



CITY OF RICHMOND

Department of Public Utilities

November 30, 2024

Mr. Jerome Brooks
Regional Director
Piedmont Regional Office
Department of Environmental Quality
4949-A Cox Road
Glen Allen, Virginia 23060

Re: 2024 Financial Compliance & Progress Report, City of Richmond Virginia Special Order by Consent and VPDES Permit VA0063177

Dear Mr. Brooks:

In compliance with SECTION A.4 of the STATE WATER CONTROL BOARD ENFORCEMENT ACTION SPECIAL ORDER BY CONSENT (Order) ISSUED TO THE CITY OF RICHMOND, Permit No. VA0063177, effective 17 March 2005, please accept this Financial Compliance & Progress Report describing progress made in the previous fiscal year in controlling Combined Sewer Overflows (CSOs) and plans for further implementation of the Long Term Control Plan (LTCP) in the near and long term future. This report contains all the elements required in SECTION A.4. listed in the Order as follows:

“1. An independent rate consultant report that includes schedules and other material designed to demonstrate compliance with the above funding and spending criteria. At a minimum, the independent rate consultant’s report will include:

- a. A schedule of sewer rates and charges in effect during the year and an explanation of any changes in the sewer rates and charges during the year;***
- b. A schedule that calculates the current year annual sewer bill for a residential customer with a 7 ccf average monthly sewer use and the percentage of such bill to median household income in the City;***
- c. A schedule detailing sewer related revenues, operation and maintenance expenses, net revenues, debt service, reserve funds and the sewer debt service coverage ratio for the previous year;***



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- d. A schedule detailing amounts borrowed, grants, and other sources of capital funds, and the amount of capital funds obligated for water quality projects during the previous year; and,*
 - e. A schedule displaying the industrial rate structure and progress toward the goal of parity between industrial and residential rates.*
- 2. An accounting of all sums expended on implementation of specific CSO projects contained in the LTCP in the previous fiscal year and in each fiscal year since the effective date of this Order.*
 - 3. An accounting of all sums obligated in the current fiscal year, and funds projected to be obligated within the next five years for implementation of specific CSO projects contained in the LTCP.*
 - 4. A narrative report of the status of each CSO project identified in the LTCP including projected completion dates contingent upon funding availability.*
 - 5. A status report of progress being made in procuring state and federal grants and low interest loans for the purpose of implementing specific elements of the LTCP.”*

COMPLIANCE STATEMENT

Based on information referenced in Attachment No. 1 (Exhibits 1 through 3) of this report, we confirm to you the following:

1. Effective July 1, 2024, the sewer rates and charges were adjusted in accordance with Section A.1 of Appendix A to the CSO Special Order. See Exhibit 1 for a summary of the sewer rate changes for the most recent five year period.
2. The Special Order required the City to increase sewer rates such that the annual sewer bill for a typical residential customer with 7 ccf of average monthly sewer use will be at least 1.25% of MHI. As of July 1, 2024, the annual sewer bill for residential customers with 7 ccf average monthly sewer use was 1.51% of MHI for the City of Richmond. See Exhibit 2 for details.
3. For the year ended June 30, 2024, the debt coverage ratio in the City's Sewer Fund was 2.00 compared with the 1.75 maximum limit stipulated in the Special Order. See Exhibit 3 for details.



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- 4. During the year ended June 30, 2024, the City obtained the following capital funds that were used for CSO and water quality project appropriations.

Revenue bonds	\$30,699,776
Grants/Construction-in-Aid funds	(396,518)
Working capital transfers	<u>43,114,617</u>
Total	<u>\$73,417,875</u>

Attachments No. 2 through No. 4 provide a status report on information required by the Order in Sections A.4.2. through A.4.5.

As required by the Order, the City agrees to meet with the Department of Environmental Quality in December 2024 to discuss the status of the CSO projects required under this Order. By way of this letter, the City requests such a meeting. Please contact this office at (804) 646-5205 to schedule the meeting at a mutually convenient date and time.

Sincerely,

DocuSigned by:

 392118D0255C442
 April N. Bingham
 Senior Director

- cc: Robert C. Steidel, Deputy Chief Administrative Officer, Operations, City of Richmond
- John Vaughan, Jr, Deputy Department Director Senior, City of Richmond
- Emily J. Messer, Assistant City Attorney, City of Richmond
- Karen Doran, Manager, Clean Water Financing & Assistance Program, DEQ-Central Office
- Jaime Robb, Deputy Regional Director, DEQ – PRO,
- Heather Deihls, Water Compliance & Monitoring Manager, DEQ-PRO
- Jefferson Reynolds, Enforcement Manager, DEQ-PRO



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Attachments

Attachment No. 1

(SECTION A.4.1.) An independent rate consultant report and Exhibit 1, Exhibit 1a, Exhibit 1b , Exhibit 2 and Exhibit 3.

Attachment No. 2

(SECTION A.4.2.) An accounting of all sums expended on implementation of specific CSO projects contained in the LTCP in the previous fiscal year and in each fiscal year since 17 March 2005 and, Exhibit 4.1 and Exhibit 4.2.

Attachment No. 3

(SECTION A.4.3.) An accounting of all sums obligated in the current fiscal year, and funds projected to be obligated within the next five years for implementation of specific CSO projects contained in the LTCP and Exhibit 5.

Attachment No. 4

(SECTION A.4.4. and SECTION A.4.5.) A narrative report of the status of each CSO project identified in the LTCP including projected completion dates contingent upon funding availability and a status report of progress being made in procuring state and federal grants and low interest loans for the purpose of implementing specific elements of the LTCP.

Attachment No. 5

In accordance with 2020 Va. Acts 634, 2020 Va. SB 1064, this report to DEQ contains information on the level and sources of funding and financing DPU has applied to the CSO system in each of the past five fiscal years as well as an assessment of funding needs in future years. See Exhibit 6 and Exhibit 7 for details.

WASTEWATER CHARGES FOR SERVICES

Per Section A.4. Requirement 1.a.

