

Saint Elizabeth Water Tower

# APPROVED BUDGETS



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Section V CAPITAL PROGRAMS

FY 2018 – FY 2027



*DC Water Blue Plains*



*Blue Plains Advanced Wastewater Treatment Plant*



*Enhanced Nitrification*

## OVERVIEW

DC Water’s Capital Improvement Program (CIP) supports the continuation of major capital asset investment in programs and projects that will upgrade the District’s water distribution system, improve the condition of our local waterways and create clean energy. The CIP includes all mandated projects as well as rehabilitation of assets required to meet permit and other regulatory requirements, and also immediate needs necessary to maintain existing service levels.

The CIP is presented on two different bases; 10-year disbursement plan and lifetime budget. Actual cash disbursements are critical to forecasting the anticipated level of rate increases, and the amount and timing of capital financing. The 10-year disbursement plan provides a more realistic projection of actual “cash out the door” excluding contingencies. It includes projected completion rates, program management and in-house labor costs. The CIP review process also includes an extensive review of the total project, or “lifetime” budget, which represents active projects prior to, during, and beyond the current 10-year period. Lifetime budgets are the primary area of focus in budget development and day-to-day monitoring. In addition to ‘active’ projects, projects for which all activities have been completed during the previous fiscal year are listed as ‘closed’ and is included in the CIP. Closed projects are dropped from the CIP in the next fiscal year.

Detailed information on the projects can be found online at [www.dcwater.com](http://www.dcwater.com)

## **CIP DEVELOPMENT AND APPROVAL PROCESS**

DC Water's capital budget review process begins each year in the spring. This process includes a review of major accomplishments, priorities, status of major projects, and emerging regulatory and related issues impacting the capital program by the Department of Engineering & Technical Services. Projections of changes in project lifetime budgets are also included. The review process involves the DC Water departments with responsibility for managing the operations, as well as staff from Finance, Accounting and Budget, and Executive Management. The CIP is integrated into DC Water's 10-year financial plan; and is the primary driver of projected rate increases over the 10-year planning period.

This review process spans over several months and culminates with the presentation of the updated CIP to DC Water's Board of Directors' Environmental Quality and Operations, Finance and Budget, and DC Retail Water and Sewer Rates Committees in January and February 2018. The operating budgets, CIP, and 10-year financial plan were adopted by the full Board in March 2018.

After adoption by the Board of Directors, DC Water is required to submit its annual operating and capital budget to the Mayor and the District of Columbia Council for review and comment. However, neither has the power to change DC Water's annual budgets. The District of Columbia includes DC Water's budgets in their submission to Congress.

## **CAPITAL AUTHORITY REQUEST**

Capital authority represents the amount of Congressionally-authorized funding that DC Water can use to administer its capital program. Sufficient authority is required to be in place prior to contracts being executed. Actual commitments within the eight service areas may vary up or down for a particular year. However, they are "not to exceed the total" FY 2019 capital authority request in the amount of \$3.61 billion.

It should be noted that the execution of contracts require the approval of General Manager, as Contracting Officer, or his delegee. Major projects and contracts valued at \$1 million or more require DC Water Board approval.

## CAPITALIZATION POLICY

DC Water’s capitalization policy determines how expenditures will be recognized and accounted. DC Water matches the financing of an asset to the projected useful life of an item, and the policy determines how projects will be financed.

### Definition:

- Capital Project – has an average life of 30 years and is financed with long term debt
- Capital Equipment – has a life of at least 3 years, individual component cost of \$5,000 or more, and is financed with short-term debt or cash

The following guidelines are used to categorize items as either capital equipment or an operating expense:

Expenditure Activity	Description	Accounting Treatment
Enhancement	Replacement of an asset, or addition/replacement of a sub-component of an asset, to improve the “attributes” of the asset.	Capitalize
Refurbishment	Expenditure on an asset that creates a material extension to the Estimated Operating Life (EOL) of the asset. It does not improve its attributes. This is distinct from maintenance work, which is carried out to ensure that an asset is able to perform its designated function for its normal EOL.	Capitalize
Replacement	Expenditure to replace substantially all of an asset.	Capitalize
Repair/Maintenance	Routine expense that neither extends the life of the asset nor increase its functionality.	Expense

# Capital Improvement Program

10-Year Disbursement Plan - projected annual cash disbursements; lifetime budget - total lifetime budget for projects active during 10-Year period, \$ in thousands

	FY 2018 - FY 2027 Disbursement Plan										10-Yr Total	Lifetime Budget
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY2027		
<b>NON PROCESS FACILITIES</b>												
Facility Land Use	\$32,194	\$33,107	\$18,907	\$7,860	\$1,551	\$25	\$6,615	\$7,773	\$0	\$0	\$108,032	\$169,147
Subtotal	32,194	33,107	18,907	7,860	1,551	25	6,615	7,773	0	0	108,032	169,147
<b>WASTEWATER TREATMENT</b>												
Liquid Processing	18,554	30,869	37,604	38,228	44,507	35,458	29,607	31,846	74,033	109,131	449,838	1,224,582
Plantwide	12,099	15,060	19,331	32,895	35,204	30,100	18,795	17,671	20,384	10,534	212,072	488,216
Solids Processing	11,229	13,942	18,154	15,302	8,770	1,953	1,288	723	533	555	72,448	802,911
Enhanced Nitrogen Removal Facilities	53,603	14,746	2,763	1,535	1,339	2,049	1,918	11,932	22,673	9,032	121,590	1,036,089
Subtotal	95,485	74,617	77,853	87,960	89,820	69,560	51,607	62,172	117,623	129,252	855,948	3,551,799
<b>COMBINED SEWER OVERFLOW</b>												
DC Clean Rivers	168,314	189,392	148,042	138,289	192,859	151,111	59,569	50,018	128,404	87,197	1,313,196	2,764,255
Program Management	1,934	1,969	2,518	3,495	4,373	4,339	3,012	1,821	0	0	23,460	64,663
Combined Sewer	11,568	8,982	9,993	6,337	5,853	9,058	17,112	13,772	7,393	5,622	95,691	323,002
Subtotal	181,816	200,343	160,554	148,121	203,086	164,508	79,692	65,611	135,797	92,819	1,432,348	3,151,920
<b>STORMWATER</b>												
Local Drainage	92	75	354	69	629	267	861	1,050	219	0	3,617	14,230
On-Going	375	1,074	668	617	744	722	760	464	752	736	6,912	11,315
Pumping Facilities	69	3,410	375	1,134	4,065	19	0	0	305	1,397	10,774	25,232
DDOT	0	0	0	0	0	0	0	0	0	0	0	3,237
Research and Program Management	314	156	36	115	402	204	163	128	0	0	1,517	12,013
Trunk/Force Sewers	95	194	966	377	0	0	0	0	0	0	1,632	15,365
Subtotal	945	4,909	2,400	2,312	5,839	1,212	1,784	1,642	1,276	2,133	24,452	81,392
<b>SANITARY SEWER</b>												
Collection Sewers	4,488	1,244	1,088	7,929	19,594	9,139	11,139	25,253	31,888	18,343	130,105	407,999
On-Going	10,001	9,618	9,475	10,399	9,982	10,535	11,079	11,402	11,589	12,023	106,103	206,045
Pumping Facilities	1,294	428	842	2,332	1,005	1,559	214	0	0	0	7,674	36,151
Program Management	2,999	3,075	7,205	5,032	6,410	6,977	6,128	5,151	1,624	115	44,716	124,972
Interceptor/Trunk Force Sewers	11,019	18,583	15,436	27,358	37,501	45,706	47,353	17,076	15,667	8,191	243,890	754,870
Subtotal	29,802	32,947	34,046	53,050	74,492	73,917	75,912	58,882	60,769	38,672	532,490	1,530,036
<b>WATER</b>												
Distribution Systems	28,353	22,924	56,015	35,946	23,051	29,648	52,339	79,039	81,503	69,487	478,306	1,235,949
Lead Program	3,422	1,487	1,252	1,422	1,528	1,658	1,718	903	235	75	13,700	209,245
On-Going	11,079	11,044	7,569	9,982	9,930	10,183	10,793	11,157	12,429	12,636	106,802	143,288
Pumping Facilities	3,286	1,857	4,561	4,248	4,193	1,840	8,023	1,668	211	0	29,887	118,394
DDOT	904	486	208	2	2	0	0	0	0	0	1,604	33,933
Storage Facilities	7,560	4,967	8,088	3,488	2,099	5,106	9,371	2,343	0	0	43,021	107,520
Program Management	3,441	2,982	6,563	7,252	7,438	5,035	5,812	4,551	6,966	7,312	57,352	90,944
Subtotal	58,044	45,747	84,256	62,341	48,241	53,471	88,055	99,661	101,344	89,510	730,672	1,939,272
<b>CAPITAL PROJECTS</b>												
	398,285	391,670	378,015	361,644	423,029	362,694	303,666	295,742	416,809	352,386	3,683,941	10,423,566
<b>CAPITAL EQUIPMENT</b>												
	39,898	34,518	29,383	27,998	9,579	10,306	10,850	11,177	12,122	12,303	198,133	198,133
<b>WASHINGTON AQUEDUCT</b>												
	11,768	12,930	12,944	13,039	13,039	12,312	11,768	11,441	10,496	10,315	120,052	120,052
<b>ADDITIONAL CAPITAL PROGRAMS</b>												
	51,665	47,448	42,327	41,037	22,618	22,618	22,618	22,618	22,618	22,618	318,185	318,185
<b>LABOR</b>												
												390,145
<b>TOTAL CAPITAL BUDGETS</b>												
	\$449,950	\$439,118	\$420,342	\$402,681	\$445,647	\$385,312	\$326,284	\$318,360	\$439,427	\$375,004	\$4,002,125	\$11,131,895

# Prioritization Schedule

\$ in thousands

The Authority evaluates and prioritizes capital projects based on specific criteria. These criteria are fundamental in developing a CIP based on demonstrated needs and are set forth in the following table and described below.

Approximately 35 percent of the ten-year disbursements CIP is for large regulatory mandates which includes the Clean Rivers Project.

	<b>Mandates</b>		<b>Health &amp; Safety</b>	<b>Board Policy</b>	<b>Potential Failure</b>	<b>High Profile Good Neighbor</b>	<b>Good Engineering High Payback</b>		<b>Good Engineering Lower Payback</b>	<b>Total</b>
	Agreements, Regulatory standards, Court orders, Issues and Permits requirements, Stipulated Agreements, Etc.		Required to address Public Safety	Undertaken as a result of the Board's commitment to outside agencies	Related to Facilities in danger of failing, or critical to meeting permit requirements	Address Public concerns	Need to fulfill Mission and upgrade Facilities		Lower priority Projects	
<b>FY 2018</b>	\$220,594	49%	\$10,328	\$32,116	\$36,138	\$5,812	\$92,413	21%	\$52,549	<b>\$449,950</b>
<b>FY 2019</b>	206,711	47%	7,019	43,217	47,806	3,663	76,930	18%	53,771	<b>439,118</b>
<b>FY 2020</b>	152,280	36%	7,041	63,657	57,981	4,152	87,635	21%	47,595	<b>420,342</b>
<b>FY 2021</b>	142,424	35%	11,344	37,695	37,540	1,122	119,039	30%	53,517	<b>402,681</b>
<b>FY 2022</b>	197,784	44%	9,496	10,087	38,155	165	133,632	30%	56,328	<b>445,647</b>
<b>FY 2023</b>	154,862	40%	4,883	19,363	39,348	303	122,177	32%	44,377	<b>385,312</b>
<b>FY 2024</b>	63,987	20%	7,251	38,615	30,456	2,206	129,966	40%	53,803	<b>326,284</b>
<b>FY 2025</b>	54,461	17%	1,296	60,417	33,961	389	121,212	38%	46,624	<b>318,360</b>
<b>FY 2026</b>	132,361	30%	1,503	61,314	34,272	-	116,760	27%	93,218	<b>439,427</b>
<b>FY 2027</b>	89,417	24%	1,021	47,707	15,336	-	85,510	23%	136,013	<b>375,004</b>
<b>Total</b>	<b>\$1,414,882</b>	<b>35%</b>	<b>\$61,181</b>	<b>\$414,188</b>	<b>\$370,993</b>	<b>\$17,812</b>	<b>\$1,085,274</b>	<b>27%</b>	<b>\$637,796</b>	<b>\$4,002,125</b>

FY 2018 – FY 2027



**New Headquarters Building (HQO)**



**Main Pumping Station**

FY 2018 - FY 2027 Disbursement Plan											Lifetime Budget
FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	
\$32,194	\$33,107	\$18,907	\$7,860	\$1,551	\$25	\$6,615	\$7,773	\$0	\$0	\$108,032	\$169,147
											<i>(\$ in thousands)</i>

## OVERVIEW

The Non-Process Facilities Service Area accommodates projects approved under the Non-Process Facilities Master Plan (NPFMP) and related improvements necessary to support DC Water activities and critical operations. The goals of this CIP are the same as those in the NPFMP, which are designed to:

- Optimize efficient use of existing DC Water land and facilities
- Implement Green Strategies and Sustainable Design within DC Water infrastructure and facility planning
- Maximize flexibility throughout DC Water facilities for future treatment needs, distribution system operations, and innovative opportunities

## PROGRAM AREA

**Facility Land Use** – The primary objective of this service area is to implement the NPFMP and related improvements necessary to support DC Water’s activities and critical operations. The projects are designed to optimize efficient use of the Authority’s existing land and facilities; and maximize flexibility for future treatment needs, innovative opportunities, green strategies and sustainable designs throughout DC Water’s facilities. The major projects included in this program are:

- **New Headquarters Building (HQO)** – The new Administrative Headquarters Building, located above the historic Main Pumping Station, will be DC Water’s most sustainable construction project. The HQO will anchor DC Water’s new publicly-accessible campus along the Anacostia River. Currently, DC Water’s administrative offices are spread across the District of Columbia in multiple facilities, including leased space. By relocating nonessential personnel off of the Blue Plains industrial campus, DC Water will preserve remaining space – an irreplaceable commodity – for future process improvements if required by permit or desired for innovation.
- **Floatable Debris Dock Replacement** – This project was reallocated from the Combined Sewer Overflow Service Area due to an opportunity to blend the dock work with related facility and security improvements needed for staff and equipment. The existing docks are more than 25 years old and need to be replaced. The replacement slips (at least five) and associated new piles will provide flexibility and maneuverability of the boats, overcome the existing draft challenges of the river bottom, and most importantly, create safe conditions for the staff and their operations. Future improvements include the installation of a new boat ramp, updated fencing and lighting to further improve the efficiencies of skimmer boat operations.
- **Main & O Redevelopment Efforts** – This project relocates sewer and fleet operations from the Main & O Campus in order to accommodate the redevelopment plans for the District of Columbia in and around the Navy Yard. Some of the costs associated with the acquisition of new land and construction of new facilities will be reimbursed to DC Water by the District of Columbia.

## ACCOMPLISHMENTS

- DC Water successfully negotiated the Guaranteed Maximum Price (GMP) for the New Headquarters Building.

## OPERATIONAL IMPACT OF MAJOR CAPITAL INVESTMENTS

- **New Headquarters Building (HQO)** – This new building will be LEED ® Platinum Class A certified, and incorporate environmentally sustainable features that will be used to capture rainfall onsite for irrigation and non-potable water needs inside the facility. Additionally, alternative energy will be supplied by an innovative sewer heat recovery system that will lower operating cost. This project is anticipated to avoid renovation and expansion, including construction of a parking garage, at Blue Plains Advanced Waste Water Treatment Plant (AWWTP).



# Non Process Facilities

10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

FACILITY LAND USE		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
DS	New Headquarters Building	FY 2009	Active	\$28,961	\$777	\$9	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29,746	\$76,100	FY 2021
DU	Water System Laboratory Facilities	FY 2007	Active	52	113	0	0	0	0	0	0	0	0	165	647	FY 2020
HE	Bryant Street Pump Station Building Mod.	FY 2018	Active	733	1,367	7,880	1,047	0	0	0	0	0	0	11,027	14,370	FY 2021
HF	Fort Reno Pump Station	FY 2020	Active	0	0	187	570	1,551	25	0	0	0	0	2,333	3,150	FY 2023
HH	Main & O Redevelopment Efforts	FY 2015	Active	1,644	23,281	8,923	6,243	0	0	0	0	0	0	40,090	41,031	FY 2021
HJ	Central Operations Facility Renovation	FY 2018	Active	659	6,111	922	0	0	0	0	0	0	0	7,691	12,904	FY 2020
HK	CMF Renovations And Consolidation	FY 2019	Active	0	903	540	0	0	0	0	0	0	0	1,442	1,750	FY 2020
NZ	Floatable Debris Dock Replacement	FY 2018	Active	145	555	447	0	0	0	0	0	0	0	1,147	995	FY 2021
T4	District Energy Buzzard Point	FY 2024	New	0	0	0	0	0	0	6,615	7,773	0	0	14,388	18,200	FY 2025
<b>TOTAL FACILITY LAND USE BUDGETS</b>				<b>\$32,194</b>	<b>\$33,107</b>	<b>\$18,907</b>	<b>\$7,860</b>	<b>\$1,551</b>	<b>\$25</b>	<b>\$6,615</b>	<b>\$7,773</b>	<b>\$0</b>	<b>\$0</b>	<b>\$108,032</b>	<b>\$169,147</b>	
<b>TOTAL NON PROCESS FACILITIES BUDGETS</b>				<b>\$32,194</b>	<b>\$33,107</b>	<b>\$18,907</b>	<b>\$7,860</b>	<b>\$1,551</b>	<b>\$25</b>	<b>\$6,615</b>	<b>\$7,773</b>	<b>\$0</b>	<b>\$0</b>	<b>\$108,032</b>	<b>\$169,147</b>	



**Land Application of BLOOM**



**Plant Monitoring**



**Enhanced Nitrification**

FY 2018 - FY 2027 Disbursement Plan											Lifetime Budget
FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	
\$95,485	\$74,617	\$77,853	\$87,960	\$89,820	\$69,560	\$51,607	\$62,172	\$117,623	\$129,252	\$855,948	\$3,551,799

*(\$ in thousands)*

## OVERVIEW

Capital projects in the Wastewater Treatment Service Area are required to rehabilitate, upgrade or provide new facilities at Blue Plains to ensure that it can reliably meet its National Pollutant Discharge Elimination System (NPDES) permit requirements and produce a consistent, high-quality dewatered solids product. This permit requires wastewater treatment to a level that meets one of the most stringent NPDES discharge permits in the United States. The Blue Plains Enhanced Nitrogen Removal Facilities Program provides for projects necessary to meet the stringent total nitrogen discharge limit in the NPDES permit.

Blue Plains Advanced Wastewater Treatment Plant treats an annual average of 290 million gallons per day (MGD) and has a design capacity of 384 MGD, with a peak wet weather design capacity to treat one billion gallons per day. Wastewater flows in from the District of Columbia, and Montgomery and Prince George’s Counties in Maryland, and Fairfax and Loudoun counties in Virginia.

## PROGRAM AREA

**Liquid Processing** – Projects in this program area encompass upgrading and rehabilitating facilities involved in handling flows from the sanitary and combined sewer systems. These flows progress sequentially through the plant processes and ultimately discharge the treated effluents into the Potomac River.

**Plantwide** – This program provides for upgrading, rehabilitating, or installing support systems and facilities that are required for both the liquid processing and solids processing programs.

## PROGRAM AREA CONT.

**Solids Processing** – Biosolids processing involves reductions in volume along with treatment to meet applicable federal, state and local requirements for the ultimate disposal method. Treatment is provided by a system of processing facilities that include gravity thickening of primary sludge, flotation thickening of the biological waste sludge produced by the secondary and nitrification/denitrification processes, pre-dewatering of blended thickened solids by centrifuge, pre-treatment of solids by thermal hydrolysis, anaerobic digestion, and finally post-dewatering of Class A biosolids by belt filter press.

**Enhanced Nitrogen Removal Facilities** – Provides for new facilities and upgrades to existing facilities needed at Blue Plains to meet the total nitrogen discharge limit assigned to DC Water. The necessary facilities have been completed and are in operation. DC Water is fully compliant in meeting the reduced total nitrogen discharge limit, effective January 1, 2015. The facilities include more than 40 million gallons of additional capacity for nitrogen removal, new post-aeration facilities, an 890 mgd lift station, new channels and conveyance structures and new facilities to store and feed multiple carbon sources.

## ACCOMPLISHMENTS

- **Enhanced Nitrogen Removal Facility North** – This project improved the performance of the secondary treatment facilities by providing limited nitrogen removal and more consistent quality for the downstream denitrification processes. The facilities are in operation and construction was 97 percent complete as of September 2017.
- **Filtrate Treatment Facility** – This side-stream treatment project will utilize anammox bacteria to remove nitrogen from the filtrate, from the belt filter press facility resulting in lower use of methanol, which are otherwise necessary when the filtrate is processed through the plant. Facilities are in the commissioning process and construction was 92 percent complete as of September 2017.
- **Gravity Thickener Upgrades Phase II** – The project upgrades the aging mechanical/electrical equipment associated with the 10 gravity thickeners and primary sludge screening and degritting. Detailed design is 98% complete as of September 2017 and the project bid for construction in FY 2018. Construction is scheduled for completion in FY 2022.
- **Tunnel Dewatering Pump Station (TDPS)** – The project was designed and is being built in conjunction with the Enhanced Clarification Facility (ECF) to pump out the Blue Plains Tunnel for processing through the ECF or the Blue Plains plant mainstream as required by permit. The TDPS is scheduled to be operational by March 23, 2018.
- **Enhanced Clarification Facility** – The project provides facilities to treat up to 225 MGD of flow from the TDPS in excess of the capacity of the Blue Plains mainstream flow. The ECF portion of the design-build contract is 79 percent complete as of September 2017, and is scheduled to be operational by March 23, 2018.
- **Raw Wastewater Pumping Station 2** – The pumping station delivers wastewater from the wastewater collection system to the east preliminary treatment processes at Blue Plains. This project updates aging electrical equipment, replacing equipment that is beyond its useful life and relocating sensitive electronic equipment to a less corrosive environment to reduce the rate of deterioration on the equipment. The construction contract was issued in September 2016 and is scheduled to be completed in 2019.
- **Final Dewatering Facility (FDF)** – The FDF provides dewatering of stabilized Class A biosolids by the belt filter press prior to hauling for beneficial reuse.
- **Solar Power Purchase Agreement (PPA)** – The project will provide several megawatts of green energy from a solar photovoltaic system installed by a Provider at no capital cost to DC Water, under a Solar Power Purchase Agreement (PPA). The Request for Quotes (RFQ) and Request for Information (RFI) were issued and responses evaluated. The RFP and PPA are undergoing review and the system is anticipated to be operational in 2020.

## OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

***Biosolids Management Program*** – The Walter F. Bailey Bioenergy Facility, which is now operational, significantly reduces DC Water’s carbon footprint. The innovative CAMBI® thermal hydrolysis process uses intense heat and pressure to pre-treat wastewater solids prior to anaerobic digestion, and producing a much cleaner Class A biosolid and digester gas, that allows onsite generation of up to one third of Blue Plains’ electricity needs. This process has resulted in operational efficiencies in electricity, biosolids hauling and chemicals costs.

***Tunnel De-watering Pump Station/Enhanced Clarification Facility*** – These projects start where the DC Clean Rivers Project tunnels end at Blue Plains. When the Blue Plains tunnel is brought online, the TDPS will pump millions of gallons of combined sewer overflows and the ECF will treat the captured wet-weather flows that previously flowed into the District’s waterways during heavy rain storms.

***Filtrate Treatment Facility (FTF)*** – Also known as Centrate Treatment Facility, FTF is part of the Total Nitrogen Removal Wet Weather plan. The project assists in nitrogen removal from the water processed. This new facility uses six sequencing batch reactors to treat a nitrogen-rich stream from the Final Dewatering Facility’s belt filter presses. The de-ammonification process represents a major breakthrough in nitrogen removal, which lowers the use of methanol. It also has approximately 60 percent lower energy demand than the mainstream treatment and lowers greenhouse gas (GHG) emissions.

# Wastewater Treatment

## 10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

LIQUID PROCESSING		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
A2	Liquid Processing Program Management	FY 2001	Active	\$1,226	\$1,320	\$1,217	\$1,948	\$2,166	\$1,667	\$1,378	\$4,666	\$6,694	\$4,532	\$26,813	\$48,462	FY 2031
B6	Primary Sedimentation Tank Covers	FY 2021	Active	0	0	0	557	898	132	3,596	3,205	19,293	7,603	35,284	43,598	FY 2028
B7	Primary Sedimentation Tank Odor Scrubblers	FY 2024	Active	0	0	0	0	0	0	687	105	1,775	2,107	4,674	45,870	FY 2032
BC	Headworks Influent Structures	FY 2019	Active	0	425	522	2,753	4,158	1,802	0	0	0	0	9,659	12,190	FY 2023
BG	Dual Purpose Rehabilitation	FY 2009	Active	685	1,836	1,141	4	0	0	0	0	0	0	3,666	34,416	FY 2021
BP	Grit Chamber Facilities Phase II	FY 2018	Active	71	128	69	29	0	0	0	0	0	0	298	528	FY 2021
BQ	Grit and Screenings and Primary	FY 2018	Active	163	1,916	2,077	8,997	7,737	2,595	569	0	0	0	24,054	38,958	FY 2024
BR	Nitrification/Denitrification Facility	FY 2006	Active	1,508	1,486	1,250	1,022	670	243	0	0	0	0	6,179	51,986	FY 2023
BT	Filtration/Disinfection Facility Phase II	FY 2008	Active	257	580	1,106	1,603	330	0	0	0	0	0	3,877	24,885	FY 2027
BV	Raw Wastewater Pump Station No. 2 Upgrades	FY 2013	Active	10,038	4,995	235	0	0	0	0	0	0	0	15,268	43,799	FY 2019
DA	WWT Research/Pilot Projects	FY 2006	Active	0	0	0	0	0	0	0	0	0	0	0	4,121	FY 2017
I4	Grit Removal Facilities - 20 Year Rebuild	FY 2026	Active	0	0	0	0	0	0	0	0	1,976	8,110	10,086	52,500	FY 2032
I5	Raw Water Pump Stations I & 2 - 20 Year Rebuild	FY 2021	Active	0	0	0	592	7,135	7,228	7,380	3,711	0	0	26,046	29,000	FY 2025
I7	Primary Treatment - 20 Year Rebuild	FY 2024	Deferred	0	0	0	0	0	0	589	7,586	17,113	13,459	38,747	54,600	FY 2028
IX	Headworks HVAC Rehabilitation	FY 2013	Active	0	0	0	0	0	0	0	0	0	0	0	786	FY 2021
IY	Effluent Filter Upgrade	FY 2017	Active	1,149	5,589	4,081	9,295	7,223	9,444	9,730	8,281	10,408	40,043	105,243	164,753	FY 2030
IZ	Replace/Upgrade Influent Screens	FY 2016	Active	1,075	4,024	5,735	1,227	0	0	0	265	2,671	3,812	18,810	81,270	FY 2032
J2	Replace/Upgrade Primary Treatment Mechanisms	FY 2018	Active	72	408	1,323	3,094	4,420	2,853	1,523	0	0	1	13,694	22,704	FY 2031
J6	Deammonification Project	FY 2013	Active	0	18	212	429	1,333	835	34	0	0	0	2,859	3,503	FY 2024
JC	Secondary East and West - 20 Year Rebuild	FY 2025	Active	0	0	0	0	0	0	0	512	5,528	14,315	20,355	96,000	FY 2032
LC	Effluent Disinfection Upgrades	FY 2023	Active	0	0	0	0	0	1	700	5	263	441	1,411	8,011	FY 2030
LF	Nitrification Reactor/Sedimentation - 20 Year Rebuild	FY 2024	Active	0	0	0	0	0	0	9	3,509	8,313	14,708	26,540	138,000	FY 2033
OZ	Grit Chambers I & 2 Upgrades	FY 2017	Active	708	958	509	1,423	3,675	3,595	1,980	0	0	0	12,849	15,178	FY 2024
PD	Secondary East & West Upgrades	FY 2016	Active	258	0	0	2	1,992	4,180	1,430	0	0	0	7,862	9,639	FY 2024
PE	Nitrification Reactor/Sedimentation Upgrades	FY 2017	Active	54	943	1,176	2,151	2,770	884	0	0	0	0	7,977	10,400	FY 2023
TF	Grit Chamber Building I & 2	FY 1996	Active	0	0	0	0	0	0	0	0	0	0	0	71,170	FY 2017
UC	Filtration/Disinfection Facility	FY 2004	Active	1,291	6,243	16,952	3,101	0	0	0	0	0	0	27,587	102,419	FY 2022
UD	Raw Water Pump Stations I & 2	FY 1999	Active	0	0	0	0	0	0	0	0	0	0	0	15,838	FY 2017
<b>TOTAL LIQUID PROCESSING BUDGETS</b>				<b>\$18,554</b>	<b>\$30,869</b>	<b>\$37,604</b>	<b>\$38,228</b>	<b>\$44,507</b>	<b>\$35,458</b>	<b>\$29,607</b>	<b>\$31,846</b>	<b>\$74,033</b>	<b>\$109,131</b>	<b>\$449,838</b>	<b>\$1,224,582</b>	

# Wastewater Treatment

## 10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

PLANTWIDE		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
AL	Plantwide Project Program Management	FY 2001	Active	\$2,306	\$1,280	\$1,432	\$2,742	\$3,599	\$3,073	\$3,073	\$2,204	\$1,997	\$1,367	\$23,073	\$40,761	FY 2028
AZ	Central Operations Facility Renovation	FY 2002	Active	115	123	138	48	0	0	0	0	0	0	424	17,377	FY 2021
BY	Additional Chemical Systems Phase III	FY 2018	Active	0	0	0	0	0	0	109	406	751	815	2,081	3,822	FY 2029
CH	Miscellaneous Facility Projects	FY 2004	Active	64	55	54	18	0	0	0	0	0	0	192	7,965	FY 2021
CV	Laboratory Upgrades	FY 2006	Active	29	283	181	224	0	0	0	0	0	0	718	9,260	FY 2021
CW	Security at Blue Plains	FY 2005	Active	428	524	600	351	200	30	0	0	0	0	2,131	6,148	FY 2023
DQ	Non-OEM PLC Interfaces/Replacements	FY 2009	Active	0	0	0	0	0	0	0	0	0	0	0	2,185	FY 2017
EI	Plantwide Painting of Steel Pipes	FY 2012	Active	0	0	0	227	1,430	1,448	1,249	0	0	0	4,354	4,960	FY 2024
EN	Wastewater Treatment Plant - Central Fire Alarm System	FY 2008	Active	0	0	0	0	0	0	0	0	0	0	0	3,104	FY 2017
GP	Instrumentation & Control & Electric Program Management	FY 2011	Active	1,468	513	0	0	0	0	0	0	0	0	1,981	5,075	FY 2019
GW	Control Systems Replacement	FY 2021	Active	0	0	0	352	437	1,382	1,177	6,843	10,684	5,987	26,862	37,000	FY 2028
HL	DWT - Process and Operations Jobs	FY 2011	Active	385	376	604	1,090	0	0	0	0	0	0	2,455	6,869	FY 2021
HU	Blue Plains Logistics	FY 2011	Active	0	0	0	0	0	0	0	0	0	0	0	6,919	FY 2021
IC	Electrical Monitoring Systems	FY 2015	Active	0	321	486	2,648	1,540	0	0	0	0	0	4,995	7,250	FY 2022
IT	Hauled Waste Receiving Facility	FY 2023	New	0	0	0	0	0	4	1,519	1,524	1,429	0	4,478	5,000	FY 2026
IU	Solar Photovoltaic System	FY 2018	Active	0	236	981	626	131	0	0	0	0	0	1,974	2,500	FY 2022
IV	Blue Plains IT Backbone Fibre-Optic Cables Tubes	FY 2016	Active	14	697	1,569	0	0	0	0	0	0	0	2,280	5,542	FY 2020
JF	Construction of Flood Seawall	FY 2018	Active	18	236	3,161	2,607	3,463	1,410	10	0	0	0	10,905	13,668	FY 2024
JY	Information Technology - Data Center	FY 2010	Active	0	0	0	0	0	0	0	0	0	0	0	2,367	FY 2021
LP	Wastewater Asset Management Technical Support	FY 2013	Active	257	271	358	0	0	0	0	0	0	0	885	10,000	FY 2020
LS	Miscellaneous Facility Projects FY 2013	FY 2013	Active	1,187	1,225	1,708	1,357	265	268	616	412	387	393	7,818	15,303	FY 2030
LX	Process Control System Upgrade	FY 2021	Active	0	0	0	1,545	1,569	2	0	0	0	0	3,116	4,000	FY 2023
OD	Plantwide Paving	FY 2015	Active	145	171	1,362	862	840	851	869	871	206	0	6,176	7,950	FY 2026
OE	Plantwide Drainage & Runoff	FY 2016	Active	135	3,288	277	651	672	681	1,486	2,284	1,538	0	11,012	15,433	FY 2026
OG	City Water & Sewer Upgrades at Wastewater Treatment Plant	FY 2020	Active	0	0	1	535	539	0	0	0	0	0	1,074	1,250	FY 2022
OH	Plantwide Demolition	FY 2021	Active	0	0	0	2,414	4,716	1,985	598	0	0	0	9,714	11,100	FY 2024
OI	Plantwide Painting & Signage	FY 2018	Active	0	0	0	0	102	254	46	0	0	0	402	450	FY 2024
OK	Plantwide H2S Mitigation	FY 2021	Active	0	0	0	0	0	0	0	0	0	0	0	10,000	FY 2029
OM	Plantwide Hot Water System/ Loop Rehabilitation	FY 2017	Active	849	1,590	922	391	0	0	0	0	0	0	3,752	6,066	FY 2025
ON	Plantwide Grounding Upgrades	FY 2022	Active	0	0	0	0	87	317	899	989	1,538	863	4,693	5,500	FY 2028
OP	Plantwide Sump Pump Rehabilitation	FY 2023	Active	0	0	0	0	0	0	105	315	296	169	886	1,000	FY 2028
OQ	Plantwide Roofing Upgrades	FY 2022	Active	0	0	0	0	406	1,773	2,779	1,482	1,558	939	8,937	10,000	FY 2027
OS	Plantwide Lighting Upgrades	FY 2017	Active	375	917	571	228	0	0	0	0	0	0	2,092	3,000	FY 2023
PF	Chemical System/Building Upgrades	FY 2015	Active	2,589	1,197	1,998	3,716	2,749	2,104	1,161	11	0	0	15,525	21,593	FY 2025
TA	Process Computer Control System	FY 1997	Active	650	0	0	0	0	0	0	0	0	0	650	65,474	FY 2018
TZ	Electric Power System - Power Gear	FY 2001	Active	775	1,483	1,730	8,427	11,280	13,671	2,427	0	0	0	39,793	61,590	FY 2024
YD	Miscellaneous Projects	FY 1999	Active	310	274	1,200	1,835	1,181	846	670	329	0	0	6,646	50,735	FY 2026
<b>TOTAL PLANTWIDE BUDGETS</b>				<b>\$12,099</b>	<b>\$15,060</b>	<b>\$19,331</b>	<b>\$32,895</b>	<b>\$35,204</b>	<b>\$30,100</b>	<b>\$18,795</b>	<b>\$17,671</b>	<b>\$20,384</b>	<b>\$10,534</b>	<b>\$212,072</b>	<b>\$488,216</b>	

# Wastewater Treatment

## 10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

<b>SOLIDS PROCESSING</b>		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
AM	Solids Processing Program Management	FY 2001	Active	\$706	\$44	\$450	\$465	\$673	\$802	\$842	\$723	\$533	\$555	\$5,792	\$13,042	FY 2028
BX	Gravity Thickener Upgrades Phase II	FY 2010	Active	1,740	6,355	14,099	8,586	340	0	0	0	0	0	31,119	50,696	FY 2022
EV	Area Substation No. 6	FY 2008	Active	165	12	0	0	0	0	0	0	0	0	177	22,103	FY 2019
I3	Biosolids Blending Development Center	FY 2015	Active	272	1,049	58	19	0	0	0	0	0	0	1,398	2,101	FY 2021
LD	Pre-Dewatering Additional Centrifuges	FY 2019	Active	0	177	426	3,457	2,859	0	0	0	0	0	6,919	10,156	FY 2022
LE	High Strength Waste Receiving Facility (Includes Fats, Oils & Grease)	FY 2020	Active	0	0	194	500	2,854	426	0	0	0	0	3,973	6,008	FY 2023
XA	New Digestion Facilities	FY 1999	Active	8,023	576	321	0	0	0	0	0	0	0	8,920	551,451	FY 2020
XB	Centrifuge Thickener Facility	FY 1999	Active	59	0	0	0	0	0	0	0	0	0	59	48,703	FY 2018
XZ	Solids Processing Building / Dewatered Sludge Loading Facility	FY 1999	Active	264	5,730	2,605	2,275	2,044	726	446	0	0	0	14,091	96,382	FY 2037
YZ	Digestion Facilities Site Preparation	FY 1999	Active	0	0	0	0	0	0	0	0	0	0	0	2,271	FY 2017
<b>TOTAL SOLIDS PROCESSING BUDGETS</b>				<b>\$11,229</b>	<b>\$13,942</b>	<b>\$18,154</b>	<b>\$15,302</b>	<b>\$8,770</b>	<b>\$1,953</b>	<b>\$1,288</b>	<b>\$723</b>	<b>\$533</b>	<b>\$555</b>	<b>\$72,448</b>	<b>\$802,911</b>	

  

<b>ENHANCED NITROGEN REMOVAL</b>		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
BI	Enhanced Nitrogen Removal (ENR) North	FY 2008	Active	\$3,424	\$184	\$32	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,640	\$76,634	FY 2020
E8	Enhanced Clarification Facilities	FY 2009	Active	23,533	2,891	397	21	0	0	0	0	0	0	26,842	218,171	FY 2021
E9	Nitrogen Removal Facilities	FY 2008	Active	1,458	344	75	0	0	0	0	0	0	0	1,877	272,794	FY 2020
EE	Filtrate Treatment Facilities	FY 2009	Active	5,011	1,902	411	0	0	0	0	0	0	0	7,324	108,480	FY 2020
EG	Blue Plains Tunnel	FY 2008	Active	67	27	8	0	0	0	0	0	0	0	102	177,524	FY 2020
FG	Secondary Treatment Upgrades for Total Nitrogen	FY 2013	Active	0	441	0	0	7	1,280	914	11,049	22,203	8,555	44,449	57,160	FY 2029
FR	Blue Plains Tunnel Dewatering Pumping Station	FY 2010	Active	2,746	739	329	0	0	0	0	0	0	0	3,814	34,534	FY 2020
FS	Bolling Overflow & Diversion	FY 2010	Active	9,615	0	0	0	0	0	0	0	0	0	9,615	54,013	FY 2018
LM	Enhanced Nitrogen Removal Program Management	FY 2013	Active	7,750	8,217	1,512	1,514	1,332	768	1,004	883	470	478	23,926	36,780	FY 2031
<b>TOTAL ENHANCED NITROGEN REMOVAL BUDGETS</b>				<b>\$53,603</b>	<b>\$14,746</b>	<b>\$2,763</b>	<b>\$1,535</b>	<b>\$1,339</b>	<b>\$2,049</b>	<b>\$1,918</b>	<b>\$11,932</b>	<b>\$22,673</b>	<b>\$9,032</b>	<b>\$121,590</b>	<b>\$1,036,089</b>	

  

<b>TOTAL WASTEWATER TREATMENT BUDGETS</b>				<b>\$95,485</b>	<b>\$74,617</b>	<b>\$77,853</b>	<b>\$87,960</b>	<b>\$89,820</b>	<b>\$69,560</b>	<b>\$51,607</b>	<b>\$62,172</b>	<b>\$117,623</b>	<b>\$129,252</b>	<b>\$855,948</b>	<b>\$3,551,799</b>	
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**Fort Reno Green Roof**



**Tunnel Boring Machine**



**Combined Sewer Overflow**

FY 2018 - FY 2027 Disbursement Plan											Lifetime Budget
FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	
\$181,816	\$200,343	\$160,554	\$148,121	\$203,086	\$164,508	\$79,692	\$65,611	\$135,797	\$92,819	\$1,432,348	\$3,151,920
											<i>(\$ in thousands)</i>

## OVERVIEW

Similar to more than 700 older communities in the Mid-Atlantic, Northeast, and Midwest portions of the country, a portion of the District of Columbia is served by a combined sewer system. Approximately one-third of the system is combined, mostly in the downtown and older parts of the city. In dry weather, the system delivers wastewater to the Blue Plains Advanced Wastewater Treatment Plant. In wet weather, rain water also enters the system and, if the conveyance capacity of the system is exceeded, the excess flow spills into the waterways of the District of Columbia. This discharge is called combined sewer overflow (CSO). There are 47 active CSO outfalls in the District.

DC Water has continued to implement its CSO Long Term Control Plan (LTCP), called the DC Clean Rivers Project, to reduce CSO's that discharge to the Anacostia and Potomac Rivers, as well as Rock Creek. DC Water obtained an amendment to the CSO Consent Decree in January of 2016, which will allow DC Water to include Green Infrastructure and extend the completion milestone to 2030. When fully implemented, CSO's will be reduced by a projected 96 percent during an average year (98 percent on the Anacostia River) resulting in improved water quality, and significantly reduce debris on our national capital's waterways.



## PROGRAM AREAS

**DC Clean Rivers** – The plan includes a variety of improvements throughout the District. The backbone of the plan includes constructing the Anacostia River Tunnel System to control CSO's to the Anacostia River and to relieve surface flooding, a tunnel dewatering pumping station to increased excess flow treatment during wet weather events with system completion in 2025. In addition, the amended plan includes constructing green infrastructure in large scale and a tunnel system to control Potomac River overflows with project completion in 2030. Green infrastructure will also be constructed to control CSOs to Piney Branch/Rock Creek with the first project scheduled to be completed in 2019.

**Program Management** – The CSO Program Manager is responsible for evaluation of combined sewer systems, as well as management for sewer pumping station replacement and other sewer infrastructure projects.

**Combined Sewer** – Projects within the Combined Sewer Program Area include rehabilitation and/or relocation of combined sewers, control of wet weather related pollution, and upgrades to pumping stations. Most projects in this Program Area are related to the Nine Minimum Controls and include planned upgrades to facilities based on our long term facilities plan.

## ACCOMPLISHMENTS

- Placed in operation the First Street Tunnel, which will reduce flooding in the Bloomingdale neighborhood of the District of Columbia
- Commissioned and placed in operation the Anacostia Tunnel System from Blue Plains to RFK Stadium including appurtenant structures south of RFK
- Placed in operation the new Poplar Point Pumping Station
- Issued Notice To Proceed (NTP) and began construction of the Northeast Boundary Tunnel. The final segment of the Anacostia River Tunnel System
- Continued construction of the first Rock Creek Green Infrastructure project
- Procured and awarded the first Potomac Green Infrastructure project
- Developing the Environmental Assessment (EA) and Facility Plan for Potomac River Tunnel
- Deployed all Clean Rivers Assets into the enterprise Asset Management System
- Completed emergency inspection and assessment of four miles of the Northeast Boundary Trunk Sewer
- Continued odor control upgrades at O Street Pumping Station
- Potomac Pumping Station Phase III upgrades nearing completion, including Pump No. 2 rehabilitation, new influent screens, and electrical replacement
- Modification to the 2005 LTCP Consent Decree in 2016 to include innovative green infrastructure practices to achieve the reduction of CSO volume by 96 percent system-wide for the Anacostia and Potomac Rivers and Rock Creek and offer additional community benefits.

## OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

**DC Clean Rivers** – This project aims to control CSO's to the Anacostia and Potomac Rivers and Rock Creek to meet the District's water quality standards, while improving the health of the Chesapeake Bay. This ongoing project includes green infrastructure initiatives that will divert stormwater runoff prior to entering the sewer system. The Anacostia River Tunnel System, between Blue Plains and CSO-019 is also complete. All structures south of RFK are ready to be put in operation by March 23, 2018. The tunnel system will improve operational flexibility by providing alternate means of transferring flow to Blue Plains, thereby allowing temporary diversion of flows to the tunnel to facilitate operation, maintenance and rehabilitation.

**Potomac Pump Station Upgrades** – Upgrades nearing completion address health & safety improvements and increase the reliability of the pumping station.

# Combined Sewer Overflow

## 10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

<b>DC CLEAN RIVERS</b>		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
CY	Anacostia Long Term Control Plan Projects	FY 2005	Active	\$126,476	\$156,776	\$132,951	\$121,241	\$145,383	\$83,989	\$0	\$0	\$0	\$0	\$766,815	\$1,943,834	FY 2023
CZ	Potomac Long Term Control Plan Projects	FY 2010	Active	20,418	24,790	14,510	16,484	29,739	42,178	53,825	36,900	104,145	75,496	418,486	562,323	FY 2029
DZ	Rock Creek CSS LTCP Project	FY 2010	Active	21,420	7,826	581	564	17,737	24,944	5,744	13,119	24,259	11,701	127,895	258,099	FY 2030
<b>TOTAL DC CLEAN RIVERS BUDGETS</b>				<b>\$168,314</b>	<b>\$189,392</b>	<b>\$148,042</b>	<b>\$138,289</b>	<b>\$192,859</b>	<b>\$151,111</b>	<b>\$59,569</b>	<b>\$50,018</b>	<b>\$128,404</b>	<b>\$87,197</b>	<b>\$1,313,196</b>	<b>\$2,764,255</b>	
<b>PROGRAM MANAGEMENT</b>		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
AV	Combined Sewer Overflow Program Management	FY 2001	Active	\$1,934	\$1,969	\$2,518	\$3,495	\$4,373	\$4,339	\$3,012	\$1,821	\$0	\$0	\$23,460	\$64,663	FY 2025
<b>TOTAL PROGRAM MANAGEMENT BUDGETS</b>				<b>\$1,934</b>	<b>\$1,969</b>	<b>\$2,518</b>	<b>\$3,495</b>	<b>\$4,373</b>	<b>\$4,339</b>	<b>\$3,012</b>	<b>\$1,821</b>	<b>\$0</b>	<b>\$0</b>	<b>\$23,460</b>	<b>\$64,663</b>	
<b>COMBINED SEWER</b>		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
BA	DC Water Low Impact Development Projects	FY 2002	Active	\$312	\$74	\$17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$403	\$2,870	FY 2020
BH	Rock Creek Combined Sewer Overflow Projects	FY 2004	Active	0	0	0	0	0	0	0	0	0	0	0	16,670	FY 2017
EJ	Potomac Pumping Station - Phase III Rehabilitation	FY 2010	Active	2,248	1,596	36	0	0	0	0	0	0	0	3,880	22,784	FY 2020
EK	Long Term Rehabilitation - Main & O Pump Station	FY 2021	Active	0	0	0	19	51	2,014	6,228	3,520	2,565	4,585	18,982	55,644	FY 2030
EL	Swirl Facility Rehabilitation	FY 2008	Active	26	67	2	0	0	0	0	0	0	0	96	4,450	FY 2020
EQ	Potomac Pumping Station-Phase IV Rehabilitation	FY 2019	Active	0	45	86	1,371	0	0	0	0	0	0	1,501	2,325	FY 2021
FQ	Main & O Street PS Intermediate Upgrade	FY 2010	Active	8,380	6,028	5,430	2,742	1,331	0	0	0	0	0	23,912	46,185	FY 2023
FX	Rehabilitation Northeast Boundary Sewer - Phase I	FY 2015	Active	228	4	157	513	547	5,236	4,216	69	43	37	11,051	18,591	FY 2030
FZ	Tiber Creek Sewer Lining - Phase I	FY 2018	Active	0	305	441	0	190	729	4,290	6,519	615	0	13,089	17,838	FY 2026
G7	Combined Sewers Under Buildings	FY 2010	Active	291	863	3,763	0	0	0	0	0	0	0	4,917	15,981	FY 2021
IH	Combined Sewer Rehabilitation 2	FY 2013	Active	82	0	61	1,692	3,626	652	0	0	0	0	6,113	24,833	FY 2023
IP	Tiber Creek Trunk Sewer Rehabilitation	FY 2022	Active	0	0	0	0	108	427	2,241	3,276	363	0	6,416	8,250	FY 2026
KI	Main & O Street Pump Stations	FY 2025	Closed	0	0	0	0	0	0	0	0	0	0	0	79,906	FY 2029
OB	FY 2024 - Inflatable Dams Replacement	FY 2024	Active	0	0	0	0	0	0	136	388	3,807	1,000	5,331	6,675	FY 2027
<b>TOTAL COMBINED SEWER BUDGETS</b>				<b>\$11,568</b>	<b>\$8,982</b>	<b>\$9,993</b>	<b>\$6,337</b>	<b>\$5,853</b>	<b>\$9,058</b>	<b>\$17,112</b>	<b>\$13,772</b>	<b>\$7,393</b>	<b>\$5,622</b>	<b>\$95,691</b>	<b>\$323,002</b>	
<b>TOTAL COMBINED SEWER OVERFLOW BUDGETS</b>				<b>\$181,816</b>	<b>\$200,343</b>	<b>\$160,554</b>	<b>\$148,121</b>	<b>\$203,086</b>	<b>\$164,508</b>	<b>\$79,692</b>	<b>\$65,611</b>	<b>\$135,797</b>	<b>\$92,819</b>	<b>\$1,432,348</b>	<b>\$3,151,920</b>	



**CSO 19 Overflow Facility**



**CSO 21 Diversion Facilities**



**CSO 07 Diversion**

FY 2018 - FY 2027 Disbursement Plan											Lifetime Budget
FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY2027	10-Yr Total	
\$945	\$4,909	\$2,400	\$2,312	\$5,839	\$1,212	\$1,784	\$1,642	\$1,276	\$2,133	\$24,452	\$81,392

*(\$ in thousands)*

## OVERVIEW

Stormwater is the water generated by rain or melted snow on “impervious surfaces” or surfaces that do not allow the water to soak into the ground (such as roads, driveways, sidewalks, parking lots, and buildings). Stormwater runoff occurs when rain or snowmelt flows over these impervious surfaces.

Stormwater can pick up trash, excess nutrients (such as nitrogen and phosphorus), sediment and other pollutants that flow into the storm sewer system or directly to a lake, stream, river, or wetland. Untreated stormwater runoff ends up in the waterbodies we use for swimming, fishing and drinking water. Polluted stormwater runoff can have many adverse effects on plants, fish, animals and people. For example, trash can clog waterbodies, nutrients can cause algae blooms, and sediment impacts aquatic life.

The District’s Municipal Separate Storm Sewer System (MS4), has approximately storm sewer pipes, catch basins, inlets, special structures and related facilities. Some components of the existing storm sewer system are over 100 years old. DC Water is responsible for the maintenance and replacement of the publicly-owned collection and conveyance facilities that transport stormwater runoff to the Anacostia and Potomac Rivers, Rock Creek, and other receiving streams within the District of Columbia.

## PROGRAM AREAS

**Local Drainage** – Includes projects for the investigation, design and rehabilitation of sewers to relieve local flooding and to address short term needs for improvements to storm sewers located in the separate and combines sewer areas.

**On-Going** – This category includes annual planned projects for rehabilitation, improvements, and replacements to restore integrity and reliability of the storm-water system.

**Pumping Facilities** – DC Water’s 16 stormwater pumping stations serve critical areas of the District and are integral to the road network to maintain safe passage of vehicles through areas that do not drain without the assistance of mechanical means. DC Water has projects to rehabilitate 13 of the 16 storm-water pumping stations. The remaining three were recently upgraded by the District of Columbia Department of Transportation (DDOT).

**DDOT** – The annual program of stormwater infrastructure projects are coordinated with street rehabilitation or other construction work performed by DDOT. In an effort to ease public disruption and reduce paving costs, DC Water coordinates its activities with those of DDOT.

**Research and Program Management** – Provides engineering program management services for the stormwater service area capital projects, and required technical assessments, and hydraulic studies required to assess problems in the storm water system. It also provides engineering services for condition assessment to the storm sewer system.

**Trunk/Force Sewers** – Provides for the design and construction services for stormwater interceptors, trunk sewers and force mains that require upgrades. Sewers rehabilitated by this project are defined by the major planning and condition assessment program underway for the stormwater sewer system.

## ACCOMPLISHMENTS

- Stormwater Pollution Prevention Plan
- Watts Branch Sewer System Evaluation Study
- Detailed Inflow/Infiltration Modeling for Watts Branch Sewershed
- Construction began for the rehabilitation and improvement of the Watts Branch Storm Sewer Phase 3
- Received partial funding from FEMA grant, and began design for the rehabilitation of the following stormwater pumping stations: 14th Street Bridge SW, 9th Street and D Streets SE, Portland Street SE, Dean Avenue NE, and Eastern Avenue NE
- Began design on the following Stormwater pump stations: Kenilworth Stormwater Pumping Station and Eye Street and D Street SE

# Stormwater

## 10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

LOCAL DRAINAGE		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion	
A6	Lining 22nd & P Street NW/NWBSO Repair	FY 2001	Closed	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,537	FY 2015	
GY	Storm Sewer Rehabilitation at Various Location	FY 2013	Active	92	75	344	0	0	0	0	0	0	0	512	5,676	FY 2020	
IE	Storm Sewer Rehabilitation 3	FY 2020	Active	0	0	10	69	629	267	861	1,050	219	0	3,105	7,017	FY 2026	
<b>TOTAL LOCAL DRAINAGE BUDGETS</b>				<b>\$92</b>	<b>\$75</b>	<b>\$354</b>	<b>\$69</b>	<b>\$629</b>	<b>\$267</b>	<b>\$861</b>	<b>\$1,050</b>	<b>\$219</b>	<b>\$0</b>	<b>\$3,617</b>	<b>\$14,230</b>		
ON-GOING		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion	
BD	FY2011 - DSS Stormwater Projects	FY 2011	Closed	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$581	FY 2014	
CN	FY2013 - DSS Stormwater Projects	FY 2013	Closed	0	0	0	0	0	0	0	0	0	0	0	669	FY 2017	
DX	FY2016 - DSS Stormwater Projects	FY 2016	Active	0	0	0	0	0	0	0	0	0	0	0	787	FY 2018	
FN	FY2017 - DSS Stormwater Projects	FY 2017	Active	375	166	0	0	0	0	0	0	0	0	541	745	FY 2019	
H5	FY2018 - DSS Stormwater Projects	FY 2019	Active	0	536	68	0	0	0	0	0	0	0	604	770	FY 2020	
HM	FY2019 - DSS Stormwater Projects	FY 2019	Active	0	373	229	0	0	0	0	0	0	0	601	794	FY 2020	
JH	FY2020 - DSS Stormwater Projects	FY 2020	Active	0	0	371	237	0	0	0	0	0	0	608	820	FY 2021	
LO	FY2021 - DSS Stormwater Projects	FY 2021	Active	0	0	0	380	244	0	0	0	0	0	625	845	FY 2022	
M8	FY2022 - DSS Stormwater Projects	FY 2022	Active	0	0	0	0	500	201	0	0	0	0	701	820	FY 2023	
MG	FY2023 - DSS Stormwater Projects	FY 2023	Active	0	0	0	0	0	521	211	0	0	0	732	845	FY 2024	
NV	FY2024 - DSS Stormwater Projects	FY 2024	Active	0	0	0	0	0	0	550	216	0	0	766	870	FY 2025	
PI	FY2025 - DSS Stormwater Projects	FY 2025	Active	0	0	0	0	0	0	0	248	528	0	776	896	FY 2026	
QA	FY2026 - DSS Stormwater Projects	FY 2026	New	0	0	0	0	0	0	0	0	223	498	722	923	FY 2027	
T9	FY2027 - DSS Stormwater Projects	FY 2027	New	0	0	0	0	0	0	0	0	0	237	237	950	FY 2028	
<b>TOTAL ON-GOING BUDGETS</b>				<b>\$375</b>	<b>\$1,074</b>	<b>\$668</b>	<b>\$617</b>	<b>\$744</b>	<b>\$722</b>	<b>\$760</b>	<b>\$464</b>	<b>\$752</b>	<b>\$736</b>	<b>\$6,912</b>	<b>\$11,315</b>		
PUMPING FACILITIES		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion	
NG	Stormwater Pumping Station Rehabilitation	FY 2017	Active	\$69	\$3,410	\$375	\$1,134	\$4,065	\$19	\$0	\$0	\$305	\$1,397	\$10,774	\$25,232	FY 2028	
<b>TOTAL PUMPING FACILITIES BUDGETS</b>				<b>\$69</b>	<b>\$3,410</b>	<b>\$375</b>	<b>\$1,134</b>	<b>\$4,065</b>	<b>\$19</b>	<b>\$0</b>	<b>\$0</b>	<b>\$305</b>	<b>\$1,397</b>	<b>\$10,774</b>	<b>\$25,232</b>		
DDOT		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion	
H4	FY 2018 - DDOT Stormwater Projects	FY 2018	Active	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,017	FY 2019	
HP	FY 2019 - DDOT Stormwater Projects	FY 2015	Active	0	0	0	0	0	0	0	0	0	0	0	220	FY 2015	
<b>TOTAL DDOT BUDGETS</b>				<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,237</b>		
RESEARCH & PROGRAM MANAGEMENT		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion	
AT	Stormwater Program Management	FY 2001	Active	\$314	\$156	\$36	\$115	\$402	\$204	\$163	\$128	\$0	\$0	\$1,517	\$12,013	FY 2025	
<b>TOTAL RESEARCH &amp; PROGRAM MANAGEMENT BUDGETS</b>				<b>\$314</b>	<b>\$156</b>	<b>\$36</b>	<b>\$115</b>	<b>\$402</b>	<b>\$204</b>	<b>\$163</b>	<b>\$128</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,517</b>	<b>\$12,013</b>		
TRUNK/FORCE SEWERS		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion	
BO	Future Stormwater Projects	FY 2005	Active	\$95	\$194	\$966	\$377	\$0	\$0	\$0	\$0	\$0	\$0	\$1,632	\$15,365	FY 2021	
<b>TOTAL TRUNK/FORCE SEWERS BUDGETS</b>				<b>\$95</b>	<b>\$194</b>	<b>\$966</b>	<b>\$377</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,632</b>	<b>\$15,365</b>	
<b>TOTAL STORMWATER BUDGETS</b>				<b>\$945</b>	<b>\$4,909</b>	<b>\$2,400</b>	<b>\$2,312</b>	<b>\$5,839</b>	<b>\$1,212</b>	<b>\$1,784</b>	<b>\$1,642</b>	<b>\$1,276</b>	<b>\$2,133</b>	<b>\$24,452</b>	<b>\$81,392</b>		



**Work on Sewer Laterals**



**Sewer**



**Sewer Rehabilitation - Cured In Place Pipe Lining (CIPP)**

FY 2018 - FY 2027 Disbursement Plan											Lifetime Budget
FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	
\$29,802	\$32,947	\$34,046	\$53,050	\$74,492	\$73,917	\$75,912	\$58,882	\$60,769	\$38,672	\$532,490	\$1,530,036
											<i>(\$ in thousands)</i>

## OVERVIEW

DC Water is responsible for wastewater collection and transmission in the District of Columbia including the operation and maintenance of the system. The sanitary sewer system includes over 1,900 miles of sewer pipes, large interceptor sewers, smaller gravity collection sewers, sewer lateral connections and the 50-mile Potomac Interceptor System which carries wastewater from areas in Virginia and Maryland to Blue Plains AWWTP. DC Water is also responsible for sewer lateral connections from the sewer mains to the property lines of residential, government, and commercial properties. The existing sewer system in the District dates back to 1871, and includes a variety of materials such as brick and concrete, vitrified clay, reinforced concrete, ductile iron, plastic, steel, brick, cast iron, cast-in-place concrete and even fiberglass.

## PROGRAM AREAS

**Collection Sewers** – Includes studies and projects to effectively eliminate stormwater, groundwater, and other infiltration and inflow to the sewer system; to separate stormwater flows; and to reduce other extraneous flows to Blue Plains. This category also includes projects to rehabilitate sanitary sewer pipes.

**On-Going** – This category is managed by the Department of Sewer Services (DSS) and includes annual planned projects for rehabilitation, improvements, and replacements to restore integrity and reliability of the sanitary system.

**Pumping Facilities** – Projects required for the upgrade of existing wastewater pumping stations, as well as projects for the engineering and construction of new wastewater pumping facilities to enhance reliability and integrity of DC Water’s sanitary sewer system.

**Program Management** – Engineering program management services for the sewer system including assessing system needs, developing facilities plan, developing design scopes of work, preparing cost estimates, task orders or agreements, and reviewing design documents.

**Interceptor/Trunk Force Sewers** – Provides for the design and construction services for large diameter sewers and force mains that require upgrades. Sewers rehabilitated by this project are defined by the major planning and condition assessment program underway for the sewer system.

## ACCOMPLISHMENTS

- Completed over 8 miles of Closed Circuit TV (CCTV) and sonar inspection of the Potomac Interceptor
- The temporary flow metering program was completed, including the compilation of flow data from more than 160 meters. This data is being used to develop an overarching coordination plan to link all monitoring efforts throughout the DC Water collection system, calibrate the system-wide sewer model, provide inflow/infiltration characterization, and assess rehabilitation effectiveness
- Design services began for portable generators to serve Main, O Street and Potomac pumping stations, with construction starting in 2018
- Construction of the sewer rehabilitation within the National Arboretum continued during FY 2017 for the Upper East Side Interceptor and local sewers within the property
- Began the calibration of a new sewer system hydraulic model which will greatly increase DC Water’s predictive capabilities for system performance and will support a variety of planning and O&M activities
- Completed revisions to existing pumping station Standard Operating Procedures (SOPs) with new SOPs anticipated in the future to enhance the standardization of typical pumping station operations, as well as a variety of preventive and corrective maintenance activities
- Completed the design of rehabilitation to sewer structures 24 & 35 which will improve operability and flexibility to manage flows in major sewers
- Design of the rehabilitation of the Low Area Trunk Sewer was completed. Construction to commence in 2018
- Design for the rehabilitation and cleaning of B Street/NJ Avenue Trunk Sewer was completed. Construction to commence in 2018
- In house design for rehabilitation of prior local sewers began. This project includes 14 miles of sewers ranging from 8-inches to 27-inches



## OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

**Potomac Interceptor Odor Abatement Facilities** – The Potomac Interceptor (PI) is a 50-mile long sanitary sewer that starts at the Washington-Dulles International Airport and serving Loudoun and Fairfax Counties in Virginia, Montgomery County in Maryland, and the District of Columbia. The PI was constructed in the 1960's and carries greater than 50 million gallons each day to the Blue Plains Advanced Wastewater Treatment Plant. DC Water maintains this asset through regular internal inspections to identify segments needing rehabilitation, and subsequently undertakes CIP projects to rehabilitate and maintain the integrity of the PI.

DC Water operates six odor abatement facilities, located strategically along the PI. Four of these facilities are adjacent to the Chesapeake and Ohio (C&O) Canal; one facility in northwest Washington, DC, and three in Maryland, with the other two facilities in Virginia. These facilities use a vacuum blower to pull odorous air from the PI and push it through a dual-bed carbon filter before discharging to the atmosphere. Combined with passive treatment units (carbon canisters) located in various vents along the PI, these facilities help reduce the odorous air that is emitted from the sewer in public areas. This activity contributes to better public relations.

