

ENTERPRISE FUND SUMMARY

DEPARTMENT/AGENCY/OFFICE NAME: Department of Public Utilities

DEPARTMENT/AGENCY/OFFICE NUMBER: 035

DEPARTMENT BUDGET SUMMARY							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Description	FY16 Actual	FY17 Actual	FY18 Adopted	FY19 Proposed	Variance FY18 vs. FY19	FY 20 Proposed	Variance FY19 vs. FY20
DEPARTMENT BUDGET SUMMARY							
Enterprise Fund Agency Personnel	\$ 45,232,394	\$ 51,323,992	\$ 51,614,396	\$ 53,793,548	\$ 2,179,152	\$ 53,792,485	\$ (1,064)
Enterprise Fund Agency Operating (less Transfers Out)	233,471,008	238,509,763	282,323,270	279,196,016	(3,127,254)	292,806,220	13,610,204
Enterprise Fund Agency Transfers Out	-	-	-	-	-	-	-
Total Enterprise Fund Expenditures	\$ 278,703,402	\$ 289,833,755	\$ 333,937,666	\$ 332,989,564	\$ (948,102)	\$ 346,598,705	\$ 13,609,141
FT Permanent	\$ 31,135,771	\$ 31,309,386	\$ 32,789,427	\$ 34,391,346	\$ 1,601,919	\$ 34,391,346	\$ -
OT Permanent	2,823,209	2,994,450	2,668,670	2,995,608	326,938	2,994,545	(1,064)
Part Time	58,150	59,894	-	-	-	-	-
Temp Employee	65,720	85,276	30,260	40,070	9,810	40,070	-
FICA	1,965,646	2,025,982	2,046,832	2,095,855	49,023	2,095,855	-
Retirement Contribution	6,887,173	6,774,331	6,754,258	7,016,652	262,394	7,016,652	-
Medical FICA	460,574	474,844	521,852	490,033	(31,819)	490,033	-
Group Life Insurance	169,437	176,650	235,221	205,599	(29,622)	205,599	-
Workers Comp	816,024	845,471	990,074	845,471	(144,603)	845,471	-
Health Care Active EE	4,653,683	4,445,539	5,138,508	5,311,787	173,279	5,311,787	-
Health Care Retired EE	380,643	373,207	392,061	373,207	(18,854)	373,207	-
State Unemployment Insurance (SUI)	16,168	880	-	-	-	-	-
Health Savings Account	6,000	11,500	16,653	11,500	(5,153)	11,500	-
Education Pay	2,886	513	-	-	-	-	-
Meals Allowances	8,220	-	30,580	16,420	(14,160)	16,420	-
GASB 68-Pension Expense	(4,216,910)	(2,417,779)	-	-	-	-	-
OPEB Expense	-	4,163,847	-	-	-	-	-
Total	\$ 45,232,394	\$ 51,323,992	\$ 51,614,396	\$ 53,793,548	2,179,152	\$ 53,792,485	(1,064)

ENTERPRISE FUND SUMMARY

PROPOSED PERSONNEL CHANGES								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Description	FY16 Actual	FY17 Actual	FY18 Adopted	FY19 Proposed	Variance FY18 vs. FY19	FY 20 Proposed	Variance FY19 vs. FY20	
PROPOSED CHANGES IN PERSONNEL (FTEs)								
0807 - Gas Utility	223.56	224.63	227.60	222.73	(4.87)	222.73	0.00	
0808 - Water Utility	159.11	165.69	159.90	178.07	18.17	178.07	0.00	
0809 - Wastewater Utility	169.12	160.92	164.40	149.23	(15.17)	149.23	0.00	
0810 - Stormwater Utility	58.37	58.50	57.00	60.12	3.12	60.12	0.00	
0811 - Stores Utility	6.00	6.67	8.00	6.00	(2.00)	6.00	0.00	
0904 - Electric Utility	26.34	23.58	22.00	22.40	0.40	22.40	0.00	
Funded Filled Positions	642.50	639.98	638.90	638.55	(0.35)	638.55	0.00	
0807 - Gas Utility	45.44	42.60	41.20	41.17	(0.03)	41.17	0.00	
0808 - Water Utility	32.17	31.47	31.10	31.14	0.04	31.14	0.00	
0809 - Wastewater Utility	27.22	30.13	31.60	31.56	(0.04)	31.56	0.00	
0810 - Stormwater Utility	16.96	17.44	17.50	17.85	0.35	17.85	0.00	
0811 - Stores Utility	1.00	1.00	1.00	1.00	0.00	1.00	0.00	
0904 - Electric Utility	7.51	10.18	11.50	11.53	0.02	11.53	0.00	
Unfilled Positions (Vacant/New)	130.30	132.82	133.90	134.25	0.35	134.25	0.00	
Proposed Funding	\$ 45,232,394	\$ 45,964,732	\$ 51,614,396	\$ 53,793,549	\$ 2,179,153	\$ 53,792,485	\$ (1,064)	