See Explanatory notes on Exhibit 1b

	<u>7/1/2020</u>	<u>7/1/2021</u>	<u>7/1/2022</u>	<u>7/1/2023</u>	<u>7/1/2024</u>
Volume Charge - Residential	7.295	7.587	7.985	8.504	9.030
Volume Charge - Commercial	7.295	7.587	7.985	8.504	9.030
Volume Charge - Industrial	7.295	7.587	7.985	8.504	9.030
Volume Charge - Municipal	7.295	7.587	7.985	8.504	9.030
Monthly Service Charge (5/8" Meter)	18.21	18.94	19.93	21.23	21.66
Private Water Supply (non-meter)	65.6	68.22	71.8	76.47	80.48
Strong Wastewater Charge (275 mg/l)	0.2247	0.43	0.45	0.48	0.51
Strong Wastewater Charge (250 mg/l)	0.2763	0.41	0.43	0.458	0.482
Nitrogen Surcharge	0.969	1.73	1.82	1.94	2.04
Phosphorus Surcharge	1.2403	2.44	2.57	2.74	2.88

WASTEWATER CHARGES FOR SERVICES

Per Section A.4. Requirement 1.a.

See Explanatory notes on Exhibit 1b

	<u>7/1/2020</u>	<u>7/1/2021</u>	<u>7/1/2022</u>	<u>7/1/2023</u>	<u>7/1/2024</u>
Commercial and Industrial Wastewater Rates					
Monthly Service Charge (5/8" Meter)	\$18.21	\$18.94	\$19.93	\$21.23	\$21.66
Monthly Service Charge (3/4" Meter)	\$25.98	\$27.02	\$28.44	\$30.29	\$30.90
Monthly Service Charge (1" Meter)	\$41.53	\$43.19	\$45.46	\$48.41	\$49.38
Monthly Service Charge (1-1/2" Meter)	\$80.41	\$83.63	\$88.02	\$93.74	\$95.62
Monthly Service Charge (2" Meter)	\$127.05	\$132.13	\$139.07	\$148.11	\$151.08
Monthly Service Charge (3" Meter)	\$251.44	\$261.50	\$275.23	\$293.12	\$298.99
Monthly Service Charge (4" Meter)	\$391.38	\$407.04	\$428.41	\$456.26	\$465.39
Monthly Service Charge (6" Meter)	\$780.10	\$811.30	\$853.89	\$909.39	\$927.58
Monthly Service Charge (8" Meter)	\$1,246.56	\$1,296.42	\$1,364.48	\$1,453.17	\$1,482.24
Monthly Service Charge (10" Meter)	\$1,790.77	\$1,862.40	\$1,960.18	\$2,087.59	\$2,129.35
Volume Charge (Commercial)	7.295	7.587	7.985	8.504	9.030
Volume Charge (Industrial)	7.295	7.587	7.985	8.504	9.030

WASTEWATER RATE HISTORY

Explanation of Rates

- 1. Sewer use is typically billed at the appropriate volume rate. Generally usage is based on metered water consumption. In cases where the customer uses a private water supply, a flat rate is charged for sewer services.**

- 2. In addition to charges for usage, customers are charged a capacity charge that is dependent on the size of the meter that is required to service the customer. Meters range from 5/8 inch to 10 inches in diameter and service charges vary from \$21.66 to \$2,129.35 per month.**

- 3a. Strong wastewater charges (275mg/l) are to cover treatment costs when wastes, containing concentrations of suspended solids that exceed 275 milligrams per liter, are discharged into the City's wastewater system.**

- 3b. Strong wastewater charges (250mg/l) are to cover treatment costs when wastes, containing concentrations of BOD (Biochemical Oxygen Demand) that exceed of 250 milligrams per liter, are discharged into the City's wastewater system.**

- 3c. Nitrogen surcharges (30mg/l) are to cover treatment costs when wastes, containing concentrations of nitrogen that exceed 30 milligrams per liter, are discharged into the City's wastewater system.**

- 3d. Phosphorus surcharges (12mg/l) are to cover treatment costs when wastes, containing concentrations of nitrogen that exceed 12 milligrams per liter, are discharged into the City's wastewater system.**

ANNUAL WASTEWATER BILL AS A PERCENT OF MHI

Per Section A.4. Requirement 1.b.

ANNUAL RESIDENTIAL WASTEWATER BILL:		<u>7/1/2024</u>
Effective rate		\$9.030
Average monthly use in ccf	x	<u>7</u>
Volume charge		63.21
Monthly service charge		<u>21.66</u>
Total monthly wastewater bill		84.87
	x	<u>12</u>
Annual wastewater bill		<u><u>\$1,018.44</u></u>
 MEDIAN HOUSEHOLD INCOME (MHI) CALCULATION		
2023 MHI per U.S.Census Bureau Quick Facts		\$65,650
CPI index from Dec 2023 to July 2024 (306.746 to 314.540)	x	1.025
2024 estimated MHI		<u><u>\$67,291</u></u>
 ANNUAL WASTEWATER BILL AS A % OF MHI		 <u><u>1.51%</u></u>

Notes:

1. CPI data from US Department of Labor:

December 2023 Index =	306.746
July 2024 Index =	314.540

DEBT SERVICE COVERAGE

Per Section A.4. Requirement 1.c.

