

APPOMATTOX RIVER WATER AUTHORITY

May 19, 2016

PROPOSED OPERATION & MAINTENANCE BUDGET 2016/2017

			Change	
	<u>2015/2016</u> Budget	<u>2016/2017</u> Budget	<u>Increase/ (Decrease)</u> FY14/15 to FY15/16	Reason for Changes
O&M EXPENSES				
41000 - Personal Services	\$ 1,465,100.00	\$ 1,610,000.00	\$144,900	Budget includes up to a 3% pay for performance increase for staff plus 2% market adjustment based on the 2015 Springsted compensation study. This also include 2 new positions for the development of an Joint Authority Instrumentation/IT Department
41101 - Admin Salaries & Wages	\$ 207,000.00			
41102 - Laboratory Salaries & Wages	\$ 161,000.00			
41103 - Purification Salaries & Wages	\$ 683,000.00			
41104 - Maintenance Salaries & Wages	\$ 409,000.00			
41105 - Employee Promotions	\$ 5,100.00			
42000 - Employee Benefits	\$ 610,500.00	\$ 623,400.00	\$12,900	
42100 - Employer FICA	\$ 115,000.00	\$ 123,000.00		
42200 - Virginia Retirement System	\$ 100,000.00	\$ 96,000.00		
42210 - Deferred Comp 457	\$ 5,000.00	\$ 5,000.00		
42300 - Hospitalization Insurance	\$ 370,000.00	\$ 370,000.00		
42400 - VRS Group Life Insurance	\$ 19,000.00	\$ 21,300.00		
42500 - Group Term Life	\$ 1,500.00	\$ 1,500.00		
42600 - Health Insurance Rebate		\$ 1,500.00		
42700 - Employee Promotions		\$ 5,100.00		
42900 - Other Fringe Benefits				
43000 - Contractual Services	\$ 567,500.00	\$ 806,000.00	\$238,500	Potable water contracts increased \$175,000 due to switching GAC carbon change out to every three instead of every four years per the Hazen and Sawyer Odor control study. Additional increases resulting from increased legal and engineering costs.
43121 - Auditing Services	\$ 10,000.00	\$ 10,000.00		
43122 - Accounting Services	\$ 12,000.00	\$ 12,000.00		
43140 - Consulting Engineers	\$ 60,000.00	\$ 75,000.00		
43150 - Legal Services	\$ 50,000.00	\$ 75,000.00		
43152 - Software Support		\$ 20,000.00		
43155 - Other Consulting Services				
43156 - Admin and Maintenance Svc-SCWWA				
43160 - Trustee Services	\$ 10,000.00	\$ 10,000.00		
43162 - Bank Service Charges	\$ 1,500.00	\$ 1,500.00		
43170 - Research	\$ 15,500.00	\$ 15,000.00		
43180 - Potable Water Contract	\$ 325,000.00	\$ 500,000.00		
43190 - Samples and Tests	\$ 25,000.00	\$ 25,000.00		
43200 - Lake Patrol	\$ 4,000.00	\$ 4,000.00		
43320 - Maintenance Service Contracts	\$ 20,000.00	\$ 25,000.00		
43500 - Printing and Copier Lease	\$ 2,500.00	\$ 1,500.00		
43600 - Grounds Maintenance	\$ 32,000.00	\$ 32,000.00		
45000 - Other Charges	\$ 925,500.00	\$ 967,400.00	\$41,900	Increase due to electricity costs.
45110 - Electricity - Pumping	\$ 450,000.00	\$ 450,000.00		
45111 - Electricity - Purification	\$ 250,000.00	\$ 270,000.00		
45112 - Electricity - Raw Water				
45120 - Heating Fuel	\$ 75,000.00	\$ 75,000.00		

