bromate Formation Study	50,000	40,000	10,000
Subtotal	150,000	40,000	110,000
General and Administrative			
Project 1477 Water Research Foundation	135,000	--	135,000
Project 2273 Energy Management	100,000	--	100,000
Project 2324 Enterprise Geographical Information System	6,637,000	4,337,000	300,000
Project 2422 Environmental Permitting and Compliance	10,000	--	10,000
Project 2426 ERP Enhancements and Upgrade	5,151,000	2,699,000	841,000
Project 2441 Communication Lease Handling	10,000	--	10,000
Project 2508 Water Quality and Security Program	1,928,000	453,000	125,000
Project 2620 Intranet and Information Sharing	1,475,000	325,000	350,000
Subtotal	15,446,000	7,814,000	1,871,000
Total - General Studies and Programs	16,652,000	7,854,000	3,037,000
Total - Part B Capital Improvement Program	743,351,000	198,471,000	104,744,000

Item	Total Project Cost	Disbursements Prior to Jan. 1, 2019	Cash Disbursements 2019
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	3,500,000	--	100,000
Subtotal	3,867,000	--	304,000
General Plant Facilities			
Project 2199 General and Administrative - Part D	54,213,000	53,363,000	60,000
Subtotal	54,213,000	53,363,000	60,000
Total - Part D Capital Improvement Program	58,080,000	53,363,000	364,000