	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024
REVENUES:					
Operating Revenues	86,821,333	84,026,578	93,819,299	102,062,493	105,962,496
Connection Fees	2,953,000	692,450	939,988	1,517,499	(396,518)
Interest Income	3,178,469	714,634	713,135	9,036,199	13,807,224
Total Revenues	92,952,802	85,433,662	95,472,422	112,616,191	119,373,202
OPERATING & NON-OPERATING EXPENSES					
Operating Expenses	21,694,393	20,285,893	21,449,320	25,065,226	30,122,079
Salaries & Wages	13,236,183	19,127,192	12,362,713	13,344,318	17,305,108
Materials & Supplies	1,421,650	1,216,539	1,141,669	1,561,515	2,570,406
Rents & Utilities	4,353,988	4,942,221	4,864,265	6,808,998	5,861,044
Maintenance & Repairs	7,915,383	10,587,005	6,734,469	9,555,064	9,171,166
Taxes & Licenses					
Total Operating & Non-Operating Expenses	48,621,597	56,158,850	46,552,436	56,335,121	65,029,803
NET REVENUES	44,331,205	29,274,812	48,919,986	56,281,070	54,343,399
DEBT SERVICE					
General Obligation Bonds (100%)	708,500	725,202			
Revenue Bonds (115%)	21,320,766	26,242,874	27,365,098	27,066,120	27,180,393
Total Debt Service	22,029,266	26,968,076	27,365,098	27,066,120	27,180,393
DEBT COVERAGE	2.01	1.09	1.79	2.08	2.00

PROJECT APPROPRIATIONS

Projects are normally appropriated at the beginning of each fiscal year when the City’s Capital Improvement Program (CIP) is approved by the City Council. City staff is authorized to expend money on individual projects after project construction bids are received and approved. Since July 1, 2000, the City has appropriated \$1,417,288,011 for CSO and other water quality projects. A summary of these amounts is shown below:

	CSO	Water Quality	Total
Prior to FY 2020 Expenditures	205,258,725	458,009,997	663,268,722
FY 2020 Expenditures	1,450,532	21,271,785	22,722,317
FY 2021 Expenditures	3,688,290	20,032,815	23,721,105
FY 2022 Expenditures	13,305,036	27,142,895	40,447,931
FY 2023 Expenditures	16,925,010	35,624,125	52,549,135
FY 2024 Expenditures	18,049,459	55,368,416	73,417,875
Unexpended Authorizations	88,447,853	452,713,073	541,160,926
Totals	\$347,124,905	\$1,070,163,106	\$1,417,288,011

Exhibit 4.1 contains an itemization of project expenditures and unexpended authorizations from July 1, 2000 to June 30, 2024. Unexpended authorizations represent the remaining budgets on projects not completed as of June 30, 2024. Appropriations to be authorized represent approved CIP amounts that have not been authorized for specific projects at June 30, 2024. This occurs because project bids cannot always be received and approved in the same year that projects are appropriated.

PROJECT EXPENDITURES

1. CSO Projects Authorized

Per Section A.4. Requirement 2.

Project Description	Work Order No.	Prior to FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	Cumulative Expenditures	Unexpended Amount
		Expenditures	Expenditures	Expenditures	Expenditures	Expenditures	Expenditures		
CSO Phase III - 4 Lower Gillies Creek 28E and 28A	102150 + 102151	11,410,043	0	0	0	0	0	\$11,410,043	2,847,404
Shockoe Diversion Structure & Miscellaneous Improvements	100336	1,276,766	0	0	0	0	0	\$1,276,766	0
CSO Phase III - 1 Regulators 24,25,26	X110	2,947,787	0	0	0	0	0	\$2,947,787	0
CSO Phase III - 5 Oakwood In-Line Equalization	X094	2,174,634	0	0	0	0	0	\$2,174,634	0
CSO Phase III - 2 Separation Design Orleans & Nicholson Sts	100338 103881	891,188	0	0	0	0	0	\$891,188	0
CSO Phase III - 2 Separation Design Maury Street	X092	2,104,370	0	0	0	0	0	\$2,104,370	0
CSO Phase III - 2 Separation Design Fulton Bottom	103879	727,368	0	0	0	0	0	\$727,368	0
CSO Phase III - PPP	103878	828,667	0	0	0	0	0	\$828,667	0
CSO Re-Evaluation Study	103850	649,757	0	0	0	0	0	\$649,757	0
Swirl Concentrators	X028071U	1,756,805	0	0	0	0	0	\$1,756,805	0
CSO 4&5 - Hampton Street Retention Tunnel	103849	51,563,190	0	0	0	0	0	\$51,563,190	0
James River Monitoring	X022071U	1,758,663	0	0	0	0	0	\$1,758,663	0
CSO Phase III - 3 Regulators Design 12,14,39	100337	6,270,576	0	0	0	0	0	\$6,270,576	0
Flow Regulators#X157172U	100350	175,504	17,942	41,194	2,475	0	1,818	\$238,933	78,847
MIS Phase III	100326	507,160	94,476.04	170,345.92	86,605	41,513	216,118	\$1,116,219	3,375,781
Shockoe Diversion Structure Crest Gates and Arch Sewer Emergency Gates	100356	340,964	103,888	141,287	88,581	148,100	3,863,856	\$4,686,677	13,992,323
CSO S.O #14 - WWTP Wet Weather Primary Disinfection Facility	102099	15,269,103	915,071	244,586	0	0	0	\$16,428,761	836,239
CSO S.O. #15 - WWTP Screening and Grit Facility.	102130	2,622,259	216,205	1,988,350	11,192,346	13,962,072	6,332,741	\$36,313,972	3,505,384
Lower Gillies Creek Conveyance CSO 004	103901	204,319	0	64,130	127,858	57,635	2,595,815	\$3,049,757	7,950,243
Security Package at Shockoe	106065	0	102,949	109,475	901	6,896	0	\$220,221	0
Odor Control System Improvements - Haxall Canal, Hampton Flushing Structure, and McCloy P	106821	0	0	33,730	0	0	0	\$33,730	86,270
Real Time monitoring Equipment: Flow Meter and Rain Gauge Equipment	106866	0	0	276,588	0	0	0	\$276,588	0
CSO Real Time Decision Support System	106906	0	0	275,633	808,621	539,167	1,062,008	\$2,685,430	3,514,571
McCloy P.S. Improvements	106910	0	0	278,415	81,287	398,479	1,499,933	\$2,258,114	91,886
Replace gate at CSO 21	107206	0	0	0	71,206	0	0	\$71,206	0
Shockoe Pump & Impellers	107258	0	0	0	93,907	0	0	\$93,907	0
CSO Replace #11-3810	107282	0	0	64,555	0	0	0	\$64,555	0
CSO 36" cast iron flap gate	107378	0	0	0	15,020	0	0	\$15,020	0
Replace gates 01, 02 and 03 at Shockoe	107383	0	0	0	38,832	0	0	\$38,832	0
Replace Circuit breaker at Shockoe	107387	0	0	0	9,510	0	0	\$9,510	0
CSO Interim Plan Projects	107541	0	0	0	563,267	448,588	491,232	\$1,503,087	16,825,920
750KVA Dry Transformer	107719	0	0	0	111,674	77,556	0	\$189,230	0
Shockoe Gatehouse Manway Replacements (3)	107924	0	0	0	12,945	17,023	36,479	\$66,447	143,553
Hampton PS MCC/Controls Replacement	107927	0	0	0	0	61,682	0	\$61,682	320,448
Sewer Model Database	107988	0	0	0	0	449,581	0	\$449,581	1,550,419
CSO Regulator Improvements	108158	0	0	0	0	62,834	97,879	\$160,713	1,239,287
Shockoe&McCloy Tunnel Cleaning	107423	0	0	0	0	0	0	\$0	2,000,000
CSO Program Management	108360	0	0	0	0	614,992	1,041,547	\$1,656,539	343,461
Dock St. Pump Station	108430	0	0	0	0	8,513	141,452	\$149,965	3,867,035
FY23 WWTP CSO Flap Gate	108470	0	0	0	0	25,210	0	\$25,210	0
CSO 031 Storage Tank	108532	0	0	0	0	5,168	347,224	\$352,392	667,608
FY24 Repl Main Breakers	109164	0	0	0	0	0	63,335	\$63,335	171,176
FY23 CD225M Dri-Prime Pump	108550	0	0	0	0	0	78,874	\$78,874	15,146
FY23 CSO 006 Outfall Improv	108591	0	0	0	0	0	66,819	\$66,819	11,057,181
CSO 12 & 24 Separation	108620	0	0	0	0	0	112,331	\$112,331	787,669