ENTERPRISE FUND SUMMARY

PROPOSED BUDGETARY CHANGES					
(1)	(2)	(3)	(4)	(5)	(6)
Description					
PROPOSED CHANGES IN OPERATIONS	MANDATORY/ DISCRETIONARY	SERVICE	FY19 COST	FY20 COST	COMMENTS
Major Change: Charge-offs	Mandatory	Customer Service	\$ 600,000	\$ 2,000,000	External contractors
Major Change: Gas Costs	Mandatory	Gas	1,500,000	1,000,000	Due to estimated average temperatures
Major Change: Interest on Long Term Debt	Mandatory	Admin	(1,518,717)	6,000,000	Cost of new Debt
Major Change: Contractor Construction Services	Mandatory	All Utilities	(1,526,324)	3,911,268	External contractors
Major Change: Depreciation	Mandatory	Admin	1,200,000	(800,000)	New/retirement of assets
Major Change: Sludge Disposal	Mandatory	Water	-	1,000,000	External contractors
Major Change: Indirect City Costs	Mandatory	All Utilities	(2,393,244)	200,000	
Major Change: Personnel	Mandatory	All Utilities	2,179,153	(1,064)	Change in vacancy rates
Major Change: Electric Service	Mandatory	All Utilities	(988,969)	300,000	Change in usage & rates
Subtotal: Major Changes			\$ (948,102)	\$ 13,610,204	
Subtotal: Non-Service Major Changes			\$ -	\$ -	
*Total Proposed Budgetary Changes			\$ (948,102)	\$ 13,610,204	

***Reminder:** The 'Total Proposed Budgetary Changes' for FY19 and FY20 should equal the 'Variance' amounts for both 'FY18 vs. FY19' and 'FY19 vs. FY20' less the 'Transfers-Out'. **For example** the total FY19 cost for 'Proposed Budgetary Changes' which is \$530,000 plus the \$10,000 in transfers-out expenditures equals the \$540,000 variance from FY18 vs. FY19.

Department of Public Utilities (035)

Budget Summary

(\$ in millions)

<u>TOTAL DPU</u>	<u>ACTUAL FY17</u>	<u>APDOPTED BUDGET FY18</u>	<u>PROPOSED BUDGET FY19</u>	<u>PROPOSED BUDGET FY20</u>	<u>PROPOSED FY19 BUDGET % to TOTAL</u>
CITY REVENUES	\$235.0	\$248.4	\$251.6	\$258.4	67.7%
COUNTY REVENUES	21.7	32.1	33.2	34.1	8.9%
GAS RECOVERY	61.8	77.2	78.6	81.0	21.2%
INTEREST INCOME	1.9	2.5	3.3	3.6	0.9%
GRANTS	7.4	4.3	2.4	2.4	0.6%
OTHER	1.1	0.7	2.5	2.9	0.7%
TOTAL REVENUE	<u>\$328.9</u>	<u>\$365.2</u>	<u>\$371.6</u>	<u>\$382.4</u>	<u>100.0%</u>
GAS COSTS	\$61.8	\$77.2	\$78.6	\$81.0	23.6%
O&M EXPENSE	112.5	133.8	132.9	135.8	39.9%
DEPRECIATION	61.3	59.8	64.1	68.3	19.2%
TAXES	27.9	27.2	22.9	21.5	6.9%
INTEREST EXPENSE	26.3	36.1	34.5	39.9	10.4%
TOTAL EXPENSE	<u>\$289.8</u>	<u>\$333.9</u>	<u>\$333.0</u>	<u>\$346.6</u>	<u>100.0%</u>
NET INCOME	<u>\$39.1</u>	<u>\$31.3</u>	<u>\$38.6</u>	<u>\$35.8</u>	
PILOT PAYMENT	\$27.8	\$27.2	\$22.8	\$21.4	
DIVIDEND	6.1	2.8	5.4	3.0	
INDIRECT COSTS	3.2	3.2	3.3	3.3	
DIRECT COSTS	7.7	10.0	9.5	9.4	
DPU FUNDED POSITIONS	1.6	1.1	1.1	1.0	
TOTAL DPU to GF	<u>\$46.4</u>	<u>\$44.2</u>	<u>\$42.0</u>	<u>\$38.0</u>	