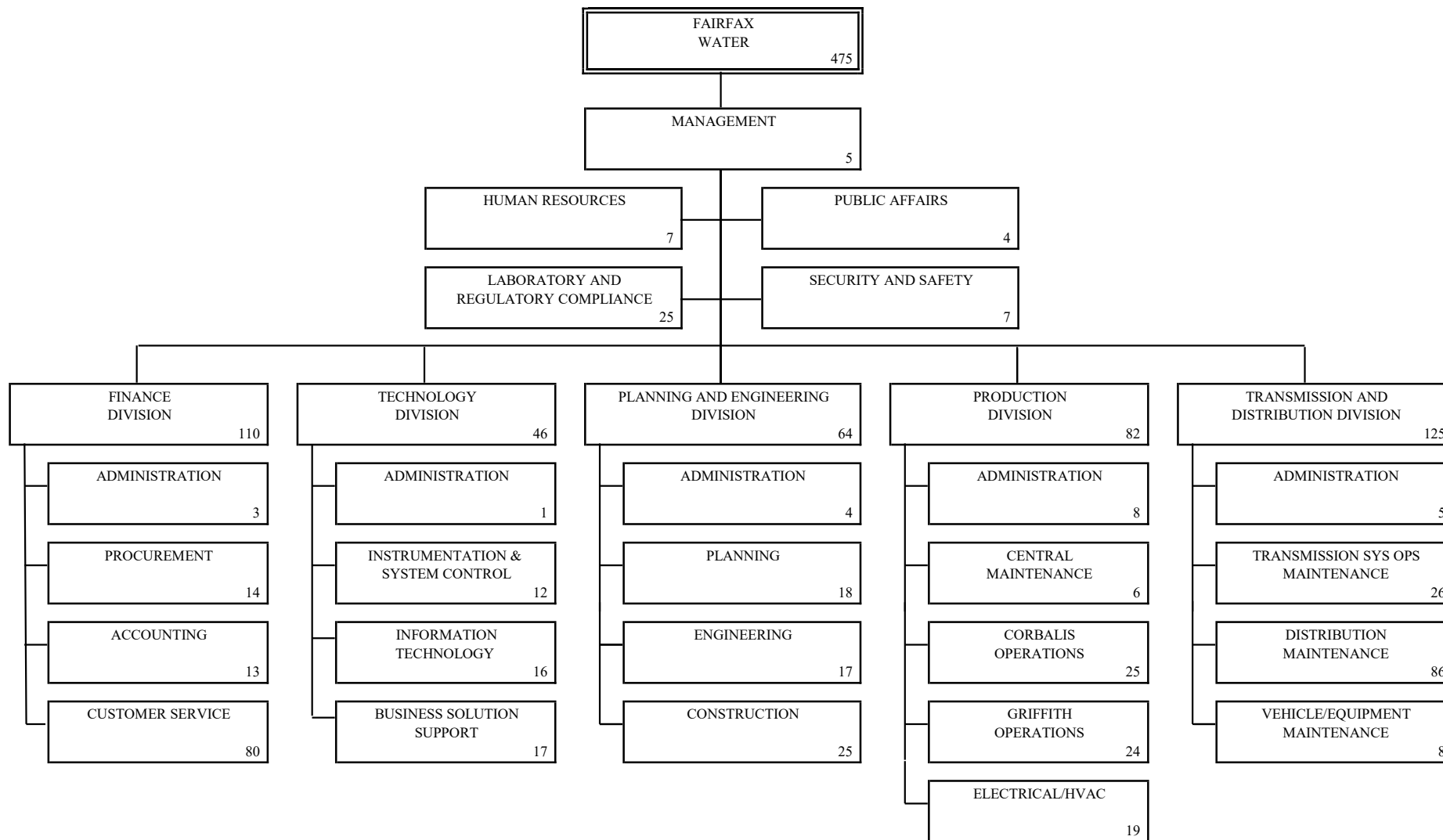
EXHIBIT 5

Item	Total Project Cost	Disbursements Prior to Jan. 1, 2019	Cash Disbursements 2019
Disbursements - Part E Capital Improvement Program			
Transmission Facilities			
Project 2481 Tysons East Transmission Main	\$ 9,981,000	\$ 5,832,000	\$ 225,000
Subtotal	<u>9,981,000</u>	<u>5,832,000</u>	<u>225,000</u>
General Plant Facilities			
Project 2517 General and Administrative - Part E	3,680,000	2,090,000	50,000
Subtotal	<u>3,680,000</u>	<u>2,090,000</u>	<u>50,000</u>
Total - Part E Capital Improvement Program	<u>13,661,000</u>	<u>7,922,000</u>	<u>275,000</u>
<u>Total - Improvement Fund</u>	<u>815,092,000</u>	<u>259,756,000</u>	<u>105,383,000</u>
<u>Balance Carried Forward - December 31, 2019</u>			<u>369,000</u>

FAIRFAX WATER

PERSONNEL ORGANIZATION PLAN

FOR THE YEAR ENDING DECEMBER 31, 2019



FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2019
DERIVATION OF PERSONAL SERVICES COSTS

<u>Base Salaries</u>	<u>2018 Budget</u>		<u>2018 Current Estimate ⁽¹⁾</u>		<u>2019 Budget</u>	
Management (Includes Members' Fees)	50	\$ 4,775,000	48	\$ 4,236,000	48	\$ 4,705,000
Finance Division	109	6,991,000	110	6,916,000	110	7,223,000
Planning and Engineering Division	64	6,285,000	64	6,076,000	64	6,334,000
Technology Division	46	5,192,000	46	4,536,000	46	5,224,000
Transmission and Distribution Division	124	7,771,000	125	7,401,000	125	7,997,000
Production Division	82	6,460,000	82	5,973,000	82	6,458,000
Subtotal - Base Salaries	<u>475</u>	<u>37,474,000</u>	<u>475</u>	<u>35,138,000</u>	<u>475</u>	<u>37,941,000</u>
 <u>Adjustments</u>						
Less Allowance for Vacancies		<u>(1,886,000)</u>		<u>--</u>		<u>(1,826,000)</u>
Subtotal		35,588,000		35,138,000		36,115,000
Plus Overtime		3,325,000		4,014,000		3,450,000
Plus Salaries for Summer/Temporary Employees		<u>650,000</u>		<u>569,000</u>		<u>650,000</u>
Subtotal		39,563,000		39,721,000		40,215,000
Plus Allowance for 2.5% Cost-of-Living Increase Effective the First Pay Period of 2019		<u>273,000</u>		<u>--</u>		<u>983,000</u>
Total - Personal Services		<u><u>39,836,000</u></u>		<u><u>39,721,000</u></u>		<u><u>41,198,000</u></u>

⁽¹⁾ Base salaries for 2018 Current Estimate include a 0.7% cost-of-living increase.

FAIRFAX WATER
ANNUAL BUDGET
FOR THE YEAR ENDING DECEMBER 31, 2019
ALLOCATION OF PERSONAL SERVICES COSTS
REVENUE AND IMPROVEMENT FUNDS

<u>REVENUE FUND</u>	2018		2019 Budget
	Budget	Current Estimate	
<u>Operation and Maintenance</u>			
Supply			
Occoquan	\$ 236,000	\$ 255,000	\$ 264,000
Potomac	300,000	339,000	352,000
Purchased	34,000	41,000	43,000
	<u>570,000</u>	<u>635,000</u>	<u>659,000</u>
Treatment			
Griffith	3,682,000	3,691,000	3,828,000
Potomac	4,406,000	4,276,000	4,435,000
	<u>8,088,000</u>	<u>7,967,000</u>	<u>8,263,000</u>
Transmission			
Transmission System	2,220,000	2,030,000	2,105,000
Wholesale Accounts	29,000	39,000	40,000
	<u>2,249,000</u>	<u>2,069,000</u>	<u>2,145,000</u>
Distribution			
Distribution System	3,824,000	4,226,000	4,384,000
Retail Accounts	7,587,000	7,473,000	7,747,000
	<u>11,411,000</u>	<u>11,699,000</u>	<u>12,131,000</u>
Administrative			
General Plant	1,368,000	1,424,000	1,477,000
Administrative	4,202,000	4,111,000	4,264,000
	<u>5,570,000</u>	<u>5,535,000</u>	<u>5,741,000</u>
Total - Operations and Maintenance	<u>27,888,000</u>	<u>27,905,000</u>	<u>28,939,000</u>

	2018		2019
	Budget	Current Estimate	Budget
<u>Other</u>			
New Services and Meters	\$ 1,319,000	\$ 1,163,000	\$ 1,206,000
Merchandising and Jobbing	4,000	- -	4,000
Total - Other	1,323,000	1,163,000	1,210,000
Total - Revenue Fund	29,211,000	29,068,000	30,149,000
<u>IMPROVEMENT FUND</u>			
General	6,679,000	6,784,000	6,888,000
Subdivision and Development	1,220,000	995,000	1,180,000
Extraordinary Maintenance	1,783,000	2,000,000	2,075,000
Additions and Extensions	728,000	680,000	705,000
Special Studies	215,000	194,000	201,000
Total - Improvement Fund	10,625,000	10,653,000	11,049,000
Total - Personal Services	39,836,000	39,721,000	41,198,000