# Sanitary Sewer

## 10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

COLLECTION SEWERS			Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
G1	Small Local Sewer Rehabilitation 1	FY 2010	Active	\$2,319	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,335	\$28,452	FY 2019
G8	Small Local Sewer Rehabilitation 2	FY 2010	Active	14	0	0	0	0	0	0	0	0	0	0	14	2,869	FY 2018
G9	Small Local Sewer Rehabilitation 3	FY 2014	Active	3	0	0	0	0	0	0	0	0	0	0	3	368	FY 2018
GA	Small Local Sewer Rehabilitation 4	FY 2015	Active	220	0	0	0	0	0	0	0	0	0	0	220	8,557	FY 2018
J3	Sewer Upgrade - City Wide	FY 2001	Active	1,928	1,170	393	562	157	0	0	0	0	0	0	4,209	18,004	FY 2022
JS	Sanitary Sewer Rehabilitation 15	FY 2020	Active	0	0	55	499	3,999	1,330	0	0	0	0	0	5,883	13,830	FY 2023
JU	Sanitary Sewer Rehabilitation 13	FY 2019	Active	0	52	400	3,486	2,060	205	0	0	0	0	0	6,204	15,175	FY 2023
JX	Sanitary Sewer Rehabilitation 10	FY 2017	Active	3	6	6	2,185	2,528	106	0	0	0	0	0	4,834	13,600	FY 2023
LK	Sanitary Sewer Rehabilitation 17	FY 2020	Active	0	0	49	372	3,849	2,197	0	0	0	0	0	6,466	16,100	FY 2023
LL	Sanitary Sewer Rehabilitation 18	FY 2023	Active	0	0	0	0	0	453	942	6,633	133	0	0	8,162	16,582	FY 2026
MO	Sanitary Sewer Rehabilitation 20	FY 2024	Active	0	0	0	0	0	0	397	919	6,183	139	0	7,637	15,000	FY 2027
MP	Sanitary Sewer Rehabilitation 22	FY 2023	Active	0	0	0	0	0	381	1,229	7,113	30	0	0	8,753	17,600	FY 2026
MZ	Sanitary Sewer Rehabilitation 24	FY 2024	Active	0	0	0	0	0	0	377	1,092	7,478	107	0	9,054	18,100	FY 2027
NI	Sanitary Sewer Rehabilitation 21	FY 2024	Active	0	0	0	0	0	0	90	584	5,041	3,192	0	8,907	17,100	FY 2027
NC	Sanitary Sewer Rehabilitation 23	FY 2023	Active	0	0	0	0	0	0	104	681	5,003	3,073	0	8,861	17,600	FY 2026
NF	Sanitary Sewer Rehabilitation 19	FY 2021	Active	0	0	0	82	523	3,648	2,675	0	0	0	0	6,929	15,164	FY 2024
NX	Sanitary Sewer Rehabilitation 25	FY 2024	Active	0	0	0	0	0	0	123	759	6,986	1,488	0	9,356	18,664	FY 2027
NY	Sanitary Sewer Rehabilitation 26	FY 2025	Active	0	0	0	0	0	0	0	555	1,761	7,883	0	10,198	19,100	FY 2027
PY	Sanitary Sewer Rehabilitation 16	FY 2020	Active	0	0	186	743	5,741	69	0	0	0	0	0	6,739	16,100	FY 2023
QB	Sanitary Sewer Rehabilitation 27	FY 2026	Active	0	0	0	0	0	0	0	0	1,204	3,974	0	5,178	45,000	FY 2028
QC	Sanitary Sewer Rehabilitation 28	FY 2027	New	0	0	0	0	0	0	0	0	0	1,561	0	1,561	55,000	FY 2029
U3	B Street & New Jersey Avenue Trunk Sewer Rehab. - Phase 2	FY 2022	New	0	0	0	0	737	645	4,625	2,595	0	0	0	8,602	20,000	FY 2025
QE	Paving (Project Name TBD)	FY 2018	Active	0	0	0	0	0	0	0	0	0	0	0	0	34	FY 2028
<b>TOTAL COLLECTION SEWERS BUDGETS</b>					<b>\$4,488</b>	<b>\$1,244</b>	<b>\$1,088</b>	<b>\$7,929</b>	<b>\$19,594</b>	<b>\$9,139</b>	<b>\$11,139</b>	<b>\$25,253</b>	<b>\$31,888</b>	<b>\$18,343</b>	<b>\$130,105</b>	<b>\$407,999</b>	

  

ON-GOING			Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
BF	FY2011 - DSS Sanitary Sewer Projects	FY 2011	Active	\$67	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$67	\$8,175	FY 2018
D6	FY2014 - DSS Sanitary Sewer Projects	FY 2014	Active	1,250	0	0	0	0	0	0	0	0	0	0	1,250	10,575	FY 2019
DI	FY2015 - DSS Sanitary Sewer Projects	FY 2015	Active	591	0	0	0	0	0	0	0	0	0	0	591	11,188	FY 2018
DW	FY2016 - DSS Sanitary Sewer Projects	FY 2015	Active	601	257	0	0	0	0	0	0	0	0	0	858	14,601	FY 2019
FP	FY2017 - DSS Sanitary Sewer Projects	FY 2017	Active	4,362	555	0	0	0	0	0	0	0	0	0	4,917	11,500	FY 2019
H6	FY2018 - DSS Sanitary Sewer Projects	FY 2018	Active	2,971	2,880	0	0	0	0	0	0	0	0	0	5,851	11,845	FY 2019
HN	FY2019 - DSS Sanitary Sewer Projects	FY 2019	Active	\$0	\$5,925	\$4,417	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,343	\$12,200	FY 2020
JL	FY2020 - DSS Sanitary Sewer Projects	FY 2020	Active	0	0	5,058	5,754	0	0	0	0	0	0	0	10,812	12,568	FY 2021
LN	FY2021 - DSS Sanitary Sewer Projects	FY 2021	Active	0	0	0	4,645	5,358	0	0	0	0	0	0	10,003	12,945	FY 2022
M9	FY2022 - DSS Sanitary Sewer Projects	FY 2022	Active	0	0	0	0	4,624	5,658	0	0	0	0	0	10,283	13,335	FY 2023
MF	FY2023 - DSS Sanitary Sewer Projects	FY 2023	Active	0	0	0	0	0	4,877	5,886	0	0	0	0	10,763	13,735	FY 2024
NW	FY2024 - DSS Sanitary Sewer Projects	FY 2024	Active	0	0	0	0	0	0	5,192	6,074	0	0	0	11,266	14,225	FY 2025
OX	FY2025 - DSS Sanitary Sewer Projects	FY 2025	Active	0	0	0	0	0	0	0	5,328	6,143	0	0	11,470	14,650	FY 2026
PZ	FY2026 - DSS Sanitary Sewer Projects	FY 2026	New	0	0	0	0	0	0	0	0	5,447	6,317	0	11,764	15,090	FY 2027
Q3	FY2003 - DSS Sanitary Sewer Projects	FY 2003	Active	159	0	0	0	0	0	0	0	0	0	0	159	13,863	FY 2019
T8	FY2027 - DSS Sanitary Sewer Projects	FY 2027	New	0	0	0	0	0	0	0	0	0	5,706	0	5,706	15,550	FY 2028
<b>TOTAL ON-GOING BUDGETS</b>					<b>\$10,001</b>	<b>\$9,618</b>	<b>\$9,475</b>	<b>\$10,399</b>	<b>\$9,982</b>	<b>\$10,535</b>	<b>\$11,079</b>	<b>\$11,402</b>	<b>\$11,589</b>	<b>\$12,023</b>	<b>\$106,103</b>	<b>\$206,045</b>	

# Sanitary Sewer

## 10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

PUMPING FACILITIES			Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
CX	Sewer Facilities Security Upgrades	FY 2010	Active	\$102	\$0	\$14	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$116	\$1,334	FY 2020
GZ	Sewer Instrumentation & Control	FY 2012	Active	609	212	0	0	0	0	0	0	0	0	0	821	8,785	FY 2019
HB	DSS Sewer Pumping Project	FY 2010	Active	0	0	0	0	0	0	0	0	0	0	0	0	3,953	FY 2020
LY	Sewer Facilities Security Upgrades	FY 2020	Active	0	0	14	46	48	29	0	0	0	0	0	137	2,000	FY 2023
MB	3rd Street & Constitution Ave NW - Pumping Station	FY 2014	Active	36	11	11	10	662	1,326	214	0	0	0	0	2,271	7,374	FY 2024
MC	Additional Sewer SCADA System Sites	FY 2016	Active	548	139	626	953	157	0	0	0	0	0	0	2,422	8,000	FY 2022
PM	East Side Pumping Station	FY 2019	Active	0	66	170	1,308	55	0	0	0	0	0	0	1,599	4,000	FY 2022
PT	Existing Sewer Facilities Building Optimization	FY 2020	Active	0	0	6	15	83	205	0	0	0	0	0	308	705	FY 2023
<b>TOTAL PUMPING FACILITIES BUDGETS</b>					<b>\$1,294</b>	<b>\$428</b>	<b>\$842</b>	<b>\$2,332</b>	<b>\$1,005</b>	<b>\$1,559</b>	<b>\$214</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,674</b>	<b>\$36,151</b>	
PROGRAM MANAGEMENT			Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
AU	Sanitary Sewer Program Management	FY 2001	Active	\$1,506	\$998	\$1,311	\$3,071	\$4,052	\$4,437	\$3,386	\$2,566	\$0	\$0	\$0	\$21,327	\$75,901	FY 2025
DN	Sewer Inspection Program	FY 2010	Active	1,294	1,875	5,894	1,961	2,358	2,540	2,742	2,585	1,624	115	0	22,989	44,071	FY 2027
LR	Sanitary Sewer Asset Management	FY 2014	Active	199	201	0	0	0	0	0	0	0	0	0	400	5,000	FY 2019
<b>TOTAL PROGRAM MANAGEMENT BUDGETS</b>					<b>\$2,999</b>	<b>\$3,075</b>	<b>\$7,205</b>	<b>\$5,032</b>	<b>\$6,410</b>	<b>\$6,977</b>	<b>\$6,128</b>	<b>\$5,151</b>	<b>\$1,624</b>	<b>\$115</b>	<b>\$44,716</b>	<b>\$124,972</b>	
INTERCEPTOR/TRUNK FORCE			Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
A4	Future Sewer System Upgrades	FY 2004	Active	\$2,000	\$1,676	\$1,009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,684	\$43,669	FY 2021
DM	Upper Anacostia Main Interceptor Relief Sewer	FY 2010	Active	0	231	318	47	3,186	3,976	11	0	0	0	0	7,769	17,126	FY 2024
DR	Low Area Trunk Sewer Rehabilitation	FY 2009	Active	547	4,172	2,593	0	0	0	0	0	0	0	0	7,313	22,674	FY 2020
FW	Rehab Piney Branch Trunk Sewer	FY 2011	Active	0	34	470	1,712	9,405	4,930	907	0	0	0	0	17,458	40,456	FY 2024
FY	Rehab Upstream Rock Creek Main Interceptor	FY 2013	Active	63	57	0	36	538	1,145	7,020	2,869	0	0	0	11,727	29,553	FY 2025
G2	Sewer Structure Rehabilitation 1	FY 2010	Active	8	723	81	129	1,245	0	0	0	0	0	0	2,186	9,224	FY 2022
G4	Upper Potomac Intercept Sewer Rehabilitation	FY 2001	Active	287	27	0	77	791	2,247	1,388	0	0	0	0	4,817	13,520	FY 2024
G5	Sewer Rehab Near Creek Beds	FY 2010	Active	1,011	454	3,216	5,707	6,870	2,602	1,249	168	0	0	0	21,277	60,133	FY 2025
G6	Sanitary Sewers Under Buildings 1	FY 2010	Active	17	270	1,209	0	0	0	0	0	0	0	0	1,496	6,749	FY 2020
GG	Large Sewer Rehabilitation 2	FY 2013	Active	4	0	0	0	0	0	0	0	0	0	0	4	452	FY 2018
GH	Large Sewer Rehabilitation 3	FY 2012	Active	47	0	0	0	0	53	7,800	1,680	0	0	0	9,581	20,195	FY 2025
HS	Rehabilitation of Influent Sewers	FY 2019	Active	0	787	717	471	2,358	6,701	5,409	2,094	1,188	5,287	0	25,013	97,430	FY 2030
HT	Rehabilitation of Anacostia Force Main	FY 2012	Active	25	0	54	321	190	846	1,640	258	0	0	0	3,333	11,290	FY 2025
IF	Sanitary Sewer Rehabilitation 2	FY 2015	Active	122	0	0	0	0	0	0	0	0	0	0	122	1,540	FY 2018
IK	Potomac Force Main Rehabilitation	FY 2013	Active	63	262	104	81	914	1,076	23	0	0	0	0	2,522	6,074	FY 2024
IL	Creekbed Sewer Rehabilitation 2	FY 2013	Active	4,437	4,292	1,273	3,221	74	31	2,195	0	0	0	0	15,523	56,600	FY 2028
IM	Creekbed Sewer Rehabilitation 3	FY 2013	Active	0	0	88	399	1,006	191	2,646	1,117	1,139	4	0	6,591	15,462	FY 2028
IN	Upper East Side Trunk Sewer Rehabilitation	FY 2013	Active	0	0	583	918	183	1,597	5,600	0	0	0	0	8,881	19,002	FY 2024
IQ	Slash Run Sewer Rehabilitation	FY 2021	Active	0	0	0	231	466	3,999	326	0	0	0	0	5,021	10,000	FY 2024
IR	Anacostia Main Interceptor Rehabilitation	FY 2021	Active	0	0	0	109	1,148	3,403	2,105	0	0	0	0	6,764	14,250	FY 2024
J0	B Street New Jersey Avenue Trunk Sewer Rehab	FY 2004	Active	755	4,108	1,270	0	0	0	0	0	0	0	0	6,133	16,200	FY 2020
J1	Oxon Run Sewer Rehabilitation	FY 2004	Active	185	0	0	0	0	162	976	546	364	756	0	2,988	30,051	FY 2031
JK	Little Falls Rehabilitation Project	FY 2026	Active	0	0	0	0	0	0	0	0	72	190	0	263	4,000	FY 2029
JM	Northwest Major Sewer Rehabilitation	FY 2024	Active	0	0	0	0	0	0	242	502	3,143	70	0	3,957	7,000	FY 2027
LZ	Potomac Interceptor Projects - Rehab. Phase 2	FY 2015	Active	772	1,255	1,598	5,453	8,164	7,350	5,562	5,910	3,032	1,025	0	40,121	99,190	FY 2029

# Sanitary Sewer

## 10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

INTERCEPTOR/TRUNK FORCE, CONT.			FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
N7	Potomac Sewer System Rehabilitation	FY 2000	Active	452	100	101	0	0	0	0	0	0	654	48,089	FY 2020
O4	Southwest Interceptor Rehabilitation	FY 2024	Active	0	0	0	0	0	153	182	1,316	744	2,396	4,530	FY 2027
O7	East Rock Creek Diversion Rehabilitation	FY 2021	Active	0	0	0	145	412	2,676	67	0	0	3,300	6,600	FY 2024
OA	West Rock Creek Diversion Rehabilitation	FY 2022	Active	0	0	0	0	13	141	1,205	705	0	2,065	3,810	FY 2025
PJ	Re-Activation of Anacostia Force Main/Gravity Main as Relief to Anacostia Force Main	FY 2018	Active	225	135	751	7,952	60	0	0	0	0	9,122	20,000	FY 2022
PU	Easby Point Trunk Sewer	FY 2021	Active	0	0	0	348	476	2,582	73	0	0	3,479	7,000	FY 2024
PV	Broad Branch Trunk Sewer	FY 2024	Active	0	0	0	0	0	758	1,045	5,413	114	7,330	13,000	FY 2027
<b>TOTAL INTERCEPTOR/TRUNK FORCE SEWER BUDGETS</b>				<b>\$11,019</b>	<b>\$18,583</b>	<b>\$15,436</b>	<b>\$27,358</b>	<b>\$37,501</b>	<b>\$45,706</b>	<b>\$47,353</b>	<b>\$17,076</b>	<b>\$15,667</b>	<b>\$8,191</b>	<b>\$243,890</b>	<b>\$754,870</b>
<b>TOTAL SANITARY SEWER BUDGETS</b>				<b>\$29,802</b>	<b>\$32,947</b>	<b>\$34,046</b>	<b>\$53,050</b>	<b>\$74,492</b>	<b>\$73,917</b>	<b>\$75,912</b>	<b>\$58,882</b>	<b>\$60,769</b>	<b>\$38,672</b>	<b>\$532,490</b>	<b>\$1,530,036</b>



**Small Diameter Water Main Replacement**



**Bryant Street Pumping Station**



**Large Valve Replacement**

FY 2018 - FY 2027 Disbursement Plan											Lifetime Budget
FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	
\$58,044	\$45,747	\$84,256	\$62,341	\$48,241	\$53,471	\$88,055	\$99,661	\$101,344	\$89,510	\$730,672	\$1,939,272
											<i>(\$ in thousands)</i>

**OVERVIEW**

Delivery of safe, clean, high-quality drinking water is one of DC Water's highest priorities. Drinking water in the District of Columbia comes from the Potomac River. The U.S. Army Corps of Engineers, Washington Aqueduct (Aqueduct), is a federally owned agency that is responsible for treating the drinking water. DC Water purchases treated water from the Aqueduct and is responsible for maintaining the distribution system that delivers drinking water to customers. DC Water maintains approximately 1,310 miles of interconnected pipe, four pumping stations, five reservoirs, three water tanks, over 43,000 valves of various sizes, and 9510 fire hydrants in public space. The authority distributes drinking water to more than 681,000 residents and businesses in the District of Columbia.

The DC Water distribution system begins at the water treatment plant and ends at private service lines. Customer service lines connect to the water mains in the streets and deliver water to residents and commercial buildings, eventually reaching taps. Water is continuously moving through our distribution system, typically at a high water flow rate that keeps the water fresh. However, once the water leaves the main and enters a customer's service line, the flow of water is dependent on individual water usage.

## OVERVIEW, CONT.

DC Water is committed to providing customers with the highest quality drinking water and continuously works to deliver water that goes beyond federal standards. We accomplish this goal by aiming to meet target levels that are stricter than water quality standards required by the United States Environmental Protection Agency (USEPA). We have a dedicated Drinking Water division that collects and analyzes water samples throughout the District of Columbia. These monitoring programs include sampling and analyses that are required by EPA and additional sampling programs conducted voluntarily by DC Water.

DC Water conducts compliance monitoring on a daily basis to ensure that water quality meets EPA standards. Water quality technicians collect and analyze samples for lead and copper, total coliform (bacteria) and disinfection byproduct levels. Compliance monitoring ensures that drinking water treatment effectively prevents pipe corrosion, removes bacteria and other contaminants, and minimizes potentially harmful treatment byproducts.

DC Water operates voluntary sampling programs to support our commitment to providing high-quality drinking water to our customers. Water quality technicians collect and analyze hundreds of water samples throughout the District of Columbia. The Drinking Water division responds quickly to customer complaints and conducts water quality monitoring among the District's most vulnerable populations. DC Water operates two mobile laboratories that allow technicians to conduct on-site water quality tests and respond to emergencies. The Drinking Water division also distributes over a thousand lead test kits each year to residents and assists residents with identifying lead sources.

## PROGRAM AREAS

***Distribution Systems*** – Provides for the rehabilitation, replacement or extension of the water distribution system through several projects. The distribution systems program area is the largest for drinking water and includes three primary elements: small diameter water main renewal; large diameter water main rehabilitation; and valve replacements.

***Lead Program*** – The replacement of approximately 20,960 lead water service lines with copper piping has been completed. Additional replacement continues throughout the water distribution system as part of water main renewals projects and for customers that request full replacement.

***On-Going*** – Includes small projects for repairing water main breaks, replacing valves and fire hydrants, replacing water service connections, and other minor water main rehabilitation work.

***Pumping Facilities*** – Rehabilitate or upgrade water-pumping stations in the system.

***DDOT*** – Projects for the relocation, rehabilitation, replacement and extension of water mains, for which the work is completed under the District of Columbia's District Department of Transportation (DDOT) construction contracts for street paving or reconstruction. This program is being closed and combined with distribution projects.

***Storage Facilities*** – Rehabilitation or upgrade of elevated tanks and reservoirs. Studies to the system have identified needs that support changing development patterns, regulatory compliance, additional water pressure to certain areas of the District, and provide emergency backup service.

***Program Management*** – Provides engineering program management services, including asset management. Developing facilities plans, conceptual designs, design scopes of work, cost estimates, task orders or agreements, and design document review.

## ACCOMPLISHMENTS

- Continued installation of small diameter water mains to meet the DC Water Board goal of renewing one (1%) percent of the system annually. This renewal includes a combination of replacement with new water mains and rehabilitation of existing water mains using cleaning and cement mortar lining.
- DC Water continued its Pipe Condition Assessment (PCA) of large diameter water mains. The assessments include detailed field inspection and leak detection of five miles of high-risk water transmission mains annually. Recommendations for rehabilitation result in targeted capital projects to address the identified pipe sections in need of repairs.
- The construction of emergency repairs to the 78-inch North Clear Well water main was completed. This project addressed pipe defects and leaks identified as part of the large diameter water main PCA program and required close coordination with the Washington Aqueduct so that repairs could be completed while the McMillan North Clear Well was out of service.
- A pressure increase project for the 4<sup>th</sup> High zone in Wards 3 and 4 was completed by finishing upgrades to the Fort Reno pumping station. This project satisfies agreements with DC Fire and Emergency Medical Services (DC FEMS) to increase fire flows in the same area. Customers with lower than average pressure now have improved service, and residential customers that had high pressures were provided with interior Pressure Relief Valves (PRVs) to maintain compliance with the plumbing code.
- There was significant progress towards creating the new Anacostia 2<sup>nd</sup> High pressure zone in Ward 8, centered on the Saint Elizabeth's campus. The new 2 million gallon elevated storage facility and associated transmission mains are beyond 70% constructed, and continued coordination with the District led development of the campus, will result in an on-time opening of the new facilities in 2018.
- Remote pressure sensors, transient sensors, leak detection, and water quality monitoring equipment has been installed throughout selected areas of the District in early implementation of the water and sewer sensor program (WaSSP). Real time monitoring capabilities of the equipment have already resulted in adjustments in operational activities.
- There was significant progress towards recalibration of the water system hydraulic model. When completed a calibrated model will more accurately represent customer demands in the system for extended period simulations and provide a stronger interface with the Enterprise GIS database.
- DC Water conducted water age tracer studies in two pressure zones, to provide detailed analysis of water movement and age issues in those zones.

## OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

**Water Mains** – The primary goal of both small diameter water main renewal and rehabilitation of large water mains is to reduce operating expenses to maintain the distribution system. The capital expenditures to fix and replace water mains yields reduced reactive maintenance due to breaks and other unscheduled repairs, which is more costly than planned maintenance. Reducing the amount of unlined water main through this program also reduces the need for distribution system flushing, which is costly both in crew time and in drinking water dumped to waste. Replacing valves that are in-operable reduces the number of customers out of service during both planned and unplanned shutdowns of the system.