PROJECT EXPENDITURES

1. CSO Projects Authorized

Per Section A.4. Requirement 2.

Project Description	Work Order No.	Prior to FY 20	FY 20	FY 21	FY 22	FY 23	FY 24	Cumulative Expenditures	Unexpended Amount
		Expenditures	Expenditures	Expenditures	Expenditures	Expenditures	Expenditures		
Brown Mechanism Replacements	Pending	0	0	0	0	0	0	\$0	1,400,000
Regulator 06e Access Improvements	Pending	0	0	0	0	0	0	\$0	100,000
Shockoe Creek Sewer Entrance Bar Screen Replacement	Pending	0	0	0	0	0	0	\$0	100,000
Kanawha Canal Level Control Structure Improvements	Pending	0	0	0	0	0	0	\$0	2,000,000
(FY25) Hampton PS & Douglasdale PS Bar Screen Improvements Design	Pending	0	0	0	0	0	0	\$0	1,275,000
(FY25) Kanawha Canal Hydro Level Control Structure Final Design	Pending	0	0	0	0	0	0	\$0	3,600,000
(FY25) Force Main Improvements - Hampton, McCloy, and Upham Brook	Pending	0	0	0	0	0	0	\$0	3,600,000
(FY25) Lower Gate House, Upper Gate House & EGO Improvements	Pending	0	0	0	0	0	0	\$0	1,005,000
(FY25) Hampton PS Improvements	Pending	0	0	0	0	0	0	\$0	100,000
Total CSO Projects		\$103,479,121	\$1,450,532	\$3,688,290	\$13,305,036	\$16,925,010	\$18,049,459	\$156,897,447	\$88,447,853
Projects Authorized prior to 07/01/2000		101,779,604						101,779,604	
		\$205,258,725	\$1,450,532	\$3,688,290	\$13,305,036	\$16,925,010	\$18,049,459	\$258,677,051	\$88,447,853