Department of Public Utilities (035)

Electric Utility Fund Summary

(\$ in millions)

<u>TOTAL DPU</u>	<u>ACTUAL FY17</u>	<u>APDOPTED BUDGET FY18</u>	<u>PROPOSED BUDGET FY19</u>	<u>PROPOSED BUDGET FY20</u>	<u>PROPOSED FY19 BUDGET % to TOTAL</u>
CITY REVENUES	\$9.7	\$10.4	\$9.9	\$10.2	96.1%
COUNTY REVENUES	0.0	0.0	0.0	0.0	0.0%
GAS RECOVERY	0.0	0.0	0.0	0.0	0.0%
INTEREST INCOME	0.0	0.0	0.0	0.0	0.0%
GRANTS & CONTRIBUTIONS	0.1	0.6	0.4	0.4	3.9%
OTHER	0.0	0.0	0.0	0.0	0.0%
TOTAL REVENUE	<u>\$9.8</u>	<u>\$11.0</u>	<u>\$10.3</u>	<u>\$10.6</u>	<u>100.0%</u>
GAS COSTS	\$0.0	\$0.0	\$0.0	\$0.0	0.0%
O&M EXPENSE	5.0	7.9	7.4	7.5	77.7%
DEPRECIATION	2.1	1.6	1.6	0.7	16.9%
TAXES	0.9	0.6	0.5	0.5	5.4%
INTEREST EXPENSE	0.0	0.0	0.0	0.0	0.0%
TOTAL EXPENSE	<u>\$8.0</u>	<u>\$10.1</u>	<u>\$9.5</u>	<u>\$8.8</u>	<u>100.0%</u>
NET INCOME	<u>\$1.8</u>	<u>\$0.9</u>	<u>\$0.8</u>	<u>\$1.9</u>	