**Water Pumping and Storage** – Reservoir upgrade projects are continuing, which accomplishes both regulatory upgrades as well as operational improvements. Maintenance costs are expected to be reduced due to improved access for water sampling equipment as well as Supervisory Control and Data Acquisition (SCADA) improvements that monitor reservoir water quality remotely. Increased pressure in new areas will reduce the frequency of low pressure complaints and crew time responding to investigate and remedy issues found. The installation of remote monitoring sensors is intended to reduce the number of times that crews will need to mobilize to investigate water pressure, quality, leaks, and other related operational monitoring requirements.

10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

DISTRIBUTION SYSTEMS		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
BZ	Large Valve Replacement (Contracts 8 - 9 & 10)	FY 2009	Closed	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,010	FY 2017
C9	Large Diameter Water Mains I	FY 2014	Active	803	5,223	1,891	2,629	0	0	0	0	0	0	10,546	19,667	FY 2021
DE	Small Diameter Water Main Rehabilitation 12	FY 2014	Active	8,211	9,073	4,405	109	0	0	0	0	0	0	21,797	42,812	FY 2021
F1	Small Diameter Water Main Rehabilitation 13	FY 2014	Active	186	2,757	13,077	3,821	0	0	0	0	0	0	19,842	35,126	FY 2021
F2	Small Diameter Water Main Rehabilitation 14	FY 2018	Active	102	380	11,888	12,266	0	0	0	0	0	0	24,635	43,489	FY 2022
F6	Steel Water Main Rehabilitation - Rehabilitation I	FY 2009	Active	0	0	93	205	3,360	838	0	0	0	0	4,496	12,121	FY 2023
FE	20 Low Service Main & Pressure Reducing Valve	FY 2012	Active	529	0	0	0	0	0	0	0	0	0	529	8,393	FY 2018
FT	Water Mains Rehabilitation Phase II	FY 2014	Active	1,309	1,242	1,806	2,420	7,872	4,246	722	153	0	0	19,770	35,478	FY 2025
GQ	Fire Hydrant Replacement Program - Phase II	FY 2010	Active	345	51	51	30	21	0	0	0	0	0	498	28,302	FY 2022
GR	Small Diameter Water Main Rehabilitation 15	FY 2018	Active	766	1,116	16,905	8,088	1,028	0	0	0	0	0	27,903	52,000	FY 2022
HX	Small Diameter Water Main Rehabilitation 16	FY 2019	Active	0	813	207	0	37	1,158	4,842	18,442	9,028	0	34,528	52,000	FY 2026
I8	Large Valve Replacement (Contract 11-13)	FY 2012	Active	1,382	0	0	0	0	0	0	0	0	0	1,382	19,138	FY 2019
J7	Small Diameter Water Main Rehabilitation 17	FY 2020	Active	0	0	4,157	1,043	0	45	1,428	4,253	14,367	7,398	32,691	46,650	FY 2027
JZ	Large Diameter Water Main Replacement 3 - 4 & 5	FY 2021	Active	0	0	0	1,008	3,448	7,000	14,251	17,436	11,709	2,563	57,414	81,320	FY 2027
K7	Large Diameter Water Main Replacement 6 - 7 & 8	FY 2024	Active	0	0	0	0	0	0	469	1,937	8,714	18,862	29,981	89,140	FY 2030
K8	Large Diameter Water Main Replacement 9 - 10 & 11	FY 2027	New	0	0	0	0	0	0	0	0	0	431	431	76,400	FY 2033
KE	Small Diameter Water Main Rehabilitation 18	FY 2021	Active	0	0	0	4,327	2,623	8,292	12,778	3,483	0	0	31,504	46,340	FY 2025
KF	Small Diameter Water Main Rehabilitation 19	FY 2022	Active	0	0	0	0	4,663	2,846	8,982	13,543	3,582	0	33,616	47,730	FY 2026
KG	Small Diameter Water Main Rehabilitation 20	FY 2023	Active	0	0	0	0	0	5,221	3,098	9,632	13,864	3,812	35,628	49,160	FY 2027
KH	Small Diameter Water Main Rehabilitation 21	FY 2024	Active	0	0	0	0	0	0	5,769	3,297	9,588	14,393	33,047	50,640	FY 2028
KI	Small Diameter Water Main Rehabilitation 22	FY 2025	Active	0	0	0	0	0	0	0	6,862	3,595	10,592	21,049	52,160	FY 2029
KJ	Small Diameter Water Main Rehabilitation 23	FY 2026	Active	0	0	0	0	0	0	0	0	7,056	3,867	10,923	53,720	FY 2030
KK	Small Diameter Water Main Rehabilitation 24	FY 2027	New	0	0	0	0	0	0	0	0	0	7,571	7,571	55,330	FY 2031
MU	Small Diameter Water Main Rehabilitation 2	FY 2002	Active	0	0	0	0	0	0	0	0	0	0	0	12,667	FY 2017
MV	Small Diameter Water Main Rehabilitation 3	FY 2006	Active	38	31	1,534	0	0	0	0	0	0	0	1,603	15,676	FY 2021
NA	Clean & Line 20 4th High Water Main	FY 2002	Active	81	22	0	0	0	0	0	0	0	0	103	4,607	FY 2018
O0	Small Diameter Water Main Rehabilitation 8	FY 2011	Active	0	0	0	0	0	0	0	0	0	0	0	21,038	FY 2018
O1	Small Diameter Water Main Rehabilitation 9	FY 2012	Active	2,155	0	0	0	0	0	0	0	0	0	2,155	26,087	FY 2018
O2	Small Diameter Water Main Rehabilitation 10	FY 2013	Active	2,198	869	0	0	0	0	0	0	0	0	3,066	38,223	FY 2019
O3	Small Diameter Water Main Rehabilitation 11	FY 2014	Active	10,240	1,348	0	0	0	0	0	0	0	0	11,588	39,989	FY 2019
PK	Large Meter Vault and Piping Improvements	FY 2016	Active	11	0	0	0	0	0	0	0	0	0	11	980	FY 2018
S3	Large Valve Replacement (Contract 3-7)	FY 1999	Active	0	0	0	0	0	0	0	0	0	0	0	23,167	FY 2018
S5	Large Diameter Water Main Installation	FY 2001	Active	0	0	0	0	0	0	0	0	0	0	0	17,299	FY 2018
GX	Large Diameter Water Main Replacement II	FY 2023	Closed	0	0	0	0	0	0	0	0	0	0	0	30,090	FY 2029
<b>TOTAL DISTRIBUTION SYSTEMS BUDGETS</b>				<b>\$28,353</b>	<b>\$22,924</b>	<b>\$56,015</b>	<b>\$35,946</b>	<b>\$23,051</b>	<b>\$29,648</b>	<b>\$52,339</b>	<b>\$79,039</b>	<b>\$81,503</b>	<b>\$69,487</b>	<b>\$478,306</b>	<b>\$1,235,949</b>	



## 10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

LEAD PROGRAM			Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
BW	Lead Service Replacement Program		FY 2003	Active	\$3,422	\$1,487	\$1,252	\$1,422	\$1,528	\$1,658	\$1,718	\$903	\$235	\$75	\$13,700	\$209,245	FY 2030
<b>TOTAL LEAD PROGRAM BUDGETS</b>					<b>\$3,422</b>	<b>\$1,487</b>	<b>\$1,252</b>	<b>\$1,422</b>	<b>\$1,528</b>	<b>\$1,658</b>	<b>\$1,718</b>	<b>\$903</b>	<b>\$235</b>	<b>\$75</b>	<b>\$13,700</b>	<b>\$209,245</b>	
ON-GOING			Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
D5	FY 2014 - DWS Water Projects		FY 2014	Active	\$491	\$0	\$87	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$578	\$10,229	FY 2020
DG	FY 2015 - DWS Water Projects		FY 2015	Active	2	0	0	0	0	0	0	0	0	0	2	9,876	FY 2018
DY	FY 2016 - DWS Water Projects		FY 2016	Active	623	307	0	0	0	0	0	0	0	0	930	9,846	FY 2019
FK	FY2017 - DWS Water Projects		FY 2016	Active	3,097	1,302	0	0	0	0	0	0	0	0	4,399	9,630	FY 2019
GS	FY 2018 - DWS Water Projects		FY 2018	Active	4,766	781	0	0	0	0	0	0	0	0	5,546	9,630	FY 2019
HY	FY 2019 - DWS Water Projects		FY 2019	Active	0	6,088	108	0	0	0	0	0	0	0	6,197	9,630	FY 2020
JA	FY 2020 - DWS Water Projects		FY 2020	Active	0	0	4,654	839	0	0	0	0	0	0	5,492	9,630	FY 2021
KW	FY 2021 - DWS Water Projects		FY 2021	Active	0	0	0	6,389	1,168	0	0	0	0	0	7,557	9,630	FY 2022
KX	FY 2022 - DWS Water Projects		FY 2022	Active	0	0	0	0	5,950	1,124	0	0	0	0	7,073	9,664	FY 2023
KY	FY 2023 - DWS Water Projects		FY 2023	Active	0	0	0	0	0	6,126	1,144	0	0	0	7,270	10,150	FY 2024
KZ	FY 2024 - DWS Water Projects		FY 2024	Active	0	0	0	0	0	0	6,571	1,197	0	0	7,768	10,452	FY 2025
L1	FY 2025 - DWS Water Projects		FY 2025	Active	0	0	0	0	0	0	0	6,772	1,194	0	7,966	10,780	FY 2026
L2	FY 2026 - DWS Water Projects		FY 2026	Active	0	0	0	0	0	0	0	0	8,041	872	8,913	11,890	FY 2027
L6	FY 2027 - DWS Water Projects		FY 2027	New	0	0	0	0	0	0	0	0	0	8,419	8,419	12,250	FY 2028
QE	Paving/Surface Restoration		FY 2018	Active	2,101	2,565	2,720	2,754	2,812	2,934	3,078	3,188	3,194	3,344	28,691	0	FY 2027
<b>TOTAL ON-GOING BUDGETS</b>					<b>\$11,079</b>	<b>\$11,044</b>	<b>\$7,569</b>	<b>\$9,982</b>	<b>\$9,930</b>	<b>\$10,183</b>	<b>\$10,793</b>	<b>\$11,157</b>	<b>\$12,429</b>	<b>\$12,636</b>	<b>\$106,802</b>	<b>\$143,288</b>	
PUMPING FACILITIES			Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
AY	Upgrades to Fort Reno Pumping Station		FY 2002	Active	\$487	\$226	\$68	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$781	\$13,978	FY 2020
F8	16th & Alaska Avenue Pumping Station Upgrades		FY 2010	Active	101	3	0	0	0	0	0	0	0	0	104	4,990	FY 2019
FD	Water Facility Security System Upgrades		FY 2010	Active	53	62	38	25	0	0	0	0	0	0	177	2,100	FY 2021
FH	Discharge Piping Bryant Street Pumping Station		FY 2009	Active	0	0	0	0	0	0	0	0	0	0	0	14,482	FY 2018
HA	DWS Water Pumping Projects		FY 2010	Closed	0	0	0	0	0	0	0	0	0	0	0	1,463	FY 2017
HI	Bryant Street Pump Station Phase III		FY 2020	Active	\$0	\$0	\$42	\$86	\$215	\$987	\$2,533	\$0	\$0	\$0	\$3,864	\$5,920	FY 2024
HR	Anacostia Pump Station Improvements Phase II		FY 2021	Active	0	0	0	42	165	303	2,206	389	0	0	3,106	4,700	FY 2025
HV	Bryant Street Pump Station - Spill Header Flow Control		FY 2013	Active	25	838	2,081	371	0	0	0	0	0	0	3,315	6,641	FY 2021
JB	Bryant Street PS Improvements - Phase II		FY 2012	Active	2,223	475	254	1,295	2,905	0	0	0	0	0	7,152	12,298	FY 2022
LT	Water System SCADA		FY 2014	Active	356	179	1,690	1,951	595	0	0	0	0	0	4,771	8,296	FY 2022
LU	Water Facilities Security System Upgrades 2		FY 2016	Active	0	0	0	0	88	287	465	309	211	0	1,359	2,000	FY 2026
M7	Replacement of Anacostia Pump Station		FY 2002	Active	40	7	0	0	0	0	0	0	0	0	47	33,461	FY 2019
OR	Fort Reno Pump Station Improvements Phase II		FY 2021	Active	0	0	0	49	181	263	2,820	969	0	0	4,283	6,430	FY 2025
PS	Existing Water Facilities Building Optimization		FY 2020	Active	0	0	145	217	44	0	0	0	0	0	407	695	FY 2022
S6	West Venturi Meter - Bryant Street Pumping Station		FY 2019	Active	0	67	242	212	0	0	0	0	0	0	520	940	FY 2021
<b>TOTAL PUMPING FACILITIES BUDGETS</b>					<b>\$3,286</b>	<b>\$1,857</b>	<b>\$4,561</b>	<b>\$4,248</b>	<b>\$4,193</b>	<b>\$1,840</b>	<b>\$8,023</b>	<b>\$1,668</b>	<b>\$211</b>	<b>\$0</b>	<b>\$29,887</b>	<b>\$118,394</b>	

10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

DDOT		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
B0	B0 FY 2010 - DDOT Water Projects	FY 2010	Active	\$27	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$32	\$17,171	FY 2020
BN	FY 2011 - DDOT Water Projects	FY 2011	Active	551	343	113	0	0	0	0	0	0	0	1,007	8,738	FY 2020
CJ	FY 2012 - DDOT Water Projects	FY 2011	Active	127	90	83	2	2	0	0	0	0	0	305	6,474	FY 2022
CM	FY 2013 - DDOT Water Projects	FY 2013	Active	199	48	12	0	0	0	0	0	0	0	260	1,549	FY 2020
<b>TOTAL DDOT BUDGETS</b>				<b>\$904</b>	<b>\$486</b>	<b>\$208</b>	<b>\$2</b>	<b>\$2</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,604</b>	<b>\$33,933</b>	
STORAGE FACILITIES		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
FA	Water Storage Facility Upgrades	FY 2009	Active	\$1,992	\$1,971	\$3,527	\$1,328	\$450	\$0	\$0	\$0	\$0	\$0	\$9,268	\$36,481	FY 2022
HW	Rehabilitation of Elevated Water Tanks	FY 2020	Active	0	0	105	304	741	2,070	1,289	538	0	0	5,048	7,000	FY 2025
MA	Saint Elizabeth Water Tank	FY 2002	Active	5,377	2,826	3,617	1,079	0	0	0	0	0	0	12,899	37,291	FY 2021
MQ	2MG 4th High Storage Tank	FY 2004	Active	191	55	322	418	491	1,637	1,925	0	0	0	5,040	9,716	FY 2024
MR	2nd High Water Storage	FY 2009	Active	0	115	517	358	416	1,399	6,157	1,805	0	0	10,767	17,031	FY 2025
<b>TOTAL STORAGE FACILITIES BUDGETS</b>				<b>\$7,560</b>	<b>\$4,967</b>	<b>\$8,088</b>	<b>\$3,488</b>	<b>\$2,099</b>	<b>\$5,106</b>	<b>\$9,371</b>	<b>\$2,343</b>	<b>\$0</b>	<b>\$0</b>	<b>\$43,021</b>	<b>\$107,520</b>	
PROGRAM MANAGEMENT		Start	Status	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total	Lifetime	Completion
KV	Water Program Management Services 2F	FY 2020	Active	\$0	\$0	\$3,809	\$5,013	\$6,150	\$5,035	\$3,915	\$0	\$0	\$0	\$23,921	\$30,610	FY 2024
LB	Water Program Management Services 2G	FY 2024	Active	0	0	0	0	0	0	1,897	4,551	6,966	7,312	20,727	35,480	FY 2029
LQ	Water Service Area Asset Management	FY 2013	Active	408	56	0	0	0	0	0	0	0	0	465	5,000	FY 2019
ME	Water System Program Management Services	FY 1999	Active	3,032	2,925	2,755	2,238	1,289	0	0	0	0	0	12,239	19,854	FY 2022
<b>TOTAL PROGRAM MANAGEMENT BUDGETS</b>				<b>\$3,441</b>	<b>\$2,982</b>	<b>\$6,563</b>	<b>\$7,252</b>	<b>\$7,438</b>	<b>\$5,035</b>	<b>\$5,812</b>	<b>\$4,551</b>	<b>\$6,966</b>	<b>\$7,312</b>	<b>\$57,352</b>	<b>\$90,944</b>	
<b>TOTAL WATER BUDGETS</b>				<b>\$58,044</b>	<b>\$45,747</b>	<b>\$84,256</b>	<b>\$62,341</b>	<b>\$48,241</b>	<b>\$53,471</b>	<b>\$88,055</b>	<b>\$99,661</b>	<b>\$101,344</b>	<b>\$89,510</b>	<b>\$730,672</b>	<b>\$1,939,272</b>	



**Maintenance Services**



**DC Water Skimmer Boat**



**Washington Aqueduct**

	FY 2018 - FY 2027 Disbursement Plan										Lifetime Budget	
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027		10-Yr Total
CAPITAL EQUIPMENT	\$39,898	\$34,518	\$29,383	\$27,998	\$9,579	\$10,306	\$10,850	\$11,177	\$12,122	\$12,303	\$198,133	\$198,133
WASHINGTON AQUEDUCT	11,768	12,930	12,944	13,039	13,039	12,312	11,768	11,441	10,496	10,315	120,052	120,052
<b>ADDITIONAL CAPITAL PROGRAMS</b>	<b>51,665</b>	<b>47,448</b>	<b>42,327</b>	<b>41,037</b>	<b>22,618</b>	<b>22,618</b>	<b>22,618</b>	<b>22,618</b>	<b>22,618</b>	<b>22,618</b>	<b>318,185</b>	<b>318,185</b>

## OVERVIEW

Additional Capital Programs is a subset of the CIP, and is comprised of Capital Equipment and the Washington Aqueduct.

**Capital Equipment** – This category includes capital purchases that have a life of at least three years and an individual component cost of \$5,000 or more. The current capital equipment disbursement budget includes the following cluster groups:

- **Blue Plains** – This cluster is comprised of the Departments of Wastewater Operations, Process Engineering, and Maintenance Services. These departments’ activities are within the Blue Plains AWWTP. Activities/purchases include: major pump rebuild/replacements, large electric motors, high priority rehabilitation program, centrifuge rebuild/replacements, membrane diffuser/mechanical replacements, electrical replacements, lab equipment, process computer control systems, actuators, flow meters, and programmable logic controllers.
- **Finance, Accounting and Budget** – The Projects are primarily for the enhancements to DC Water’s existing financial and payroll software solutions. This group also manages reserve funds to support additional capital equipment needs throughout DC Water.
- **Customer Care and Operations** – This cluster is comprised of the Departments of Customer Service, Distribution and Conveyance Systems, Water Quality and Technology, Water Services, and Sewer Services. Work within this group is for rehabilitating and replacing equipment outside of Blue Plains in the distribution and collection systems. Activities/purchases include: pipes/fittings, manhole covers/frames, pumps, flow meters, catch basins, sewer cameras, cured-in-place pipe, locators, emergency generators, water mains, service lines, valves, water sample lab equipment, backflow preventers, SCADA hardware, and fire hydrant custodial locks. In addition to these items, this cluster supports replacement of residential and commercial water meters through the Automated Meter Reading (AMR) and On-going Replacement Programs.

## OVERVIEW, CONT.

- **Independent Offices** – Capital equipment projects within this cluster are primarily infrastructure projects for the Department of Information Technology (IT). Activities/purchases include: computer replacements, cabling, radios, uninterruptible power system, server hardware, SCADA core switches, and telephony upgrades. In addition, IT also manages enterprise technology projects as approved by the IT Steering Committees.
- **Support Services** – This cluster is comprised of capital equipment activities for the Departments of Facilities, Security and Fleet Management. Activities/purchases include: cameras, card readers, door/window/hatch sensors, fence-line detection systems, vehicles, buses, vac-trucks, boats, backhoes, cranes, trailers, forklifts, HVAC systems, fire suppression systems, elevators, plumbing, rollup doors, photocopiers, appliances, furniture, fixtures, signage, roofing, and general facility improvements.

**Washington Aqueduct** – The Washington Aqueduct, managed by the U.S. Army Corps of Engineers (USACE), provides wholesale water treatment services to DC Water and two wholesale customers in Northern Virginia, Arlington County and Fairfax Water. DC Water purchases approximately 73 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan Treatment Plants, and thus is responsible for approximately 73 percent of the Aqueduct's operating and capital costs. Under federal legislation and a memorandum of understanding enacted in 1997 and updated in 2013 when Fairfax Water replaced the City of Falls Church, DC Water and the Aqueduct's wholesale customers in Northern Virginia have a much greater role in oversight of the Aqueduct's operations and its Capital Improvement Program than prior to 1997. The Aqueduct's CIP is divided into six primary areas, with specific projects under each area.

- Dalecarlia Plant
- Aqueduct Wide
- McMillan Plant
- Appurtenant Transmission and Storage Facilities
- Advanced Treatment
- Emerging Projects Fund

The USACE, in accordance with Federal procurement regulations, requires DC Water to remit cash in an amount equal to the total project cost in advance of advertising contracts, and these funds are transferred immediately to a USACE/U.S. Treasury account to be drawn down during the execution of the project, through completion, with no interest going to DC Water. Over the years, extensive discussions with the U.S. Office of Management and Budget (OMB) and the USACE resulted in a proposal in the President's FY 2006 and FY 2007 budgets that would allow Aqueduct customers to deposit funds for any projects required by their National Pollutant Discharge Elimination System (NPDES) permit (including the residuals project) to a separate escrow account, allowing the Aqueduct customers to retain interest on these funds. The proposal was submitted in May 2006 to the Senate and House. During FY 2006, the USACE briefed the Senate Environment and Public Works Committee staff and in conjunction with DC Water briefed the Senate Homeland Security and Government Affairs committee staff. Additionally, DC Water and Washington Aqueduct staff provided DC Delegate Norton's office with the Administration's proposal. Neither committees acted on the proposal.