PROJECT EXPENDITURES

2. Other Water Quality Projects Authorized
Per Section A.4. Requirement 2.

Project Description	Prior to FY 20 Expenditures	FY 20 Expenditures	FY 21 Expenditures	FY 22 Expenditures	FY 23 Expenditures	FY 24 Expenditures	Cumulative Expenditures	Unexpended Amount
Lift Stations Upgrade	0	\$814,124	\$0	\$0	0	0	\$814,124	\$0
Secondary Grit Removal	0	\$78,038	0	0	0	0	\$78,038	\$0
Replace VFD's-Main/Supplemental Pumping	0	\$1,936,120	0	0	0	0	\$1,936,120	\$0
Main Pump Station Replacements	0	\$339,930	0	0	0	0	\$339,930	\$0
Blower Switchgear/DC System Replacements	0	\$1,300,943	0	0	0	0	\$1,300,943	\$0
Master Plans & Floodwall Study	0	\$1,336,037	0	0	0	0	\$1,336,037	\$0
Plant Projects Consolidation	0	\$1,340,130	0	0	0	0	\$1,340,130	\$0
Chlorine Slide Gate Replacements #2 thru #6	0	\$268,119	0	0	0	0	\$268,119	\$0
Primary Sedimentation Facility Improvements	0	\$7,124,723	0	0	0	0	\$7,124,723	\$0
Final Sedimentation Facility Improvements	0	\$7,840,559	0	0	0	0	\$7,840,559	\$0
Security Enhancements	0	\$1,363,103	0	0	0	0	\$1,363,103	\$0
Scum Study	0	\$93,236	0	0	0	0	\$93,236	\$0
Reliability & Upgrade of Sewer Crossing	0	\$79,312	0	0	0	0	\$79,312	\$0
CSO PHASE III-3 REGULATORS 12, 14 & 39	0	\$3,965,719	0	0	0	0	\$3,965,719	\$0
Odor Control Basis of Design	0	\$8,713	0	0	0	0	\$8,713	\$0
Database Integration	0	\$86,931	0	0	0	0	\$86,931	\$0
Interim Chlorination/Dechlorination	0	\$20,912	0	0	0	0	\$20,912	\$0
WWTP Emergency Chemical Piping	0	\$511,898	0	0	0	0	\$511,898	\$0
Sixth Street Sewer Repair Project	0	\$1,000,000	0	0	0	0	\$1,000,000	\$0
Lady Bird Hat Company Sewer Relocation	0	\$302,694	0	0	0	0	\$302,694	\$0
WWTP Shockoe Bottom Drainage Projects SBD 1 thru 7	0	\$18,750,653	0	0	0	0	\$18,750,653	\$0
WWTP Battery Park Drainage Projects/TS Ernesto	0	\$31,113,163	0	0	0	0	\$31,113,163	\$0
WWTP Outfall Tide Gate Inspection and Repair	0	\$237,977	0	0	0	0	\$237,977	\$0
Collection System Master Plan Upgrade	0	\$866,061	0	0	0	0	\$866,061	\$1,083,939
Biological Nutrient Removal Phase I	0	\$116,460,215	0	(50,000)	0	0	\$116,410,215	\$1,729,485
1801 Commerce Rd Operations Facility	0	\$4,312,619	0	0	0	0	\$4,312,619	\$1,721,381
Dewatering Building Rehabilitation	102222	\$1,389,133	174,178	192,102.83	253,150.24	1,345,244.07	\$14,462,549	\$32,137,451
Sludge Thickening Building Roof	102534	\$237,690	0	0	0	0	\$237,690	\$0
WWTP Integrated Plan for Projects - CWA Compliance	102868	\$4,898,658	28,430	0	0	0	\$4,927,088	\$921,252
Upgrade Sewer Crossing	103963	\$71,996	0	0	837,717.04	550,087.12	\$2,246,927	\$733,073
WWTP Utility Water System Rehabilitation	105346	\$206,923	28,805	64,483.26	1,667,177.36	1,899,587.74	\$3,878,799	\$821,201
Sludge Storage Slab	105614	\$64,696	97,805	32,357.52	35,255.38	(1,260.84)	\$255,846	\$3,066,154
Primary Sludge Pump Station Upgrade	105639	\$0	1,709,318	103,481.77	0.00	0.00	\$1,812,800	\$187,200
Sludge Thickening Building Improvements	105681	\$779,727	176,169	205,022.92	197,776.07	693,342.60	\$7,567,749	\$9,470,251
Douglasdale Pump Station VFD	106950	\$0	0	31,400.95	21,337.40	151,649.39	\$751,289	\$168,711
Main Pumping Station	106960	\$0	0	23,201.19	226,730.14	74,981.13	\$421,345	\$49,578,655
WWTP Admin Building	107328	\$0	0	26,430.15	464,761.41	363,407.53	\$854,599	\$26,495,401
Nitratax Sens Effl. Anal. Tank	107615	\$0	0	0	17,930.33	0	\$17,930	\$0
WW I&C-(1) Rtk IQ20 actuator	107415	\$0	0	0	13,920.00	0	\$13,920	\$0
WW-I&C (4) EIM Control Panels	107641	\$0	0	0	21,740.00	0	\$21,740	\$0
NRP Div#43 Bioaugmnt#X120I70U	100332	\$0	1	(50,000)	0.00	0	(548,364)	\$0
FY23 Goulds Split Case Pump	108117	\$0	2	0	0.00	0	\$64,797	\$0
FY23 Replc Pump @Main Pmp	108237	\$0	3	0	0.00	0	\$973,003	\$0
Effluent Filter Rehabilitation	108431	\$0	4	0	0.00	0	\$1,017,296	\$0
WWTP - FY24 Valve Replacement	108758	\$0	5	0	0.00	0	\$73,815	\$0
(WWTP) Replace Tank Mixers	108856	\$0	6	0	0.00	0	\$131,902	\$0
Repl Hach Phosphax	108893	\$0	7	0	0.00	0	\$64,364	\$0
WWTP Primary Clarifier Upgrd	108914	\$0	8	0	0.00	0	\$34,489	\$0
Godwin Hydraulic Sump Pump	108990	\$0	9	0	0.00	0	\$13,477	\$0
Enclose Degritters Thick Bldg	109003	\$0	10	0	0.00	0	\$18,325	\$0
FY23 (1) Yaskawa U1000 VFD	108029	\$0	11	0	0.00	134,378	\$14,107	\$148,496
FY23 WWTP Two (2) Wilo Mixers	108344	\$0	12	0	0.00	0	\$54,510	\$0
FY23 CSO Replace Fresh Air Fan	108472	\$0	13	0	0.00	0	\$20,518	\$0
Annual Sanitary Sewer Rehabilitation (City Wide)	500082	\$152,328,247	13,339,819	13,571,831	14,395,789.47	13,076,721.18	\$220,388,319	\$161,116,628