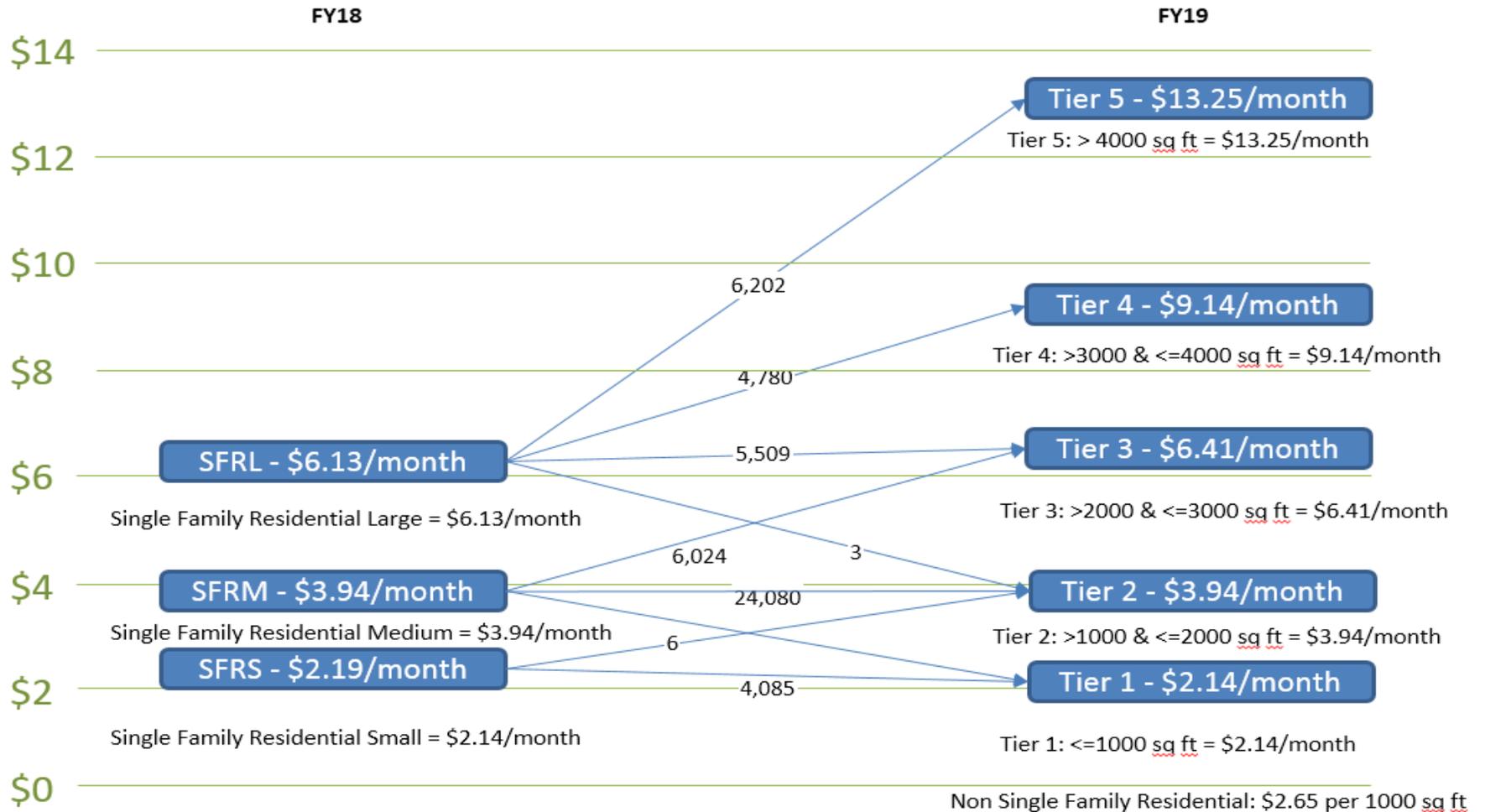
Combined Customer Impacts

Typical Residential Customer

Utility	Existing	Proposed	\$ Change	% Change
Water	\$ 38.80	\$ 35.10	\$ (3.70)	-9.5%
Wastewater	59.57	59.57	-	0.0%
Stormwater	3.94	3.94	-	0.0%
Natural Gas	51.62	53.23	1.61	3.25%
Combined (excludes cost of gas)	\$ 153.93	\$ 151.84	\$ (2.09)	-1.4%

Water & Sewer - 5/8", 6 Ccf, Single Family Residential
 Stormwater - Tier 2: > 1000 sf & <= 2000 sf
 Gas - 70 Ccf (excludes cost of gas)

Stormwater Rates – Single Family Residential Customer Impacts



Water Rates

<i>Rates</i>		<i>Typical Residential Monthly Bill Impacts</i>		
FY 2018	FY 2019	FY 2018	FY 2019	FY 2019
Actual	Projected		Projected	\$ Change

Monthly Service Charge

5/8"	\$14.56	\$14.56	\$0.00
3/4"	\$19.75	\$20.68	\$0.93
1"	\$30.13	\$32.91	\$2.78
1.5"	\$56.05	\$63.48	\$7.43
2"	\$87.17	\$100.17	\$13.00
3"	\$170.15	\$198.01	\$27.86
4"	\$263.49	\$308.08	\$44.59
6"	\$522.79	\$613.83	\$91.04
8"	\$833.94	\$980.73	\$146.79
10"	\$1,196.96	\$1,408.78	\$211.82
12"	\$3,194.97	\$3,231.91	\$36.94

Volume Charge (per Ccf)

Single Family Residential ¹			\$38.80	\$35.10	-9.54%
Tier 1 (0 - 4 Ccf)	\$4.04	\$2.58			-\$1.46
Tier 2 (> 4 Ccf)	\$4.04	\$5.11			\$1.07
Multi-Family Residential	\$4.04	\$4.31			\$0.27
Commercial	\$4.04	\$4.31			\$0.27
Industrial	\$4.04	\$4.31			\$0.27
State & Federal	\$4.04	\$4.31			\$0.27
Municipal	\$4.04	\$4.31			\$0.27

¹ Assumes 6 Ccf per month

FY19 Monthly Billing Example					
		Rate	FY19 Charge	FY18 Charge	
Volume Charge	6 Ccf				
	Tier 1 (0 - 4 Ccf)	\$2.58	\$10.32		
	Tier 2 (> 4 Ccf)	\$5.11	\$10.22		
			\$20.54	\$24.24	
Service Charge	5/8"	\$14.56	\$14.56	\$14.56	
Total			\$35.10	\$38.80	