We continue to pursue other options that would be more favorable to DC Water, including transferring dollars on a phased basis, utilizing taxable bonds, or taxable commercial paper. In the past, some of these options have not been viewed favorably by the U.S. Treasury, but we will continue our outreach efforts to Congressional staff, federal agencies and the Corps on this critical issue. We expect to develop a more efficient financing system in the near future.

## OPERATIONAL IMPACT OF MAJOR CAPITAL PROGRAMS

***Automated Meter Reading (AMR) Replacement Program*** - This program aims to replace approximately 90,000 small water meters throughout the city. The program started in FY 2016 and is expected to be completed within the next two years. Data received from the water meters will better serve DC Water customers by providing timely and accurate meter reads for billing information.

# Additional Capital Programs

10-Year Disbursement Plan & Lifetime Budget by project, \$ in thousands

CAPITAL EQUIPMENT		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	10-Yr Total
<b>BLUE PLAINS</b>												
EQP4710	Wastewater Operations	\$100	\$100	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$399
EQP4730	Wastewater Process Engineering	850	550	350	350	0	0	0	0	0	0	2,100
EQP4830	Maintenance Services	3,600	3,600	3,770	3,770	0	0	0	0	0	0	14,740
Subtotal		4,550	4,250	4,220	4,220	0	0	0	0	0	0	17,239
<b>FINANCE, ACCOUNTING &amp; BUDGET</b>												
EQP2410	Finance, Accounting & Budget	300	800	100	0	0	0	0	0	0	0	1,200
EQP2411	Reserve Fund	8,550	7,000	5,500	5,500	6,961	7,688	8,232	8,559	9,504	9,685	77,179
Subtotal		8,850	7,800	5,600	5,500	6,961	7,688	8,232	8,559	9,504	9,685	78,379
<b>CUSTOMER CARE &amp; OPERATIONS</b>												
EQP2340	Customer Service	9,343	2,618	2,618	2,618	2,618	2,618	2,618	2,618	2,618	2,618	32,905
EQP4100	Water Quality and Technology	150	150	125	150	0	0	0	0	0	0	575
EQP4210	Distribution & Conveyance Systems	1,700	1,700	1,700	1,700	0	0	0	0	0	0	6,800
EQP4410	Water Services	590	590	610	610	0	0	0	0	0	0	2,400
EQP4610	Sewer Services	225	225	260	260	0	0	0	0	0	0	970
Subtotal		12,008	5,283	5,313	5,338	2,618	2,618	2,618	2,618	2,618	2,618	43,650
<b>INDEPENDENT OFFICES</b>												
EQP2110	IT Infrastructure	2,400	3,050	2,600	2,600	0	0	0	0	0	0	10,650
EQP2115	IT Enterprise Technology	5,700	6,245	4,810	4,000	0	0	0	0	0	0	20,755
Subtotal		8,100	9,295	7,410	6,600	0	0	0	0	0	0	31,405
<b>SUPPORT SERVICES</b>												
EQP3410	Facilities Management	1,855	2,855	2,305	1,805	0	0	0	0	0	0	8,820
EQP3610	Security	515	515	515	515	0	0	0	0	0	0	2,060
EQP5610	Fleet Management	4,000	4,500	4,000	4,000	0	0	0	0	0	0	16,500
Subtotal		6,370	7,870	6,820	6,320	0	0	0	0	0	0	27,380
<b>CHIEF ENGINEER</b>												
EQP4310	Engineering & Technical Services	20	20	20	20	0	0	0	0	0	0	80
Subtotal		20	20	20	20	0	0	0	0	0	0	80
<b>TOTAL CAPITAL EQUIPMENT</b>		<b>\$39,898</b>	<b>\$34,518</b>	<b>\$29,383</b>	<b>\$27,998</b>	<b>\$9,579</b>	<b>\$10,306</b>	<b>\$10,850</b>	<b>\$11,177</b>	<b>\$12,122</b>	<b>\$12,303</b>	<b>\$198,133</b>
<b>WASHINGTON AQUEDUCT</b>		<b>11,768</b>	<b>12,930</b>	<b>12,944</b>	<b>13,039</b>	<b>13,039</b>	<b>12,312</b>	<b>11,768</b>	<b>11,441</b>	<b>10,496</b>	<b>10,315</b>	<b>120,052</b>
<b>TOTAL ADDITIONAL CAPITAL PROGRAMS</b>		<b>\$51,665</b>	<b>\$47,448</b>	<b>\$42,327</b>	<b>\$41,037</b>	<b>\$22,618</b>	<b>\$22,618</b>	<b>\$22,618</b>	<b>\$22,618</b>	<b>\$22,618</b>	<b>\$22,618</b>	<b>\$318,185</b>



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FY 2018 - FY 2027

**Service Area Title:** Non Process Facilities  
**Program Title:** Facility Land Use  
**Project ID/Project Title:** DS - New Headquarters Building <sup>4</sup>  
**Managing Department:** Office of General Manager  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2020

**Project Description:**

This project is for the design and construction of the new DC Water Administration Headquarters building. The plan is for a 135,000 + sq. ft. administrative building to provide sufficient space for current and future administrative needs. The new administrative headquarters will be constructed over the existing O Street Pump Station located off First Street SE along the Anacostia River. This new building will address the overcrowded existing administrative building located at Blue Plains Waste Water Treatment Plant, and assist in alleviating the increased traffic and parking problems now occurring due to additional staffing, visitors and construction projects. In addition, placing the building off-site would free space for plant operations.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	73.41%
EPA/Fed -	0.00%
WSSC -	20.74%
Fairfax -	3.79%
Loudoun/PI -	0.38%

<b>Previous Approved Lifetime Budget</b>	\$76,100,000
<b>Current Approved Lifetime Budget</b>	\$76,100,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$233,118

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	33,199	28,961	777	9	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	75,965	115	20	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>4</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted was or will be derived and adopted in accordance with Blue Plains IMA Agreement of 2012 section 5.B 'Determination of Multi Jurisdictional Facilities (MJUFs)'.



FY 2018 - FY 2027

**Service Area Title:** Non Process Facilities  
**Program Title:** Facility Land Use  
**Project ID/Project Title:** DU - Water System Laboratory Facilities  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2007
<b>Completion:</b>	FY 2019

**Project Description:**

This project includes the conversion of available space at Bryant Street Pumping Station to laboratory facilities for the Water Quality Division of the Department of Water Services. Due to the demand in water quality monitoring and the limited space at the Fort Reno facility, the DWS Water Quality Division needs additional laboratory space. The project mainly includes the construction of laboratory benches, fume hoods, and the analytical equipment.

**Impact on Operations:**

This project will have an annual operating cost for maintenance of the laboratory and cost of utilities.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$646,747
<b>Current Approved Lifetime Budget</b>	\$646,747
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$4,971

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	316	52	113	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	321	326	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Non Process Facilities  
**Program Title:** Facility Land Use  
**Project ID/Project Title:** HE - Bryant Street Pump Station Building Mods  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2021

**Project Description:**

Bryant Street is composed of multiple properties including the water pumping station (PS), the warehouse, the distribution building, as well as the warehouses and pipe yard at 200 Bryant Street. The sites are variously underutilized and/or in disrepair. This fact, coupled with vast and varied spaces of the facility creates an excellent opportunity to develop a multifunctional facility located centrally in the District. However, there are two critical limitations—any modification or addition must consider the historic nature of the Bryant Street PS as well as the facility’s location adjacent to Howard University and the Washington Metropolitan High School. The following modifications are proposed to assist DC Water in achieving these objectives: (1)Renovate and reorganize first floor of the PS; (2)Renovate and reorganize spaces to accommodate the following functions: Lab for Water Quality division from Fort Reno, Water and Sewer Investigation and Repair satellite crews serving central DC, and Satellite warehouse facilities and meter storage; (3)Improve HVAC/Energy Design within the PS (all floors) to include better efficiency and redundancies for emergency situations; (4)Repair roof parking ramp to Warehouse/Meter Services Building; and (5)Evaluate 200 Bryant Street for potential use(s).

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	100.00%	<b>Previous Approved Lifetime Budget</b>	\$14,370,000
<b>EPA/Fed -</b>	0.00%	<b>Current Approved Lifetime Budget</b>	\$14,370,000
<b>WSSC -</b>	0.00%	<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Fairfax -</b>	0.00%	<b>Allocated Labor as of FY 2017</b>	\$0
<b>Loudoun/PI -</b>	0.00%		

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	0	733	1,367	7,880	1,047	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	0	1,840	0	12,530	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Non Process Facilities  
**Program Title:** Facility Land Use  
**Project ID/Project Title:** HF - Fort Reno Pump Station - Field Ops Facility West  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2023

**Project Description:**

The Fort Reno site is a seven acre industrial campus, with a collection of buildings in various states of adaptive reuse, disrepair, and/or abandon, including the historically relevant Watchman’s Tower and House. Thus, while existing conditions pose a maintenance burden, the site itself provides an opportunity to efficiently house the functions as proposed in development of a western DC satellite crew site. Establishment will consist of new construction, renovation, and strategic demolition in concert with the site’s historic character. The following modifications are proposed to assist DC Water in achieving these objectives: (1) Construct a building for a Satellite Office serving western DC; (2) Demolish existing office building; (3) Demolish abandoned pump station; (4) Remove temporary trailer; and (5) “Mothball” abandoned pump house and water tower as well as any structures requiring preservation on site

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	100.00%	<b>Previous Approved Lifetime Budget</b>	\$3,150,000
<b>EPA/Fed -</b>	0.00%	<b>Current Approved Lifetime Budget</b>	\$3,150,000
<b>WSSC -</b>	0.00%	<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Fairfax -</b>	0.00%	<b>Allocated Labor as of FY 2017</b>	\$0
<b>Loudoun/PI -</b>	0.00%		

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	0	0	0	187	570	1,551	25	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	0	0	0	585	2,565	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Non Process Facilities  
**Program Title:** Facility Land Use  
**Project ID/Project Title:** HH - Main & O Redevelopment Efforts (Formerly New Fleet Management Facility)  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2021

**Project Description:**

This project will relocate all Fleet operations from O Street and Main Pump stations site in order to accommodate the redevelopment plans for the District of Columbia in and around the new baseball stadium, Fleet Services will require a three (3) acre site, and the construction of a new 30,000 square foot vehicle service building. It is anticipated that all costs associated with the construction of this new facility along with any cost associated with site acquisition, will be reimbursed to DC Water by the District of Columbia.

**Impact on Operations:**

No significant operating cost impact.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$11,500,000
<b>Current Approved Lifetime Budget</b>	\$41,030,815
<b>Lifetime Budget Increase/Decrease</b>	\$29,530,815
<b>Allocated Labor as of FY 2017</b>	\$103,078

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,086	1,644	23,281	8,923	6,243	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,319	6,375	32,337	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies; commitments budget does not include labor)* *(\$ in thousands)*

FY 2018 - FY 2027

**Service Area Title:** Non Process Facilities  
**Program Title:** Facility Land Use  
**Project ID/Project Title:** HJ - COF Renovations  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2020

**Project Description:**

DC Water’s administration functions have outgrown their current home in the COF. Planning and design of new Administrative Headquarters building at the Main and O Street Campus is presently underway. Once complete, administrative functions, unrelated or non-critical to the plant’s functions will move to the new building. And functions that are presently forced to operate from remote or temporary facilities, will be properly housed in a modernized COF. The following modifications are proposed to assist DC Water in achieving these objectives: (1) Demolish IT Building, making space available for additional parking; (2) Renovate (Interior space) office areas to relocate the following programs to the modernized COF: DETS (from the CMF/Nitrification Blower Building), IT (from IT Building), Consultants (from Blue Plains trailers); (3) Renovate Facilities Department’s area; and (4) Add enlarged IT server.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	68.35%	<b>Previous Approved Lifetime Budget</b>	\$12,904,000
<b>EPA/Fed -</b>	0.00%	<b>Current Approved Lifetime Budget</b>	\$12,904,000
<b>WSSC -</b>	24.75%	<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Fairfax -</b>	4.53%	<b>Allocated Labor as of FY 2017</b>	\$0
<b>Loudoun/PI -</b>	0.43%		

<b>Disbursements Budget</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
	0	659	6,111	922	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
	0	1,968	10,631	305	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Non Process Facilities  
**Program Title:** Facility Land Use  
**Project ID/Project Title:** HK - CMF Renovations and Consolidation  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<u>Project Dates</u>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2020

**Project Description:**

This project will provide for the renovations and consolidation of the Central Maintenance Facility. The current design of the first floor shop areas and the mezzanine area, which is the location of lockers and kitchens (for each individual shop area), was created at the time the building was constructed and the maintenance workforce was significantly higher than what has been determined is necessary for a plant of this type and size. By consolidating these shops into smaller facilities and eliminating duplicate stored material, DC Water will be able to consolidate other functions (e.g. Facilities department functions) into this building and demolish Supply Buildings No. 1 and 2. In addition, by relocating the lockers and kitchens to the first floor, the mezzanine area can be converted into much-needed office area, that may be used by on-site project management and consulting groups. The current mezzanine floor will be doubled in size by building out over the part of the shop area below that does not need two stories.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	68.35%
EPA/Fed -	0.00%
WSSC -	24.75%
Fairfax -	4.53%
Loudoun/PI -	0.43%

Previous Approved Lifetime Budget	\$1,750,000
Current Approved Lifetime Budget	\$1,750,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	903	540	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	1,750	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Non Process Facilities  
**Program Title:** Facility Land Use  
**Project ID/Project Title:** NZ - Floatable Debris Dock Replacement  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2020

**Project Description:**

These existing facilities support one mandate of the LTCP Consent Decree, which patrols the Anacostia River to “skim” the surface clean of floatable debris passed (in part) into the river through DC Water’s combined sewer system. The existing dock facilities consist of three slips to house seven boats, one of which remains on its trailer due to lack of space. The docks are now greater than 25 years old and need to be replaced. The replacement slips (at least five) and associated new piles will allow flexibility and maneuverability of the boats, overcome the existing draft challenges of the river bottom, and most importantly, create safe conditions for the staff and their operations.

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

<b>DC -</b>	100.00%	<b>Previous Approved Lifetime Budget</b>	\$995,000
<b>EPA/Fed -</b>	0.00%	<b>Current Approved Lifetime Budget</b>	\$995,000
<b>WSSC -</b>	0.00%	<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Fairfax -</b>	0.00%	<b>Allocated Labor as of FY 2017</b>	\$0
<b>Loudoun/PI -</b>	0.00%		

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	0	145	555	447	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	0	650	0	695	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Non Process Facilities  
**Program Title:** Facility Land Use  
**Project ID/Project Title:** T4 - District Energy Buzzard Point  
**Managing Department:** Office of General Manager  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2025

**Project Description:**

The Buzzard Point Thermal Energy System (BP TES) will be a district heating and cooling network that will supply the new development near the DC United soccer stadium at Buzzard Point, as well as other nearby buildings, with thermally conditioned water for heating, cooling, and domestic hot water. This project covers the design and construction of the BP TES, including power supply alternatives assessment, siting of the energy center, and design and construction of the loop itself.

**Impact on Operations:**

There is significant operational impact. One of the main technical challenges is maintenance associated with clogging of the equipment.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>NEW</b>
<b>Previous Approved Lifetime Budget</b>	\$0
<b>Current Approved Lifetime Budget</b>	\$18,200,000
<b>Lifetime Budget Increase/Decrease</b>	\$18,200,000
<b>Allocated Labor as of FY 2017</b>	\$0

	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	6,615	7,773	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	18,200	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** DA - DWT Research / Pilot Projects  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2006
<b>Completion:</b>	FY 2017

**Project Description:**

This project is to conduct research and pilot work performed by the Department of Wastewater Treatment (DWT) and the Department of Engineering Services (DETS) in an effort to help DC Water, more cost effectively, address pending future regulations for nutrient removal and wet weather treatment.

**Impact on Operations:**

This project has no impact on current operations or operating budgets but has the potential to minimize additional operating costs resulting from the new processes required at Blue Plains. The research should identify the most appropriate and cost effective technologies that use less energy and chemicals.

**Effective Funding by User (percent):**

DC -	43.70%
EPA/Fed -	0.00%
WSSC -	43.90%
Fairfax -	8.03%
Loudoun/PI -	0.80%

**CLOSED**

Previous Approved Lifetime Budget	\$4,113,535
Current Approved Lifetime Budget	\$4,120,738
Total DC Water Allocated Labor	\$78,727
Total Project Cost	\$4,191,727

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,113	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,121	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** IX - Headworks HVAC Rehab  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2016

**Project Description:**

This project provides for modifications to the HVAC components of the Headworks Buildings including: Grit Chamber Building 1, Grit Chamber Building 2, Raw Wastewater Pumping Station 1, Raw Wastewater Pumping Station 2, East Process Screens Facility, Grit and Screenings Loading Station 1, Grit and Screenings Loading Station 2. These modifications include replacement of foul air duct work using materials more suitable for corrosive environments, additional fans and ducts to capture foul air and direct the foul air to the existing odor scrubbers, correct deficiencies in the concept of the existing HVAC system and provide updated air flow diagrams. The required facilities may require the construction of additional odor scrubber capacity.

**Impact on Operations:**

Reduction of odors and exposure to hydrogen sulfide (H2S) will improve equipment life and greatly improve working conditions for employees.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

	<b>CLOSED</b>
<b>Previous Approved Lifetime Budget</b>	\$517,929
<b>Current Approved Lifetime Budget</b>	\$786,279
<b>Total DC Water Allocated Labor</b>	\$12,223
<b>Total Project Cost</b>	\$530,223

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	518	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	786	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** TF - Grit Chamber Bldg 1&2  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 1996
<b>Completion:</b>	FY 2017

**Project Description:**

This project provides new grit removal systems consisting of traveling bridges and pumps to remove grit from the grit chambers in Grit Chamber Buildings 1 and 2. Project includes conveyance and loading systems to load the grit into transport trailers for offsite disposal. Odor Control Systems for both East and West Facilities are provided. This project is needed to replace aged equipment and upgrade process technology to improve treatment and restore integrity and reliability to the facilities.

**Impact on Operations:**

This project eliminates the current contract for vacuum truck cleaning of the screens and grit chambers, however, this savings is essentially offset by the cost of hauling an increased quantity of screenings and grit produced by the more efficient equipment. The project requires sodium hypochlorite to be used for odor control and increased electricity costs for the operation of new mechanical equipment.

**Effective Funding by User (percent):**

DC -	15.16%
EPA/Fed -	26.16%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.82%

	<b>CLOSED</b>
<b>Previous Approved Lifetime Budget</b>	\$71,045,902
<b>Current Approved Lifetime Budget</b>	\$71,170,081
<b>Total DC Water Allocated Labor</b>	\$2,208,183
<b>Total Project Cost</b>	\$73,249,183

Disbursements Budget	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
		71,041	0	0	0	0	0	0	0	0	0	0
Commitments Budget	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
		71,170	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** UD - Raw Water Pump Stations I&2  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 1999
<b>Completion:</b>	FY 2020

**Project Description:**

This project rehabilitates the pumps, motors, and drives in Raw Wastewater Pump Station I and replaces the smallest pump with a larger 80 mgd pump. The project also repairs or replaces the pump discharge conduits and provides new pump controls and pump support systems. This project rehabilitates the pumping equipment to ensure reliability of this facility.

**Impact on Operations:**

Project provides the capability to automate influent pumping which reduces labor required to monitor and control influent raw wastewater pumping.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

**CLOSED**

Previous Approved Lifetime Budget	\$15,838,083
Current Approved Lifetime Budget	\$15,838,083
Total DC Water Allocated Labor	\$844,407
Total Project Cost	\$16,682,407

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	15,838	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	15,838	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** A2 - Liquid Processing Program Management  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2031

**Project Description:**

Program management services are provided during planning, design, and construction of upgrades to the liquid wastewater treatment process at the Blue Plains AWTP, to ensure continued reliability of the facilities and compliance with the plant's NPDES discharge permit. Program management services are required because of the comprehensive nature of the upgrades throughout the plant.

**Impact on Operations:**

Program Management has no direct impact on operations; however, the impact of each project on operations is identified on individual project sheets.

**Effective Funding by User (percent):**

DC -	41.34%
EPA/Fed -	0.00%
WSSC -	45.75%
Fairfax -	8.36%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$49,579,327
<b>Current Approved Lifetime Budget</b>	\$48,461,868
<b>Lifetime Budget Increase/Decrease</b>	(\$1,117,459)
<b>Allocated Labor as of FY 2017</b>	\$558,633

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	10,985	1,226	1,320	1,217	1,948	2,166	1,667	1,378	4,666	6,694	4,532	4,338
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	14,188	0	10,274	0	0	0	0	0	18,000	0	6,000	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** B6 - Primary Sedimentation Tank Covers  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2028

**Project Description:**

This project includes the design and construction of tank covers to capture odorous off-gases from the wastewater in the primary tanks. The first stage of the project includes pilot testing to determine if covering the weirs will be adequate to reduce the odors or if the entire tank surface needs to be covered. Costs to capture and treat the captured foul air are provided in a separate project budget (B7) for installation of odor control scrubbers to treat foul air from primary sedimentation tanks.