PROJECT EXPENDITURES

2. Other Water Quality Projects Authorized
Per Section A.4. Requirement 2.

Project Description	Prior to FY 20 Expenditures	FY 20 Expenditures	FY 21 Expenditures	FY 22 Expenditures	FY 23 Expenditures	FY 24 Expenditures	Cumulative Expenditures	Unexpended Amount	
Annual Sanitary Sewer Emergency Repairs (City Wide)	500082	\$45,982,949	4,908,935	3,941,554	7,560,926.54	6,943,210.43	9,175,065	\$78,512,640	\$46,969,953
WWTP Trunk and Interceptor Sewer Inspection & Repair	500082	\$12,285,374	808,235	1,940,949	1,428,683.15	10,392,776.50	12,491,476	\$39,347,494	\$80,455,483
Sanitary Sewer Ancillary Projects (City Wide)	500083	\$3,612,675	0	0	0	0	0	\$3,612,675	\$2,444,598
Sludge Control Building No. 1	Pending	\$0	0	0	0	0	0	\$0	\$2,340,000
Sludge Control Building No. 2	Pending	\$0	0	0	0	0	0	\$0	\$3,794,000
Bio-Reactor Refurbishment	Pending	\$0	0	0	0	0	0	\$0	\$11,000,000
Secondary Clarifier Influent Valve Replacements	Pending	\$0	0	0	0	0	0	\$0	\$1,000,000
WWTP Warehouse Roof Replacement	Pending	\$0	0	0	0	0	0	\$0	\$3,000,000
WWTP Security Enhancements	Pending	\$0	0	0	0	0	0	\$0	\$1,500,000
Grit Storage Pad	Pending	\$0	0	0	0	0	0	\$0	\$2,500,000
Valve Actuator Replacement	Pending	\$0	0	0	0	0	0	\$0	\$500,000
Primary Clarifiers Upgrade Design	Pending	\$0	0	0	0	0	0	\$0	\$900,000
Biosolids Upgrades	Pending	\$0	0	0	0	0	0	\$0	\$900,000
Primary Grit Removal Station Upgrade - - Tentative	Pending	\$0	0	0	0	0	0	\$0	\$900,000
Upgrade Electrical Switchgear in Control1 ground level Electrical room	Pending	\$0	0	0	0	0	0	\$0	\$100,000
Replacement for Filter Building Staco UPS System	Pending	\$0	0	0	0	0	0	\$0	\$50,000
Digester Area Access Building Small Swichgear upgrade	Pending	\$0	0	0	0	0	0	\$0	\$40,000
UPS installed into Shockoe Retention 2400V Switchgear	Pending	\$0	0	0	0	0	0	\$0	\$25,000
Outer Pump Station and Plant Roadway Lighting LED upgrades	Pending	\$0	0	0	0	0	0	\$0	\$75,000
I.M.L.R. mixers in Aeration Tank replacement (6@27,255/ea)	Pending	\$0	0	0	0	0	0	\$0	\$163,530
Installation of Air/Climate control in Blower Building Aux. Xformer room	Pending	\$0	0	0	0	0	0	\$0	\$40,000
P2000 Product Consolidation into Software House C-CURE 9000	Pending	\$0	0	0	0	0	0	\$0	\$23,726
Elevator Replacement (5) - Main Pumping, Dewatering, Blower, Effluent Filter East, Effluent Filter West	Pending	\$0	0	0	0	0	0	\$0	\$4,430,000
(FY25) Mobile Speed Radar Station	Pending	\$0	0	0	0	0	0	\$0	\$6,000
(FY25) Pump Replacement Dewatering Building - Concrete Pumps, Bio RAS Pumps, Bio WAS Pumps	Pending	\$0	0	0	0	0	0	\$0	\$275,000
(FY25) Replace PLC at Hampton Flushing	Pending	\$0	0	0	0	0	0	\$0	\$50,000
Total Water Quality Projects Expenditures		\$423,409,997	\$21,271,785	\$20,032,815	\$27,142,895	\$35,624,125	\$55,368,416	\$1,985,684,843	\$452,713,073
Projects Authorized prior to 07/01/2000		\$34,600,000						\$34,600,000	
		\$458,009,997	\$21,271,785	\$20,032,815	\$27,142,895	\$35,624,125	\$55,368,416	\$2,020,284,843	\$452,713,073
Total All Projects (Sum of Exhibits 4.1 and 4.2)		\$459,460,529	\$22,722,317	\$23,721,104	\$40,447,930	\$52,549,135	\$73,417,875	\$2,278,961,894	\$541,160,926

Project	Description	Milestone dates	Status	Completion date
2005 Long Term Control Plan Projects				
CSO Disinfection Study				Jun-05
Phase III Program Project Plan				Dec-06
Solids & Floatable control for CSO #024				Mar-08
Solids & Floatable control for CSO #025				Apr-08
Solids & Floatable control for CSO #026				May-08
Solids & Floatable control for CSO #039				Jan-10
Fulton Bottom Urban Renewal Separation				Dec-10
Peripheral In-line flow equalization at Oakwood				Dec-10
Solids & Floatable control for CSO #012				Dec-10
Maury St. Separation				May-11
Orleans and Nicholson St Separations				May-13
Solids & Floatable control for CSO #014				Nov-16
Lower Gillies Creek Conveyance System (CSO #028, #028A)				Nov-18
Wet weather flow & solids improvement at WWTP				Apr-21
Wet Weather Disinfection to 300 MGD	Increases WWTP wet weather capacity to 300 MGD; controls CSO 021 to 4 overflows per year; upgrades WWTP screening & grit removal facilities; upgrades WWTP Main Pumping Station capacity; additional 160 MGD wet weather disinfection facility.		Construction of new screenings & grit removal facility is complete. Other elements of this project have been substituted with other projects from the new CSO Final Plan approved by DEQ on August 7, 2024.	Sep-24
Expand Secondary Wet weather flow treatment			10 interim plan projects were substituted for this project in July 2021	N/A
Adapt Shockoe Retention basin for pass through wet weather flow	Improve trash raking system, solids removal, reconfigure aeration basin to slope, provide flushing system to clean basin after every storm		Separated cross over chamber, replaced sluice and flap gates at E/W Shockoe. Construction in-progress for bascule gates, trash raking system replacements.	Construction NTP 7/31/23. Est completion Jan 2026
Expand Shockoe Retention basin by 15 MG			10 interim plan projects were substituted for this project in July 2021	N/A
Shockoe Retention Basin Wet Weather Disinfection Facility Project	Provides disinfection for new Shockoe outfall CSOs to decrease bacteria loading to the James River		This project has been substituted with other projects from the new CSO Final Plan approved by DEQ on August 7, 2024.	N/A