APPOMATTOX RIVER WATER AUTHORITY

May 19, 2016

PROPOSED OPERATION & MAINTENANCE BUDGET 2016/2017

	2015/2016 Budget	2016/2017 Budget	Increase/ (Decrease) FY14/15 to FY15/16	Change
				Reason for Changes
45130 - Trash Pickup	\$ 8,000.00	\$ 8,000.00		
45210 - Postal Services	\$ 2,500.00	\$ 2,000.00		
45230 - Telecommunications	\$ 27,500.00	\$ 27,500.00		
45304 - Property Insurance				
45308 - General Liability Insurance	\$ 80,000.00	\$ 90,000.00		
45410 - Lease/Rent of Equipment	\$ 7,500.00	\$ 7,500.00		
45510 - Mileage Allowance				
45530 - Meals and Lodging	\$ 5,000.00	\$ 5,000.00		
45540 - Education and Training	\$ 20,000.00	\$ 32,400.00		
45810 - Miscellaneous				
46000 - Materials and Supplies	\$ 2,546,500.00	\$ 2,555,500.00	\$9,000	
46001 - Office Supplies	\$ 12,000.00	\$ 12,000.00		
46004 - Laboratory Supplies	\$ 70,000.00	\$ 72,000.00		
46005 - Purification Chemicals	\$ 2,200,000.00	\$ 2,200,000.00		
46006 - Purification Supplies	\$ 10,500.00	\$ 10,500.00		
46007 - Repair and Maintenance Supplies	\$ 100,000.00	\$ 100,000.00		
46008 - Vehicle and Equipment Fuels	\$ 35,000.00	\$ 35,000.00		
46009 - Vehicle and Equipment Supplies				
46010 - Purification Equipment Parts	\$ 70,000.00	\$ 75,000.00		
46011 - Uniforms	\$ 4,000.00	\$ 6,000.00		
46012 - Dues and Subscriptions	\$ 25,000.00	\$ 25,000.00		
46014 - Other Operating Supplies				
46015 - Small Equipment Purchases	\$ 10,000.00	\$ 10,000.00		
46016 - Purification Building Maint	\$ 10,000.00	\$ 10,000.00		
46000 - Materials and Supplies - Other				
Total Operating Expenses	\$6,115,100	\$6,562,300	\$447,200	Increase primarily due to legal and engineering expenses, Electricity, and 3 year Carbon Replacement
50000 - Equipment Replacement	\$1,420,000	\$1,220,000	(\$200,000)	
Debt - 2007 Issue (retired in FY17)	\$ 517,898	\$474,071		
Debt - 2010 Issue	\$ 758,055	\$757,058		
Debt - 2012 Issue	\$ 301,984	\$301,536		
Debt- 2016 Issue		\$504,575		In-Fence Upgrades and Branders Tank and Pump Station
Total Debt	\$ 1,577,937	\$2,037,240	\$459,303	
Reserve Fund	\$ 382,064	\$439,214	\$57,150	Adjusted to factor increased O&M
Total Expenses	\$ 9,495,101	\$10,258,754	\$763,653	

APPOMATTOX RIVER WATER AUTHORITY
Replacement Fund Budget - 50000
FY16/17

Acct#	All items in \$1,000 ITEM	15/16	Proposed Budget 16/17	INFORMATIONAL & PLANNING				Totals
				17/18	18/19	19/20	20/21	
57040 - Computer Equipment	Plant GIS	\$ 10	\$ 10					\$ 20
	Replacement Computers		\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	
57050 - Furniture and Fixtures								\$ -
57060 - Construction	Replace Lime Conveyance	\$ 375						\$ 375
	Valve Replacement	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 600
	Warehouse Racks and Shelving		\$ 50					\$ 50
	General Concrete Repairs	\$ 50	\$ 50					\$ 100
	Pre-Chem Boiler Replacement		\$ 40					\$ 40
	Safety Update to Flocculation Basins		\$ 50					\$ 50
	Off-Site Reservoir Legal &/or Engineering	\$ 500	\$ 300					\$ 800
	Permit Req. Development of Reservoir Storage Management Plan		\$ 200					\$ 200
58010 - Machinery and Motors	Emergency/ Miscellaneous Repairs	\$ 275	\$ 285	\$ 285	\$ 285	\$ 285	\$ 285	\$ 1,700
58020 - Instrumentation	Turbidimeters	\$ 35						\$ 35
58030 - SCADA	Replacement of '83 vintage SCADA equipment	\$ 75	\$ 100	\$ 50	\$ 50	\$ 50	\$ 50	\$ 375
58060 - Motor Vehicles	Reservoir Sampling work boat		\$ 25					\$ 25
	TOTALS:	\$ 1,420	\$ 1,220	\$ 445	\$ 445	\$ 445	\$ 445	\$ 4,370

NOTE: FY 16/17 TO BE APPROVED WITH BUDGET

Construction Fund (Capital Projects)