**Impact on Operations:**

This project will improve environmental conditions for DC Water operations and maintenance personnel by reducing odors.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$43,598,000
<b>Current Approved Lifetime Budget</b>	\$43,598,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	557	898	132	3,596	3,205	19,293	7,603	120
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	2,000	0	3,500	1,148	36,950	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** B7 - Primary Sedimentation Tank Odor Scrubbers  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2032

**Project Description:**

This project includes the design and construction of air scrubbing units to treat captured odorous off-gases from the liquid surface of wastewater in the primary tanks and flowing over weirs. Project B6 Primary Sedimentation Tank Covers is proposed as a separate project which is pre-requisite to the treatment of foul air. This project, B7, addresses the treatment needs for the captured air and includes design and construction of two single-stage wet chemical (high pH only) odor scrubbers for foul air treatment on the East and West primary treatment facilities. Active foul air will be withdrawn from air tight head spaces provided by full tank coverage. Scrubbers will treat captured foul air (hydrogen sulfide and total reduced sulfur compounds) from 36 existing Primary Sedimentation Tanks.

**Impact on Operations:**

This project will improve environmental conditions for DC Water operations and maintenance personnel by reducing odors.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$45,870,000
<b>Current Approved Lifetime Budget</b>	\$45,870,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	687	105	1,775	2,107	29,957
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	981	750	3,695	1,170	39,274

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** BC - Headworks Influent Structures  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2023

**Project Description:**

This project rehabilitates the influent structures at the Blue Plains AWTP. The structures include the East Influent Sewer feeding Raw Wastewater Pump Station 1, the two West Influent Relief Sewers feeding the East Process Screens Facility and Raw Wastewater Pump Station 2 and the Equalization Conduit that connects the sewers between the influent pump stations. The structures comprise pipes and wet wells and have been in continuous service with raw wastewater from 50 to 80 years.

**Impact on Operations:**

This project will have minimal impact on maintenance and operations.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$5,050,000
<b>Current Approved Lifetime Budget</b>	\$12,190,000
<b>Lifetime Budget Increase/Decrease</b>	\$7,140,000
<b>Allocated Labor as of FY 2017</b>	\$0

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	0	0	425	522	2,753	4,158	1,802	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	0	0	860	3,280	8,050	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** BG - Dual Purpose Rehabilitation  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2021

**Project Description:**

This project replaces the sludge collection equipment, sludge and scum pumps, and other process equipment for the 8 Dual Purpose Sedimentation Basins. To optimize the Enhanced Nitrogen Removal process, this project also entails changes to dedicate 4 basins to nitrogen removal service and 4 basins to secondary treatment service.

**Impact on Operations:**

The new sludge collection equipment provides improved reliability and increased settling performance but has no significant impact on operational costs.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$32,208,297
<b>Current Approved Lifetime Budget</b>	\$34,416,405
<b>Lifetime Budget Increase/Decrease</b>	\$2,208,108
<b>Allocated Labor as of FY 2017</b>	\$711,387

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	28,363	685	1,836	1,141	4	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	30,766	3,650	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** BP - Grit Chamber Facilities Ph II  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2021

**Project Description:**

This project will serve to upgrade the East and West grit chamber buildings, structures and facilities including structural, architectural, electrical, building systems, HVAC, and mechanical/process systems and components.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

Previous Approved Lifetime Budget	\$397,000
Current Approved Lifetime Budget	\$528,026
Lifetime Budget Increase/Decrease	\$131,026
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	131	71	128	69	29	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	528	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** BQ - Grit and Screenings and Primary  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2024

**Project Description:**

This project provides structural, architectural, HVAC, and electrical repairs to the primary sedimentation tanks, conduits, and control houses as well as the preliminary treatment facilities.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$39,036,350
<b>Current Approved Lifetime Budget</b>	\$38,957,812
<b>Lifetime Budget Increase/Decrease</b>	(\$78,538)
<b>Allocated Labor as of FY 2017</b>	\$2,061

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	121	163	1,916	2,077	8,997	7,737	2,595	569	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	3,638	844	30,476	0	4,000	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** BR - Nitrification/Denitrification Fac  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2006
<b>Completion:</b>	FY 2023

**Project Description:**

The concept design report for ongoing Projects TK Biological Nutrient Removal and TQ Nitrification Facility Upgrade provided a comprehensive list of facilities and equipment that needed to be rehabilitated or replaced. The list of scope items was prioritized and the highest priority tasks were included in the Project TK and TQ scope of work for design and construction. Project BR provides for rehabilitating the lower priority tasks and includes major electrical rehabilitation of the entire facility.

**Impact on Operations:**

Maintenance and energy costs are anticipated to be reduced due to improved efficiency.

**Effective Funding by User (percent):**

<b>DC -</b>	40.66%
<b>EPA/Fed -</b>	0.56%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$53,692,771
<b>Current Approved Lifetime Budget</b>	\$51,985,669
<b>Lifetime Budget Increase/Decrease</b>	(\$1,707,102)
<b>Allocated Labor as of FY 2017</b>	\$1,036,771

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	44,917	1,508	1,486	1,250	1,022	670	243	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	49,937	-1,176	3,224	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** BT - Filtration/Disinfection Fac Ph II  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2008
<b>Completion:</b>	FY 2022

**Project Description:**

This project replaces existing switchgear F1 and F2 and appurtenances, including control panels, transformers, and control panels. Also included in the project are upgrades to Electrical Buildings 10 and 11 and a new electrical building. Reliability of the power service to the Filtration and Disinfection Facility will be improved by implementation of this project.

**Impact on Operations:**

Energy and operational cost savings will be realized by installation of variable frequency drives.

**Effective Funding by User (percent):**

DC -	36.93%
EPA/Fed -	4.73%
WSSC -	45.50%
Fairfax -	8.32%
Loudoun/PI -	0.83%

Previous Approved Lifetime Budget	\$24,966,535
Current Approved Lifetime Budget	\$24,885,293
Lifetime Budget Increase/Decrease	(\$81,242)
Allocated Labor as of FY 2017	\$687,454

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	20,431	257	580	1,106	1,603	330	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	21,121	764	0	3,000	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** BV - RWWPS No. 2 Upgrades  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2020

**Project Description:**

This project will upgrade the aging electrical equipment in the Raw Wastewater Pump Station 2 that has been exposed to hydrogen sulfide gas resulting in accelerated equipment deterioration from corrosion. This project will also replace equipment that is beyond its useful life and will relocate sensitive equipment to a less corrosive environment to maintain the investment in the equipment.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$42,695,794
<b>Current Approved Lifetime Budget</b>	\$43,798,576
<b>Lifetime Budget Increase/Decrease</b>	\$1,102,782
<b>Allocated Labor as of FY 2017</b>	\$615,764

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	9,865	10,038	4,995	235	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	40,590	3,209	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** 14 - Grit Removal Facilities - 20 Year Rebuild  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Biosolids Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2026
<b>Completion:</b>	FY 2032

**Project Description:**  
 The last upgrade to grit removal facilities was completed in 2005. These facilities have a useful life of 20 years.

**Impact on Operations:**  
 Rehabilitation prior to the end of the facilities useful lives would reduce maintenance costs if the rehabilitation project were not implemented.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$52,500,000
<b>Current Approved Lifetime Budget</b>	\$52,500,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	1,976	8,110	30,728
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	52,500	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** 15 - Raw Water Pump Stations I&2 - 20 Year Rebuild  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Biosolids Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2025

**Project Description:**

The RWWPS I pumps and motors were last rebuilt in 2007 by the RWWPS I Upgrade contract and have a useful life of 15 years. This project will replace the original pump motors and rehabilitate the pumps as well as replace the two magnetic coupling drives with variable frequency drives (VFDs).

**Impact on Operations:**

Rehabilitation prior to the end of the facilities useful lives would reduce maintenance costs if the rehabilitation project were not implemented.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$29,000,000
<b>Current Approved Lifetime Budget</b>	\$29,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	592	7,135	7,228	7,380	3,711	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	29,000	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** I7 - Primary Treatment - 20 Year Rebuild  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Biosolids Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2028

**Project Description:**

This Project is intended to be the first part of a comprehensive project that will provide the plant with the ability to seamlessly transfer power from the Biosolids Facility CHP system to critical treatment plant equipment in the event of a plant power failure. The option to break the project into two smaller projects allows the staff to have a quicker response time after the first project is complete by automating certain key components for power restoration to the backup power supply from the CHP. This first project will not provide a fully seamless load management system but will assist in the shedding of major loads to allow staff to bring the plant back online in a more manageable fashion.

**Impact on Operations:**

The project will result in no increase of operations costs.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$54,600,000
<b>Current Approved Lifetime Budget</b>	\$54,600,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	0	0	0	0	0	589	7,586	17,113	13,459	6,186
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	0	0	0	0	0	54,600	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** IY - Effluent Filter Upgrade  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2030

**Project Description:**  
 This project will rehabilitate or replace effluent filters. The scope of the project includes filter bottoms, filter media, air-water backwash system and associated appurtenances as well as the control system.

**Impact on Operations:**  
 There are no anticipated impacts on operations and maintenance costs.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$152,204,000
<b>Current Approved Lifetime Budget</b>	\$164,752,608
<b>Lifetime Budget Increase/Decrease</b>	\$12,548,608
<b>Allocated Labor as of FY 2017</b>	\$3,310

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	546	1,149	5,589	4,081	9,295	7,223	9,444	9,730	8,281	10,408	40,043	20,349
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,350	8,383	9,636	17,540	0	11,210	9,265	8,859	2,091	95,420	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** IZ - Replace/Upgrade Influent Screens  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2016
<b>Completion:</b>	FY 2032

**Project Description:**

This project will rehabilitate or replace fine screens for the Blue Plains wastewater influent. The scope of the project includes the fine screening equipment and associated appurtenances as well as the control system.

**Impact on Operations:**

There are no anticipated impacts on operations and maintenance costs.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$82,148,000
<b>Current Approved Lifetime Budget</b>	\$81,269,856
<b>Lifetime Budget Increase/Decrease</b>	(\$878,144)
<b>Allocated Labor as of FY 2017</b>	\$51,102

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,093	1,075	4,024	5,735	1,227	0	0	0	265	2,671	3,812	42,670
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,000	2,172	13,450	0	0	0	0	0	5,957	657	1,700	56,334

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** J2 - Replace/Upgrade Primary Treatment Mech.  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2031

**Project Description:**

The project will rehabilitate or replace collector mechanisms in the Primary Sedimentation Tanks at Blue Plains. The scope of the project includes the fine collector mechanisms and associated appurtenances as well as the control system.

**Impact on Operations:**

There will be no significant impact on operations and maintenance.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$18,750,000
<b>Current Approved Lifetime Budget</b>	\$22,703,539
<b>Lifetime Budget Increase/Decrease</b>	\$3,953,539
<b>Allocated Labor as of FY 2017</b>	\$7,057

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4	72	408	1,323	3,094	4,420	2,853	1,523	0	0	1	4,799
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	4,704	7,500	2,000	2,500	0	0	0	0	0	6,000	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** J6 - Deammonification Project  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2024

**Project Description:**

This project entails a large scale demonstration of an ammonia-nitrogen removal process (deammonification/nitrite shunt) and, if that proves successful, also the full scale implementation of that process in the existing tanks at Blue Plains AWTP. The deammonification/nitrite shunt process has potential to achieve significant savings in power and chemicals compared to the present nitrification/denitrification processes used to meet current and future total nitrogen limits. The existing process requires the addition of methanol as a carbon source in the denitrification process but the deammonification/nitrite shunt process would greatly reduce the methanol demand and therefore offer potentially significant operational cost savings. The funding for this project is currently limited to the initial research lab and pilot scale testing phases.

**Impact on Operations:**

This project is not anticipated to have a significant impact on maintenance or operations costs during the study phase; however, deammonification could lead to significant operational savings by reducing the need for methanol or another more costly carbon sources (e.g. ethanol).

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$3,493,000
<b>Current Approved Lifetime Budget</b>	\$3,502,636
<b>Lifetime Budget Increase/Decrease</b>	\$9,636
<b>Allocated Labor as of FY 2017</b>	\$4,865

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	193	0	18	212	429	1,333	835	34	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	240	0	1,263	0	2,000	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** JC - Secondary East and West - 20 Year Rebuild  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2025
<b>Completion:</b>	FY 2032

**Project Description:**

Upgrades to the Secondary treatment facilities were completed in 2008. Of the architectural, electrical, and ventilation systems that were not upgraded as part of the ENR-North project, these items will need to be upgraded by 2028, as they have a useful life of 20 years.

**Impact on Operations:**

Rehabilitation prior to the end of the facilities useful lives would reduce maintenance costs if the rehabilitation project were not implemented.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$96,000,000
<b>Current Approved Lifetime Budget</b>	\$96,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	512	5,528	14,315	56,487
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	50,000	0	46,000	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** LC - Effluent Disinfection Upgrades  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2023
<b>Completion:</b>	FY 2030

**Project Description:**

This project involves construction of revised and improved disinfection process equipment based upon industry experience since the last time that the chemical feed systems for disinfection were installed in 2004.

**Impact on Operations:**

Without this upgrade in place, operations will have increasing difficulties in meeting regulatory requirements for disinfection.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$8,011,000
<b>Current Approved Lifetime Budget</b>	\$8,011,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	1	700	5	263	441	4,554
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	770	0	520	0	6,666	55

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** LF - Nitrification Reactor/Sedimentation - 20 Year Rebuild  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Biosolids Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2033

**Project Description:**  
 This project will upgrade the nitrification facilities, replace the nitrification-denitrification sludge collectors, and rebuild the nitrification blowers and diffusers.

**Impact on Operations:**  
 Rehabilitation prior to the end of the facilities useful lives would reduce maintenance costs if the rehabilitation project were not implemented.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

Previous Approved Lifetime Budget	\$138,000,000
Current Approved Lifetime Budget	\$138,000,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	9	3,509	8,313	14,708	81,708
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	138,000	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** OZ - Grit Chambers 1 & 2 Upgrades  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2024

**Project Description:**

This project will provide funding for short and long term improvements to Grit Chambers 1 and 2 to address immediate safety needs of the facilities, support currently funded capital projects, support the continuation of work previously initiated and completed through the High Priority Program, and accommodate future process “tune ups” and capital improvements in order to maintain operational efficiency and performance.

**Impact on Operations:**

The potential for diminished maintenance of the grit chamber facilities could directly affect operational performance which, in an extreme case could result in the potential for non-compliance with NPDES Permit requirements and limits.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$18,500,000
<b>Current Approved Lifetime Budget</b>	\$15,177,702
<b>Lifetime Budget Increase/Decrease</b>	(\$3,322,298)
<b>Allocated Labor as of FY 2017</b>	\$37,463

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,127	708	958	509	1,423	3,675	3,595	1,980	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,168	-490	0	12,500	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** PD - Secondary East & West Upgrades  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2016
<b>Completion:</b>	FY 2024

**Project Description:**

This project will provide funding for short and longer term improvements for the Secondary Reactors/Sedimentation Basin Upgrades to reduce chemical costs, and accommodate future process “tune ups” and capital improvements in order to maintain operational efficiency and performance. Projects are also included to provide for more cost effective means for alkalinity addition and pH adjustment than are currently practiced as well as providing a safer alternative for this chemical addition.

**Impact on Operations:**

Changes to the chemical feed systems should result in both safer and more cost effective means to provide for both alkalinity addition and pH control.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$10,200,000
<b>Current Approved Lifetime Budget</b>	\$9,639,052
<b>Lifetime Budget Increase/Decrease</b>	(\$560,948)
<b>Allocated Labor as of FY 2017</b>	\$10,420

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	256	258	0	0	2	1,992	4,180	1,430	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	600	39	0	0	9,000	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** PE - Nitrification Reactor/Sedimentation Upgrades  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2023

**Project Description:**

This project will provide funding for the short term improvements Nitrification Reactors/Sedimentation Basin Upgrades to address immediate process control and safety needs of the facilities, maintain the integrity of concrete structures, and accommodate future process “tune ups” and capital improvements in order to maintain operational efficiency and performance.

**Impact on Operations:**

Implementation of this project will return/maintain the system to fully operable condition, which will allow improved process control and reduced energy consumption.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$10,950,000
<b>Current Approved Lifetime Budget</b>	\$10,400,000
<b>Lifetime Budget Increase/Decrease</b>	(\$550,000)
<b>Allocated Labor as of FY 2017</b>	\$529

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	10	54	943	1,176	2,151	2,770	884	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	300	1,900	2,400	5,800	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Liquid Processing  
**Project ID/Project Title:** UC - Filtration/Disinfection Fac  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2000
<b>Completion:</b>	FY 2021

**Project Description:**

This project upgrades the Filtration and Disinfection Facility at the Blue Plains AWTP. The project upgrades the filter influent pumps, converts the filters to an air-water wash type backwash system, which eliminates the surface wash system. Projects provide new underdrains, filter media, process aeration blowers and piping, and the instruments and controls to automatically backwash filters, using the PCCS. This project upgrades process technology to improve treatment and increase reliability of the facilities.

**Impact on Operations:**

There are no anticipated impacts on operations and maintenance costs.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$101,815,160
<b>Current Approved Lifetime Budget</b>	\$102,419,076
<b>Lifetime Budget Increase/Decrease</b>	\$603,916
<b>Allocated Labor as of FY 2017</b>	\$2,603,742

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	65,525	1,291	6,243	16,952	3,101	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	67,273	23,877	11,269	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** EN - WWTP - Central Fire Alarm System  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Health Safety

<b>Project Dates</b>	
<b>Start:</b>	FY 2008
<b>Completion:</b>	FY 2017

**Project Description:**

This project entails the construction of a central fire alarm system to deliver signals from fire alarm systems throughout the Blue Plains plant to one central location. Fire alarms throughout Blue Plains sound at the building in which a fire is detected. Installation of a central fire alarm system will deliver the local fire alarms to a location at which there is coverage 24 hours per day. Therefore, a more timely call to the fire department will result in prevention of potential damage to buildings, critical infrastructure and equipment and most importantly, improve the health and safety of employees and others on-site at Blue Plains.

**Impact on Operations:**

This project will have no impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

	<b>CLOSED</b>
<b>Previous Approved Lifetime Budget</b>	\$3,091,609
<b>Current Approved Lifetime Budget</b>	\$3,103,952
<b>Total DC Water Allocated Labor</b>	\$57,776
<b>Total Project Cost</b>	\$3,137,776

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	3,080	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	3,104	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** JY - IT - Data Center  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2020

**Project Description:**

This project upgrades and expands the existing Data Center located on the third floor of the Central Operations Facility. The Data Center needs to be expanded and upgraded to increase the facility's capacity, and maximize overall reliability and efficiency. Upgrades to the Data Center infrastructure are also needed to provide redundancy in HVAC equipment and mechanical systems, the electrical power distribution system, fire suppression system, and uninterruptible power supply (UPS) units. The objective in providing redundancy for these critical systems is to eliminate a single point of failure.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	68.35%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	24.75%
<b>Fairfax -</b>	4.53%
<b>Loudoun/PI -</b>	0.43%

**CLOSED**

<b>Previous Approved Lifetime Budget</b>	\$2,397,056
<b>Current Approved Lifetime Budget</b>	\$2,367,212
<b>Total DC Water Allocated Labor</b>	\$39,224
<b>Total Project Cost</b>	\$2,334,412

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	2,295	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	2,382	-15	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OF - Process & Service Water Rehabilitation  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2021

**Project Description:**

This project includes various improvements/rehabilitation of the plant service water system (PSW). The project includes replacement of PSW valves, evaluation of the PSW piping system, and replacement of piping as appropriate.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	0.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$3,950,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** AL - Plantwide Project Program Management  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2028

**Project Description:**

Program management services are required for planning, design, and construction of new or upgraded plantwide systems at the Blue Plains AWTP to ensure continued reliability of the facilities and compliance with the plant's NPDES discharge permit. Program management services are required because of the comprehensive nature of the upgrades throughout the plant.

**Impact on Operations:**

Program Management has no direct impact on operations; however, the impact of each project on operations is identified on individual project sheets.

**Effective Funding by User (percent):**

DC -	41.40%
EPA/Fed -	0.00%
WSSC -	45.70%
Fairfax -	8.35%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$43,552,066
<b>Current Approved Lifetime Budget</b>	\$40,760,917
<b>Lifetime Budget Increase/Decrease</b>	(\$2,791,149)
<b>Allocated Labor as of FY 2017</b>	\$218,557

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	10,268	2,306	1,280	1,432	2,742	3,599	3,073	3,073	2,204	1,997	1,367	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	14,073	3,591	5,817	9,280	0	0	8,000	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** AZ - COF Renovations  
**Managing Department:** Facilities Management  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2002
<b>Completion:</b>	FY 2021

**Project Description:**  
 This project provides for the renovation of the Central Operations Facility and will improve the functionality and appearance of the building. Project includes budget for renovation of office spaces used by the Authority's personnel, COF Windows replacement, HVAC upgrades and Landscaping, among others.

**Impact on Operations:**  
 This project has no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	71.28%
EPA/Fed -	0.00%
WSSC -	22.46%
Fairfax -	4.11%
Loudoun/PI -	0.39%

<b>Previous Approved Lifetime Budget</b>	\$17,690,206
<b>Current Approved Lifetime Budget</b>	\$17,377,368
<b>Lifetime Budget Increase/Decrease</b>	(\$312,838)
<b>Allocated Labor as of FY 2017</b>	\$623,574

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	16,969	115	123	138	48	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	17,556	-178	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** BY - Additional Chemical Systems Ph III  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2029

**Project Description:**

This project will provide additional chemical feed lines and application points for process needs such as polymer distribution in the grit chambers, polymer for spent wash water treatment, chemicals for wet weather flow treatment, and chemicals for solids recycle side stream treatment, as appropriate for each project.