Projects	Description	Milestone dates	Status	Projected completion date
Interim Plan Projects				
CSO #004	Construct new solids and floatables control regulator structure, increase in line storage and increase wet weather flow conveyance to WWTP	Complete construction by 7/1/27	In construction	Construction NTP 6/26/23. Est completion Apr 2025
CSO #019A	Diversion of additional wet weather flow to Hampton-McCloy tunnel	Complete construction by 7/1/27	Construction procurement	Construction begins early 2025
CSO #019 B	Diversion of additional wet weather flow to Hampton-McCloy tunnel	Complete construction by 7/1/27	Construction procurement	Construction begins early 2025
CSO #021 wet weather controls	Increase wet weather storage in existing pipe	Complete construction by 7/1/27	Construction procurement	Construction begins early 2025
CSO #040 -1	Increase wet weather storage in existing pipe	Complete construction by 7/1/27	Construction procurement	Construction begins early 2025
CSO #024	Divert additional wet weather flow to Gillies Creek interceptor	Complete construction by 7/1/27	In construction	Construction NTP 8/19/24. Est completion July 2025
CSO #039	Divert additional wet weather flow to Gillies Creek interceptor	Complete construction by 7/1/27	In construction	Construction NTP 8/19/24. Est completion July 2025
Level 1 Shockoe Retention basin Controls	Automates drainage of Shockoe Retention Basin to improve operation	Complete construction by 7/1/27	In construction	Est completion Nov 2026
CSO #020	Diversion of additional wet weather flow to Hampton-McCloy tunnel	Complete construction by 7/1/27	Design at 80%	Construction begins 2nd qtr 2025
Level 2 Shockoe Retention basin controls	Provides automated decision logic and operation of WWTP Main Pump Station to optimize utilization of 140 mgd wet weather treatment	Complete construction by 7/1/27	Design at 95%	Construction begins late 1st qtr 2025
Final Plan Projects				
Shockoe #1	Convert a portion of the existing Shockoe Retention Basin to a 1,000 MGD high-rate disinfection facility	Complete construction by 7/1/2035	Design services procurement	Before June 2035
Southside #1	New 6 million gallon CSO storage tank to reduce bacteria at CSO 040	Complete construction by 7/1/2035	Design services procurement	Before June 2035
Gillies Creek #1	New 1 million gallon CSO storage tank to reduce bacteria at CSO 031	Complete construction by 7/1/2035	Construction procurement	Construction begins 1st qtr 2025
Hilton Street #1	Separation of the CSO012 drainage area through installation of new separate storm sewers	Complete construction by 7/1/2035	90% design	Construction begins 1st qtr 2025
Green Infrastructure Projects	Implement Green Infrastructure projects in the CSO portion of the City to reduce CSO volume	Complete construction by 7/1/2035	Evaluating options	Before June 2035

		TOTAL						
		PRIOR AUTH.	FY25	FY26	FY27	FY28	FY29	TOTAL
NOTE: All amounts are in (000's)								
Closed Projects		\$187,059	\$0	\$0	\$0	\$0	\$0	\$187,059
CSO Phase III - 4 Lower Gillies Creek 28E and 28A	102150 + 102151	14,257	0	0	0	0	0	\$14,257
Flow Regulators#X15172U	100350	318	0	0	0	0	0	\$318
MIS Phase III, #X105170U	100326	4,492	0	0	0	0	0	\$4,492
SDS Crest & Arch Gates	100356	18,679	10,089	1,667	0	0	0	\$30,435
CSO Special Order #14	102099	17,265	0	0	0	0	0	\$17,265
CSO Ph III Screen/Grit Fac	102130	39,819	0	0	0	0	0	\$39,819
CSO PH III-4 GILLIES,X128171L	103901	11,000	1,000	0	0	0	0	\$12,000
Security Package-WWTP Shockoe	106065	220	0	0	0	0	0	\$220
FY20-WW-Odor Control Sys Impr	106821	120	0	0	0	0	0	\$120
CSO RT-DSS	106906	6,200	900	900	0	0	0	\$8,000
McCloy P.S. Improvements	106910	2,350	0	0	0	0	0	\$2,350
FY21 Replace gate at CSO 21	107206	71	0	0	0	0	0	\$71
CSO 36" cast iron flap gate	107378	15	0	0	0	0	0	\$15
Repl. gates 01,02,03 @Shockoe	107383	39	0	0	0	0	0	\$39
CSO Regulator Improvements	107541	18,329	6,000	6,000	3,500	0	0	\$33,829
FY22 750KVA Dry Trasformer	107719	189	0	0	0	0	0	\$189
FY22 Shockoe Mwy Replac.	107924	210	0	0	0	0	0	\$210
FY22 Hampton PS MCC Replacem	107927	382	1,000	0	0	0	0	\$1,382
Sewer Model Database	107988	2,000	500	500	0	0	0	\$3,000
FY23 Rplc of CSO regulators	108158	1,400	0	0	0	0	0	\$1,400
Shockoe&McCloy Tunnel Cleaning	107423	2,000	0	0	0	0	0	\$2,000
CSO Program Management	108360	2,000	0	0	0	0	0	\$2,000
Dock St. Pump Station	108430	4,017	700	0	0	0	0	\$4,717
FY23 WWTP CSO Flap Gate	108470	25	0	0	0	0	0	\$25
CSO 031 Storage Tank	108532	1,020	3,000	6,500	3,000	0	0	\$13,520
CSO Real Time Monitoring Equip	106866	277	0	0	0	0	0	\$277
FY21 Shockoe Pump & Impellers	107258	94	0	0	0	0	0	\$94
CSO Rplc#11-3810 w/ 2020 F-350	107282	65	0	0	0	0	0	\$65
FY21 Repl Circuit Breaker-WW	107387	10	0	0	0	0	0	\$10
FY24 Repl Main Breakers	109164	235	0	0	0	0	0	\$235
FY23 CD225M Dri-Prime Pump	108550	94	0	0	0	0	0	\$94
FY23 CSO 006 Outfall Improv	108591	11,124	2,750	6,000	2,000	0	0	\$21,874
CSO 12 & 24 Separation	108620	900	5,000	5,000	5,000	4,200	0	\$20,100
Brown Mechanism Replacements	Pending	700	700	0	0	0	0	\$1,400
Regulator 06e Access Improvements	Pending	50	50	0	0	0	0	\$100
Shockoe Creek Sewer Entrance Bar Screen Replacement	Pending	100	0	0	0	0	0	\$100
Kanawha Canal Level Control Structure Improvements	Pending	0	1,000	1,000	0	0	0	\$2,000
(FY25) Hampton PS & Douglasdale PS Bar Screen Improvements Design	Pending	0	175	550	550	0	0	\$1,275
(FY25) Kanawha Canal Hydro Level Control Structure Final Design	Pending	0	300	1,650	1,650	0	0	\$3,600
(FY25) Force Main Improvements - Hampton, McCloy, and Upham Brook	Pending	0	300	1,650	1,650	0	0	\$3,600
(FY25) Lower Gate House, Upper Gate House & EGO Improvements	Pending	0	0	125	440	440	0	\$1,005
(FY25) Hampton PS Improvements	Pending	0	0	0	0	100	0	\$100
		\$347,125	\$33,464	\$31,542	\$17,790	\$4,740	\$0	\$434,661