FY16/17

All items in \$1,000 ITEM	Proposed Budget 15/16	Proposed Budget 16/17	INFORMATIONAL & PLANNING							Totals	<10 years	
			17/18	18/19	19/20	20/21	21/22	22/23	23/24			
Branders Bridge Tank and Pump Station - see note 2		\$ 150	\$ 2,500	\$ 2,500							\$ 5,150	
Finished Water Pump Stations No. 1 Upgrade - see note 2		\$ 150	\$ 1,750	\$ 1,750							\$ 3,650	
Electrical Improvements - see note 2		\$ 150	\$ 1,150	\$ 1,150							\$ 2,450	
Emergency Generator Replacement - see note 2		\$ 150	\$ 900	\$ 900							\$ 1,950	
Raw Water Pump Station No. 1 Upgrade - see note 2		\$ 150	\$ 1,800	\$ 1,800							\$ 3,750	
18: Clearwell #4											\$ -	\$ 8,750.00
PAC Feed System						\$ 2,500					\$ 2,500	
Transmission Main - Chesdin Rd. to Pickett Rd											\$ -	\$ 10,369.00
Transmission Main - Pickett Ave. to Matoaca Tank											\$ -	\$ 10,536.00
Transmission Main - Matoaca Tank to Branders Bridge											\$ -	\$ 11,947.00
Transmission Main - Branders Bridge to Lakeview											\$ -	\$ 3,527.00
Transmission Main - Wye Connection w/ 24" & 36" to Swift Creek Meter Vault (with Swift Creek Meter Cault											\$ -	\$ 1,206.00
Totals	\$ -	\$ 750	\$ 8,100	\$ 8,100	\$ -	\$ 2,500	\$ -	\$ -	\$ -	\$ -	\$ 19,450	

NOTE:

1) The above items for information only. Approval required from BOD at time of project award.

2) Bond Funding will be required for these Proposed Capital Project.