Wastewater Rates

	<i>Rates</i>		<i>Typical Residential Monthly Bill Impacts</i>		
	FY 2018	FY 2019	FY 2018	FY 2019	FY 2019
	Actual	Projected	Actual	Projected	\$ Change
Monthly Service Charge					
5/8"	\$17.51	\$17.51			\$0.00
3/4"	\$23.36	\$24.99			\$1.63
1"	\$35.07	\$39.94			\$4.87
1.5"	\$64.33	\$77.31			\$12.98
2"	\$99.42	\$122.16			\$22.74
3"	\$193.02	\$241.77			\$48.75
4"	\$298.34	\$376.33			\$77.99
6"	\$590.86	\$750.09			\$159.23
8"	\$941.87	\$1,198.62			\$256.75
10"	\$1,351.41	\$1,721.89			\$370.48
12"		\$2,644.01			

Volume Charge (per Ccf)

Single Family Residential¹	\$7.01	\$7.01	\$59.57	\$59.57	\$0.00
Multi-Family Residential	\$7.01	\$7.01			\$0.00
Commercial	\$7.01	\$7.01			\$0.00
Industrial	\$7.01	\$7.01			\$0.00
State & Federal	\$7.01	\$7.01			\$0.00
Municipal	\$7.01	\$7.01			\$0.00

¹ Assumes 6 Ccf per month

PROPOSED FY2019-2023 FUNDING

Comprehensive Status of Proposed Capital Projects											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Line #	Project Title	Status	Total Project Cost	Previous Appropriations	Proposed Appropriation FY19	Proposed Appropriations FY20 to FY23	Total Planned Appropriations	Remaining Need	Expended as of Feb. 28	Unexpended Appropriation	Use of Funds/Justification
1	Gas Utility New Business	Existing	Ongoing	\$ 300,125,207	\$ 12,557,000	\$ 50,126,000	\$ 362,808,207	Ongoing	\$ 236,122,526	\$ 64,002,681	This project provides for the ongoing installation of new gas mains, services, meters, and regulators to serve new customers in the City of Richmond and the counties of Chesterfield, Hanover and Henrico. It is estimated that 35,000 feet of new mains and 1,400 new services will be installed in FY 2019.
2	Gas Utility System Replacement	Existing	Ongoing	\$ 383,812,319	\$ 25,274,000	\$ 91,624,000	\$ 500,710,319	Ongoing	\$ 327,109,345	\$ 56,702,974	This project provides for the replacement of gas mains, services, meters, and regulators. The primary projects included in this program are replacement of old gas mains, replacement or renewal of old gas services and response to water infiltration. Also included are ancillary projects to renew or replace mains in conjunction with projects being done by other City agencies or the State. It is estimated to replace 130,000 feet of main and 2,100 services in FY 2019. This project also allows for the purchase of replacement vehicles and equipment used to provide services throughout the Department of Public Utilities' Gas Utility service territory.
3	Water Utility Distribution System Improvements	Existing	Ongoing	\$ 223,159,907	\$ 16,804,000	\$ 72,249,000	\$ 312,212,907	Ongoing	\$ 171,509,080	\$ 51,650,827	This project provides for installation of water mains to serve new customers, also meter programs and the rehabilitation of existing water mains and services. It is estimated to replace or retire 42,000 feet of main and 500 services in FY 2019. Also included are ancillary projects to renew or replace mains in conjunction with projects being done by other City of Richmond agencies or the State. This project also allows for the purchase of replacement vehicles and equipment used to provide services throughout the Department of Public Utilities' Water Utility service territory.
4	Water Utility Transmission Main Improvements	Existing	\$ 132,394,169	\$ 128,274,169	\$ 667,000	\$ 3,453,000	\$ 132,394,169	\$ -	\$ 51,501,553	\$ 76,772,616	This project provides for construction of water transmission mains and tanks, to provide service to the City of Richmond as well as Henrico, Hanover, and Chesterfield Counties, to maximize the use of the City of Richmond's water purification plant.
5	Water Utility Major Plant & Pumping Improvements	Existing	\$ 398,292,175	\$ 370,997,175	\$ 8,694,000	\$ 18,601,000	\$ 398,292,175	\$ -	\$ 216,805,848	\$ 154,191,327	A comprehensive study of the City of Richmond's water purification plant and pumping system indicated that substantial improvements were needed to meet projected water demand and to comply with the requirements of the Safe Drinking Water Act and State Health Department regulations. The program for accomplishing these improvements began in the mid-1970s. The plant's present certified capacity is 132 million gallons per day (MGD).
6	Wastewater Utility Treatment	Existing	Ongoing	\$ 224,194,999	\$ 132,000	\$ -	\$ 224,326,999	Ongoing	\$ 158,499,500	\$ 65,695,499	This project provides for the upgrading of equipment and process control systems at the Wastewater Treatment Plant. The wastewater system serves approximately 58,000 customers in the City, Henrico, northern Chesterfield and Goochland counties. This project also allows for the purchase of replacement vehicles and equipment used to provide services throughout the Department of Public Utilities' Wastewater Utility service territory.
7	Wastewater Utility Sanitary Sewers	Existing	Ongoing	\$ 409,017,924	\$ 37,284,000	\$ 144,752,000	\$ 591,053,924	Ongoing	\$ 237,811,855	\$ 171,206,069	This project provides for rehabilitation and upgrade of sanitary sewers, inspection and replacement programs, miscellaneous sewer extensions, and emergency replacements. This project includes the Shockoe Bottom Drainage Projects (SBD 1-7) and the Battery Park Drainage Project. Also included are ancillary projects to renew or replace sewers in conjunction with projects being done by other City agencies or the State. Various Stormwater Drainage projects totaling \$4,521,725 were added as a Council Budget Amendment to the Capital Improvement Plan for FY2009-2013 (Ordinance 2008-73-105, Attachment II).
8	Wastewater Utility Combined Sewer Overflow	Existing	Ongoing	\$ 264,202,760	\$ -	\$ -	\$ 264,202,760	Ongoing	\$ 193,695,533	\$ 70,507,227	This project implements the City of Richmond's Combined Sewer Overflow (CSO) Plan. The program includes design engineering and construction of CSO conveyance facilities on the north and south sides of the James River, increases the wet weather treatment capacity at the Wastewater Treatment Plant, expansion of the Shockoe Retention Basin and other smaller CSO control projects. In addition, this project includes \$22.7 million for the Canal Redevelopment Project.