Compliance with 2020 Va. Acts 634, 2020 Va. SB 1064

§ 3. Any such owner or operator of a CSO system shall report annually to the Department on its progress pursuant to § 1 and § 2, with the first annual report due no later than December 1, 2020, and the final annual report due after completion of (i) the construction activities pursuant to the final plan required in subsection B of § 1 and (ii) additional actions identified in subsection D of § 2.

The report, which may be included as part of any annual report required under a consent special order issued by the Department to the owner or operator regarding the CSO system, shall include information on the level and sources of funding and financing such owner or operator has applied to the CSO system in each of the past five fiscal years, as well an assessment of funding needs in future years with a request that appropriation amounts sufficient to carry out the purposes of this act be included in the budget bill.

In accordance with Chapter 634 signed by Governor Northam on April 2, 2020, the City of Richmond is required to report annually to DEQ on progress related to requirements to develop Interim and Final Plans to address combined sewer overflows, as well as requirements of the Special Order by Consent issued by the State Water Control Board for the combined sewer system (CSS). This report shall cover the following:

1. Progress on the Interim and Final Plans
2. Level and sources of funding and financing applied to the CSS in each of the past five fiscal years
3. Assessment of funding needs in future years with a request for appropriations to effect the Interim and Final Plans

The City of Richmond Department of Public Utilities (DPU) submitted a report with the above information to Department of Environmental Quality Director on November 1, 2024. See the CSO Level and Sources of Funding, attached as Exhibit 7.

The City of Richmond is working to implement the ten projects contained in the Interim Plan. The Final Plan dated May 30, 2024 was submitted to DEQ ahead of the required deadline on June 14, 2024. The plan was approved by DEQ on August 7, 2024.

DPU has continued extensive communication with its stakeholders via the RVAH2O stakeholder group, which was founded in 2014. DPU convened another stakeholder group for the development of the Final Plan that had participation from every council district in the city and has met regularly since spring of 2022 through completion of the Plan in mid-2024.

The General Assembly has mandated that that City complete Final Plan projects by 2035, a goal estimated to cost \$575 million. The City received a \$50 million ARPA fund grant appropriation from the General Assembly in 2021 with a \$50 million local match. The City received an additional \$100 million ARPA fund grant appropriation from the General Assembly in 2022. These grant funds are being applied to projects identified in the Interim Plan, as well as two of the Final Plan projects. The Interim Plan includes ten projects to be completed by July 1, 2027 that will cut combined sewer overflow volume by 182 million gallons per year. The City of Richmond is grateful for the state investment to-date but the city and its ratepayers cannot bear the remaining \$500 million cost of the remaining two large Final Plan projects alone. The General Assembly is requested to provide consistent grant funding in successive state budgets to enable the City to complete this project by 2035 as mandated.

As noted, the projected costs for implementing the Final Plan projects at the conceptual stage and using ACEE Class 5 ranges is approximately \$575 million. As required by 2020 SB 1064, the City requests grant funding appropriations in the General Assembly's regular budget bill sufficient to stay on schedule financially and to carry out the purposes of SB 1064. Specifically, In 2025 Richmond is requesting amending the \$50 million approved for our CSO work in the 2024 General Assembly, requesting an additional \$100 million, for a total of \$150 million in FY25. We are also requesting another \$150 million in FY26 to support the implementation of this

Compliance with 2020 Va. Acts 634, 2020 Va. SB 1064

approved Final Plan. We also need to make a correction in the budget language approved in 2024. That language included 'spend by' language – before July 1, 2025. Because of the short timespan since the approval of the Final Plan and lengthy process to procure design engineering services under Virginia law, the City is unable to spend the \$50M before the end of this fiscal year. After checking with the Virginia Resource Authority and DEQ, the current CSO matching fund can be used to house and distribute the funds to the City as reimbursements for actual project design and construction expenses incurred. We are working with the City delegation to draft an amendment for the funding request and modification to the existing language regarding housing and distributing of funds directed to Richmond's CSO Final Plan.

CSO Level and Sources of Funding

Per Virginia SB 1064 1. § 3

	FY 20	FY 21	FY 22	FY 23	FY 24	Five Year Totals
Total CSO Expenditures	\$1,450,532	\$3,688,290	\$13,305,036	\$16,925,010	\$18,049,459	\$53,418,327
Virginia Revolving Loan Fund	\$0	886,551	3,867,832	12,669,050	7,185,675	\$24,609,108
Grant Receipts	\$10,351,801	\$0	\$1,271,150	\$983,193	\$33,568,380	\$46,174,524
Wastewater Revenue Bonds/Operating Cash	(\$8,901,269)	\$2,801,739	\$8,166,054	\$3,272,767	(\$22,704,596)	(\$17,365,306)
Total CSO Funding Sources	\$1,450,532	\$3,688,290	\$13,305,036	\$16,925,010	\$18,049,459	\$53,418,327