Revenues

Appomattox River Water Authority

FY Budget Year 2016/2017 Proposed Jan. 21, 2016 Adopted May. 19, 2016 Revised

		<u>Chesterfield</u>	<u>Colonial Heights</u>	<u>Dinwiddie</u>	<u>Petersburg</u>	<u>Prince George</u>	<u>Total</u>
1) Operations and Maintenance Base Rate							
O&M Rate							
	\$/1000 gallons	\$ 0.7807	\$ 0.7807	\$ 0.7807	\$ 0.7807	\$ 0.7807	\$ 0.7807
Estimated (\$/quarter)		\$ 1,433,825	\$ 122,810	\$ 91,039	\$ 335,091	\$ 45,733	\$ 2,028,497.04
Total annual allocation		\$ 5,735,298	\$ 491,239	\$ 364,155	\$ 1,340,364	\$ 182,932	\$ 8,113,988
% of flows		70.68%	6.05%	4.49%	16.52%	2.25%	100.00%
Estimated (mgd)		20.128	1.724	1.278	4.704	0.642	28.476
Calc. annual usage (bg)		7.347	0.629	0.466	1.717	0.234	10.394
O&M =	\$ 6,562,300	Replacement =	\$ 1,220,000	54.38% 2010 Debt (maintenance) =	\$ 411,688		
Int./Misc. Income	\$ 80,000						
Reserve Policy Rate							
Allocation	%	69.31%	4.39%	6.75%	16.69%	2.86%	100%
Annual Charge	\$/year	\$ 304,419	\$ 19,281	\$ 29,647	\$ 73,305	\$ 12,562	\$ 439,214
Quarter Charge	\$/Quarter	\$ 76,105	\$ 4,820	\$ 7,412	\$ 18,326	\$ 3,140	\$ 109,803
Reserve Policy Rate	\$/1000gals	\$ 0.0414	\$ 0.0306	\$ 0.0636	\$ 0.0427	\$ 0.0536	
FY 16/17 Reserve Policy Charge		\$439,214					
BASE RATE	\$/1000gals	\$ 0.8221	\$ 0.8113	\$ 0.8442	\$ 0.8234	\$ 0.8343	
3) Debt Service							
Bonds	% Financed						
Rate (cents/1000 gals)		\$ 0.0577	\$ -	\$ 0.1081	\$ -	\$ -	
2007 expansion (\$/year)	100.00%	\$ 423,638	\$ -	\$ 50,433	\$ -	\$ -	\$ 474,071
% allocation		89.36%		10.64%			100.00%
Rate (cents/1000 gals)		\$ 0.0037	\$ 0.0316	\$ 0.4263	\$ -	\$ 0.4243	
2010 expansion (\$/year)	45.62%	\$ 27,181	\$ 19,893	\$ 198,864	\$ -	\$ 99,432	\$ 345,370
% allocation		7.87%	5.76%	57.58%	0.00%	28.79%	100.00%
Rate (cents/1000 gals)		\$ 0.0284	\$ 0.0210	\$ 0.0436	\$ 0.0293	\$ 0.0368	
2012 Maintenance (\$/year)	100.00%	\$ 208,995	\$ 13,237	\$ 20,354	\$ 50,326	\$ 8,624	\$ 301,536
% allocation		69.31%	4.39%	6.75%	16.69%	2.86%	100.00%
Rate (cents/1000 gals)		\$ 0.0476	\$ 0.0352	\$ 0.0730	\$ 0.0490	\$ 0.0616	
(1) 2016 In-Fence Upgrades (\$/year)	100.00%	\$ 349,721	\$ 22,151	\$ 34,059	\$ 84,214	\$ 14,431	\$ 504,575
% allocation		69.31%	4.39%	6.75%	16.69%	2.86%	100.00%
FY16/17 Bond Payments	2007 =	\$ 474,071	2010 =	\$ 757,058	2012 =	\$ 301,536	
	2016 =	\$ 504,575					
EXPANSION RATE	\$/1000 gals	\$ 0.1374	\$ 0.0879	\$ 0.6511	\$ 0.0784	\$ 0.5227	
	\$/year	\$ 1,009,534	\$ 55,282	\$ 303,710	\$ 134,540	\$ 122,487	\$ 1,625,552
3) Total Rate							
TOTAL RATE (BASE + EXPANSION)	\$/1000gals	\$ 0.9595	0.8992	1.4953	0.9017	1.3570	\$ 1.1225
Estimated annual charges	\$/year	\$ 7,049,251	\$ 565,802	\$ 697,511	\$ 1,548,208	\$ 317,981	\$ 10,178,754
4) Budget Comparison							
Proposed FY16/17 Total Rate	\$/1000 gals	\$ 0.9595	\$ 0.8992	\$ 1.4953	\$ 0.9017	\$ 1.3570	\$ 1.1225
Approved FY 15/16 Total Rate	\$/1000 gals	\$ 0.9169	\$ 0.8582	\$ 1.4071	\$ 0.8502	\$ 1.3046	\$ 1.0674
Total Rate Difference	\$/1000 gals	\$ 0.0426	\$ 0.0409	\$ 0.0882	\$ 0.0515	\$ 0.0524	\$ 0.0551
Total Rate Difference	%	4.65%	4.77%	6.27%	6.06%	4.02%	5.17%
Proposed FY16/17 Revenues	\$/year	\$ 7,049,251	\$ 565,802	\$ 697,511	\$ 1,548,208	\$ 317,981	\$ 10,178,754
Total FY15/16 Approved Budget	\$/year	\$ 6,602,785	\$ 545,072	\$ 683,094	\$ 1,449,166	\$ 299,983	\$ 9,580,101
Annual Cash Difference	\$/year	\$ 446,466	\$ 20,730	\$ 14,418	\$ 99,042	\$ 17,997	\$ 598,653
Annual Revenue Difference	%	6.76%	3.80%	2.11%	6.83%	6.00%	6.25%
FY 16/17 Expenses	\$ 10,258,754	FY 16/17 Income Revenue	\$ 10,258,754				

NOTES:

1) These are estimated debt service payments based on VRA 2016 spring issuance and using market rates on 12/3/2015.

Reserve Policy: Appomattox River Water Authority FY16/17

Reserve Fund Calculation (year 2 of 5)

ARWA O&M Budget	Reserves as of 6/30/2015	Revenue for FY2015/2016	Total expected reserves on 6/30/2016	Recommended 50% O&M Reserves	Charges required to achieve 50% reserves	Annual Charge
\$6,562,300	\$1,142,232	\$382,064	\$1,524,296	\$3,281,150	\$1,756,854	\$439,214