PROPOSED FY2019-2023 FUNDING

Comprehensive Status of Proposed Capital Projects											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Line #	Project Title	Status	Total Project Cost	Previous Appropriations	Proposed Appropriation FY19	Proposed Appropriations FY20 to FY23	Total Planned Appropriations	Remaining Need	Expended as of Feb. 28	Unexpended Appropriation	Use of Funds/Justification
9	Stormwater Facilities Improvements	Existing	Ongoing	\$ 57,987,665	\$ 7,263,000	\$ 56,650,000	\$ 121,900,665	Ongoing	\$ 29,429,793	\$ 28,557,872	This project provides for Citywide rehabilitation and upgrade of stormwater sewers and associated facilities, inspection and replacement programs, miscellaneous stormwater extensions, and emergency replacements. This project also allows for the purchase of replacement vehicles and equipment used to provide services throughout the Department of Public Utilities' Stormwater Utility service territory.
10	Street Lighting - Special	Existing	Ongoing	\$ 13,350,525	\$ 300,000	\$ -	\$ 13,650,525	Ongoing	\$ 9,883,266	\$ 3,467,259	This budget category provides funding for special street lighting projects including the installation of special and ornamental street lights based on citizen's requests.
11	Street Lighting - LED Conversion	Existing	Ongoing	\$ 500,000	\$ 1,420,203	\$ 4,079,797	\$ 6,000,000	Ongoing	\$ -	\$ 500,000	This budget category provides funding for street lighting projects including 1) the installation of LED street lights based on a transition to newer lighting technology and 2) conversion of current street lighting to LED street lights. The specific funding requested below represents replacement of 11,600 lower wattage Cobra head lights with LED lights. A construction expenditure of \$6.0M over five years is expected to bring a breakeven with O&M savings at between 20 and 30 years. This assumes a 50% power savings in each year of operation. DPU is currently engaged in a LED pilot assisted by experts from Virginia Tech Transportation Institute securing assistance with analysis of the selected LED lighting components under evaluation, cost-benefit impacts and to help establish LED standards for the City.
12	Street Lighting - General	Existing	Ongoing	\$ 34,759,390	\$ 403,000	\$ 1,300,000	\$ 36,462,390	Ongoing	\$ 24,474,575	\$ 10,284,815	This project provides for installation of new street lights at various locations based on requests of citizens, the Police Department, and the Department of Public Works Traffic Engineering Division. This project also provides for an upgrade to the electric distribution system, upgrades to four electric sub-stations, and ancillary electric work required due to CIP projects undertaken by other departments within the City of Richmond.