**Impact on Operations:**

This project will increase operations and maintenance costs of the chemical feed pumps and systems.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$3,821,638
<b>Current Approved Lifetime Budget</b>	\$3,821,638
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	109	406	751	815	823
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	3,822	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** CH - Misc Facility Projects  
**Managing Department:** Facilities Management  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2004
<b>Completion:</b>	FY 2021

**Project Description:**

This will rehabilitate and upgrade various facilities throughout the Wastewater Treatment Plant. Upgrades to portions of the Central Maintenance Facility, trailers for consultant office space, as well as upgrades to support security and site management are included in this project.

**Impact on Operations:**

This funding will help minimize out of service time for facility related repairs and keep critical safety provisions in order.

**Effective Funding by User (percent):**

DC -	63.62%
EPA/Fed -	0.00%
WSSC -	28.41%
Fairfax -	5.20%
Loudoun/PI -	0.51%

<b>Previous Approved Lifetime Budget</b>	\$8,037,490
<b>Current Approved Lifetime Budget</b>	\$7,965,059
<b>Lifetime Budget Increase/Decrease</b>	(\$72,431)
<b>Allocated Labor as of FY 2017</b>	\$80,393

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	7,615	64	55	54	18	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	7,933	32	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** CV - Laboratory Upgrades  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Health Safety

<b>Project Dates</b>	
<b>Start:</b>	FY 2006
<b>Completion:</b>	FY 2021

**Project Description:**

This project will renovate the central laboratory building located at Blue Plains. This building was constructed around 1935 and was last renovated in the early 1980s. The project will refurbish the building interior, including floors, walls, and ceilings and replace laboratory benches, fume hoods, and the analytical equipment. This project would also abate the asbestos contained in the older building materials.

**Impact on Operations:**

There is no direct impact on the operating budget as a result of this project. However, upgrading of the laboratory, including repairs to doors and windows, upgrade of the heating, ventilation, and air conditioning systems will provide for energy savings, and provide a safe and improved work environment for the lab personnel.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$8,509,591
<b>Current Approved Lifetime Budget</b>	\$9,259,557
<b>Lifetime Budget Increase/Decrease</b>	\$749,966
<b>Allocated Labor as of FY 2017</b>	\$186,236

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,222	29	283	181	224	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,372	388	500	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** CW - Security at Blue Plains  
**Managing Department:** Security  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2005
<b>Completion:</b>	FY 2023

**Project Description:**

The Blue Plains Internal and External Security (formerly named Blue Plains Perimeter Security) provides a series of security upgrades for the Advanced Wastewater Treatment Plant at Blue Plains. These upgrades will improve security around the perimeter and throughout the plant, including increased security surveillance to oversee any delinquent activity inside and outside critical facilities at Blue Plains.

**Impact on Operations:**

This project will have no material impact on the operating budget, however minor operating costs for maintenance and monitoring of security cameras will occur in future budget years.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$6,116,761
<b>Current Approved Lifetime Budget</b>	\$6,147,920
<b>Lifetime Budget Increase/Decrease</b>	\$31,159
<b>Allocated Labor as of FY 2017</b>	\$142

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,438	428	524	600	351	200	30	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,148	1,000	2,000	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** DQ - Non-OEM PLC Interfaces/Replacements  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2018

**Project Description:**

This project is to interface the non-OEM Programmable Logic Controllers (PLCs) across the plant with the Ovation control software within the PCCS. A number of PLCs were installed to provide monitoring and control of various plant systems prior to the availability of the PCCS. There are other PLCs in the system that have been supplied with process equipment by the Original Equipment Manufacturer (OEM) to control and safe-guard specific pieces of equipment, such as the influent screens, traveling grit bridges and centrifuges. This project is to provide the non-OEM PLCs across the plant the capability, with proper interfaces, to communicate with the Ovation control software within the PCCS.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

Previous Approved Lifetime Budget	\$2,132,604
Current Approved Lifetime Budget	\$2,185,463
Lifetime Budget Increase/Decrease	\$52,859
Allocated Labor as of FY 2017	\$50,760

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,185	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,185	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** EI - Plantwide Painting of Steel Pipes  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2012
<b>Completion:</b>	FY 2024

**Project Description:**

This project entails painting the steel piping throughout the Advanced Wastewater Treatment Plant at Blue Plains. The steel pipes at Blue Plains exist in a corrosive environment and require painting to protect them from corrosion. The extent of piping, especially large diameter pipes, throughout the plant is beyond the scope of typical maintenance.

**Impact on Operations:**

This project will prevent unforeseen repair / replacement costs.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$4,960,000
<b>Current Approved Lifetime Budget</b>	\$4,960,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$557

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	60	0	0	0	227	1,430	1,448	1,249	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	80	0	0	0	4,880	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** GP - I & C & Elec - EPMC  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2011
<b>Completion:</b>	FY 2019

**Project Description:**

Professional services related to Instrumentation and Control (I&C) support and programming for new and upgraded facilities throughout Blue Plains. Specific tasks would include verifying that the designs are meeting DC Water standards for I&C and Electrical work, QA/QC of the designs for I&C and Electrical and review of I&C and Electrical shop drawings. This work is needed to ensure that the project is properly coordinated with DC Water standards for I&C and Electrical.

**Impact on Operations:**

There will be no significant impacts on operational costs.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$7,226,286
<b>Current Approved Lifetime Budget</b>	\$5,075,005
<b>Lifetime Budget Increase/Decrease</b>	(\$2,151,281)
<b>Allocated Labor as of FY 2017</b>	\$609,191

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,164	1,468	513	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	5,075	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** GW - Control Systems Replacement  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2028

**Project Description:**  
 This project will include concept design, detailed design, and installation of a system or components of the existing plant Process Control System (PCS) as the PCS reaches the end of its useful life.

**Impact on Operations:**  
 There will be significant impact on operating and maintenance budgets.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$37,000,000
<b>Current Approved Lifetime Budget</b>	\$37,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	352	437	1,382	1,177	6,843	10,684	5,987	2,716
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	1,000	1,700	400	33,900	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** HL - DWT - Process and Operations Jobs  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2011
<b>Completion:</b>	FY 2021

**Project Description:**

This project will upgrade or rehabilitate facilities and equipment through out the AWTP at Blue Plains. Examples of work to be performed, but not limited to, are upgrades to grit and screens, process service water, asbestos removal that was based on safety survey, HVAC improvements throughout the Plant.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$7,106,447
<b>Current Approved Lifetime Budget</b>	\$6,868,900
<b>Lifetime Budget Increase/Decrease</b>	(\$237,547)
<b>Allocated Labor as of FY 2017</b>	\$111,982

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,581	385	376	604	1,090	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,919	1,050	600	1,300	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** IC - Electrical Monitoring Systems  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2022

**Project Description:**

This project includes monitoring systems associated with electrical power distribution at the Advanced Wastewater Treatment Plain at Blue Plains. The activities that will be identified in this project will increase DC Water’s ability to monitor, track and assess power usage throughout the AWTP at Blue Plains. This enhanced ability will protect and enhance the current and future investment in electrical power infrastructure.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

Previous Approved Lifetime Budget	\$7,250,000
Current Approved Lifetime Budget	\$7,250,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$938

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	23	0	321	486	2,648	1,540	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	350	0	2,000	4,900	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** IU - Solar Photovoltaic System  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2022

**Project Description:**

This project has the potential to install Solar Photo Voltaic (PV) Systems at Blue Plains on multiple buildings roofs, open ground along the east perimeter road, as carpports around COF, CMF, and the dock, and as custom canopy systems over the four sedimentation basins and Filtration and Disinfection Facility. Conceptual designs for these systems in that roughly 1.2MW-AC can be installed as rooftop systems, 0.5MW-AC as ground mount systems, 2.8MW-AC as carport systems, and 10.5MW-AC as custom canopies over the basins. Associated electrical interconnections will need to be routed and connected to the DC Water electrical system.

**Impact on Operations:**

This project will reduce electricity costs by generating solar power.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$2,500,000
<b>Current Approved Lifetime Budget</b>	\$2,500,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	236	981	626	131	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	2,500	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** IV - Blue Plains IT Backbone FOC Tubes  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2016
<b>Completion:</b>	FY 2020

**Project Description:**

This project includes a condition survey of existing Blue Plains' duct-bank and gallery cable usage and installation of a new Blown Fiber system throughout the Blue Plains campus to upgrade the IT enterprise fiber network with the latest in-ground infrastructure for fiber-optic/data installation.

**Impact on Operations:**

The impact on operations will be moderate. Equipment automation, enterprise database, etc. will require increased bandwidth capability; therefore, a Blown Fiber Infrastructure can promptly respond to any unforeseen communication needs.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$5,475,000
<b>Current Approved Lifetime Budget</b>	\$5,541,899
<b>Lifetime Budget Increase/Decrease</b>	\$66,899
<b>Allocated Labor as of FY 2017</b>	\$34,337

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	696	14	697	1,569	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,000	2,342	2,200	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** JF - Construction of Flood Seawall  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2024

**Project Description:**

The project is construction of a wall to prevent flooding of the Advanced Wastewater Treatment Plant at Blue Plains from the Potomac River. The flood wall will be constructed to protect the AWTP from being inundated in a flood event up to a 500-year flood elevation with 3 feet of freeboard.

**Impact on Operations:**

There will be no significant impact on operation or maintenance budgets.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$13,234,000
<b>Current Approved Lifetime Budget</b>	\$13,668,230
<b>Lifetime Budget Increase/Decrease</b>	\$434,230
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	18	236	3,161	2,607	3,463	1,410	10	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	460	4,490	8,675	43	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** LP - Wastewater Asset Management Tech Support <sup>5</sup>  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2020

**Project Description:**

This project is to implement a comprehensive Asset Management program for Wastewater and Maintenance operations at Blue Plains. The program consists of a variety of elements, including but not limited to technology and data, maintenance and work management, reliability and condition assessment and asset life cycle management activities. Asset Management implementation is expected to take place over a five year period.

**Impact on Operations:**

Additional operating/maintenance costs will be required, but greater savings through improved asset life cycle costing is anticipated.

**Effective Funding by User (percent):**

DC -	66.66%
EPA/Fed -	0.00%
WSSC -	25.66%
Fairfax -	5.02%
Loudoun/PI -	0.47%

<b>Previous Approved Lifetime Budget</b>	\$10,000,000
<b>Current Approved Lifetime Budget</b>	\$10,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$340,192

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,328	257	271	358	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	9,892	108	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** LS - Misc. Facilities Projects FY2013  
**Managing Department:** Facilities Management  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2030

**Project Description:**

This project provides for a program of planned projects by the Department of Facilities Management for the rehabilitation, upgrade and improvement of various facilities and buildings at Blue Plains.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	63.50%
EPA/Fed -	0.00%
WSSC -	28.52%
Fairfax -	5.22%
Loudoun/PI -	0.50%

<b>Previous Approved Lifetime Budget</b>	\$8,188,346
<b>Current Approved Lifetime Budget</b>	\$15,302,828
<b>Lifetime Budget Increase/Decrease</b>	\$7,114,482
<b>Allocated Labor as of FY 2017</b>	\$161

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,894	1,187	1,225	1,708	1,357	265	268	616	412	387	393	812
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	5,613	2,439	2,500	950	0	0	0	3,800	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** LX - Process Control System Upgrade  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2023

**Project Description:**

This project addresses short-term and longer term needs of the Process Control System (PCS) for the Advanced Wastewater Treatment Plant at Blue Plains. Specifically, it includes upgrades to the system as well as development of a master plan.

**Impact on Operations:**

There will be no significant impact on operating or maintenance budgets.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$4,000,000
<b>Current Approved Lifetime Budget</b>	\$4,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	1,545	1,569	2	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	375	0	0	3,625	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OD - Plantwide Paving  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2026

**Project Description:**  
 This project will provide for paving and roadway repair at Blue Plains for areas that are not covered by other construction projects.

**Impact on Operations:**  
 This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$7,990,000
<b>Current Approved Lifetime Budget</b>	\$7,950,000
<b>Lifetime Budget Increase/Decrease</b>	(\$40,000)
<b>Allocated Labor as of FY 2017</b>	\$19,727

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	644	145	171	1,362	862	840	851	869	871	206	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,475	-25	1,500	5,000	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OE - Plantwide Drainage & Runoff  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2016
<b>Completion:</b>	FY 2026

**Project Description:**

This project will be to provide for drainage improvements and rehabilitation/replacement of existing storm water pumping stations at Blue Plains.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$7,151,050
<b>Current Approved Lifetime Budget</b>	\$15,433,230
<b>Lifetime Budget Increase/Decrease</b>	\$8,282,180
<b>Allocated Labor as of FY 2017</b>	\$24,138

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	615	135	3,288	277	651	672	681	1,486	2,284	1,538	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	750	948	4,735	4,000	0	0	0	5,000	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OG - City Water & Sewer Upgrades at WWTP  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2022

**Project Description:**

This project includes improvements/rehabilitation city water and city service water systems. Primarily it involves elimination of many of the backflow preventers located throughout the Plant and installation of break tanks to provide seal water.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$1,250,000
<b>Current Approved Lifetime Budget</b>	\$1,250,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	1	535	539	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	1,250	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OH - Plantwide Demolition  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2024

**Project Description:**

This project includes the demolition of various systems that are no longer in service. These facilities have been taken out of service due to the various ongoing construction activities, but not demolished as part of those activities. The project is proposed as a multi-year program.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

Previous Approved Lifetime Budget	\$11,100,000
Current Approved Lifetime Budget	\$11,100,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	2,414	4,716	1,985	598	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	11,100	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OI - Plantwide Painting & Signage  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2024

**Project Description:**  
 This project is a multi-year project to provide painting and signage within buildings and galleries, primarily for safety purposes.

**Impact on Operations:**  
 This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$450,000
<b>Current Approved Lifetime Budget</b>	\$450,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	0	0	0	102	254	46	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	0	0	0	450	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OK - Plantwide H2S Mitigation  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2029
<b>Completion:</b>	FY 2037

**Project Description:**

This project will be to provide for implementation of projects to provide for protection of equipment subject to damage by the effects of hydrogen sulfide. Projects may include HVAC improvements, odor control improvements and/or relocation of equipment to lesser impacted areas.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

Previous Approved Lifetime Budget	\$10,000,000
Current Approved Lifetime Budget	\$10,000,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	10,000

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OM - Plantwide Hot Water System/ Loop Rehab  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2021

**Project Description:**

This project will provide hot water for the purpose of equipment cleaning and maintenance as well as building heat. Systems will be constructed at the East and West Grit and Screenings Facilities for the purpose of cleaning grease and debris from the screens, compactors, and other equipment on a daily basis. An evaluation will be made regarding the feasibility of installing one or more chilled water loops or repurposing existing process water lines to supply building cooling. The concept will involve / evaluate hot and chilled water production in a centralized location with appropriate storage capacity. The available excess steam from CHP will also be evaluated. Recommendations deemed acceptable will be implemented through construction.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$7,650,000
<b>Current Approved Lifetime Budget</b>	\$6,066,100
<b>Lifetime Budget Increase/Decrease</b>	(\$1,583,900)
<b>Allocated Labor as of FY 2017</b>	\$29,864

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	633	849	1,590	922	391	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	3,858	2,208	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** ON - Plantwide Grounding Upgrades  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2022
<b>Completion:</b>	FY 2028

**Project Description:**

This project will evaluate the various grounding systems located throughout the Blue Plains AWTP and provide for repairs or replacement where necessary.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$5,500,000
<b>Current Approved Lifetime Budget</b>	\$5,500,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	87	317	899	989	1,538	863	11
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	446	82	4,973	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OP - Plantwide Sump Pump Rehabilitation  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2023
<b>Completion:</b>	FY 2028

**Project Description:**

This project is a multi-year project to rehabilitate and replace failing sump pumps in various places around the plant.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$1,000,000
<b>Current Approved Lifetime Budget</b>	\$1,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	0	0	0	0	0	105	315	296	169	2
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	0	0	0	0	1,000	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OQ - Plantwide Roofing Upgrades  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2022
<b>Completion:</b>	FY 2027

**Project Description:**

This project will provide for immediate roof rehabilitation where damage to roofing systems has been observed and documented as well as for planned roof replacement where roofing systems have reached the end of their 20-year expected life.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

Previous Approved Lifetime Budget	\$10,000,000
Current Approved Lifetime Budget	\$10,000,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	406	1,773	2,779	1,482	1,558	939	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	8,000	0	0	2,000	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** OS - Plantwide Lighting Upgrades  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2021

**Project Description:**

This project will serve to expand and continue the program of plantwide lighting improvements through the replacement of older roadway fixtures located on Perimeter Roads North, South, and West with more efficient fixtures that match newer fixtures in other areas of the plant. As part of this project, aging cable and conduit will also be replaced thereby providing an up to date energy efficient lighting system for the roadways along the perimeter of the plant.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$3,000,000
<b>Current Approved Lifetime Budget</b>	\$3,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	6	375	917	571	228	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	3,000	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** PF - Chemical System/Building Upgrades  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2025

**Project Description:**

This project will evaluate needs, determine condition of existing chemical unloading and feed systems, and perform the necessary upgrades/rehabilitation to the existing metal salts, sodium hypochlorite, and sodium bisulfate tanks and feed systems.

**Impact on Operations:**

Failure of any one of the systems would have similar impacts. Along with the health and safety impacts the failure of the sodium hypochlorite could result in insufficient disinfection, failure of the sodium bisulfate system could result in insufficient dechlorination and failure of the metal salts facility would impact the ability to remove Phosphorous, as well as impact primary clarifier performance. In each case, violation of the NPDES discharge permit is a possibility.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$22,500,000
<b>Current Approved Lifetime Budget</b>	\$21,592,662
<b>Lifetime Budget Increase/Decrease</b>	(\$907,338)
<b>Allocated Labor as of FY 2017</b>	\$30,992

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	613	2,589	1,197	1,998	3,716	2,749	2,104	1,161	11	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	1,445	4,648	3,000	4,500	8,000	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** TA - Process Computer Control System  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 1997
<b>Completion:</b>	FY 2018

**Project Description:**

The Process Computer Control System provides monitoring and control for the Raw Wastewater Pumping Stations, Grit and Screen Facilities, Primary and Secondary Treatment Facilities, additional Chemical Systems, alternate Disinfection System, additional Dewatering Systems, Nitrification, Filtration and Disinfection Facilities, and Gravity Thickening in the first two phases of a plant-wide system. The PCCS provides monitoring and control of key process functions such as aeration, sludge pumping, and chemical feed dosing.

**Impact on Operations:**

The new Process Control Computer System (PCCS) assists in optimizing labor, chemical and electricity costs. The system monitors power usage and permits discretionary operation of non-critical equipment during off-peak hours. Dissolved oxygen (DO) control is provided in the Secondary and Nitrification processes to match blower operation with process air needs, thereby saving power costs. PCCS in conjunction with the Grit & Screen Facility Upgrades and Gravity Thickener Upgrade is expected to save in labor costs. PCCS in conjunction with the Primary Treatment, Secondary Treatment and Nitrification Facility Upgrade projects is expected to save in labor costs.

**Effective Funding by User (percent):**

<b>DC -</b>	41.36%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.73%
<b>Fairfax -</b>	8.36%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$65,281,159
<b>Current Approved Lifetime Budget</b>	\$65,474,279
<b>Lifetime Budget Increase/Decrease</b>	\$193,120
<b>Allocated Labor as of FY 2017</b>	\$2,175,339

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	64.080	650	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	65.279	195	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** TZ - Elec Power System - Switch Gear  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2024

**Project Description:**

This project replaces switchgear and transformers throughout Blue Plains as they reach the end of their useful lives. This project is needed to update the electrical equipment and ensure reliability of the plant processes.

**Impact on Operations:**

Project has no material impact on operations costs.

**Effective Funding by User (percent):**

DC -	40.85%
EPA/Fed -	0.38%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$59,399,213
<b>Current Approved Lifetime Budget</b>	\$61,589,864
<b>Lifetime Budget Increase/Decrease</b>	\$2,190,651
<b>Allocated Labor as of FY 2017</b>	\$536,887

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	12,142	775	1,483	1,730	8,427	11,280	13,671	2,427	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	14,413	3,317	60	17,458	213	26,129	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** YD - Miscellaneous Projects  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 1999
<b>Completion:</b>	FY 2025

**Project Description:**

This project includes the study, design, and construction of miscellaneous improvements to the Blue Plains AWTP that are not included in major capital projects. Examples of such improvements include general site, roadways, truck access, process upgrades, re-roofing of the Central Maintenance Facility, and a plant-wide odor study to identify, characterize and control on-site plant odors. This project is needed to improve conditions for plant workers, neighbors, and haulers as well as improve treatment. This also includes the high priority rehabilitation program which is used to repair and replace equipment to keep systems operational until the long term upgrade projects are completed.

**Impact on Operations:**

Project has no material impact on operating costs.

**Effective Funding by User (percent):**

<b>DC -</b>	48.18%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	40.41%
<b>Fairfax -</b>	7.39%
<b>Loudoun/PI -</b>	0.74%

<b>Previous Approved Lifetime Budget</b>	\$50,305,501
<b>Current Approved Lifetime Budget</b>	\$50,734,827
<b>Lifetime Budget Increase/Decrease</b>	\$429,326
<b>Allocated Labor as of FY 2017</b>	\$1,286,804

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	42,699	310	274	1,200	1,835	1,181	846	670	329	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	43,889	570	4,476	1,800	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Plantwide  
**Project ID/Project Title:** IT - Hauled Waste Receiving Facility  
**Managing Department:** Engineering and Technical Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2023
<b>Completion:</b>	FY 2026

**Project Description:**

This project includes planning, design and construction of a hauled waste receiving facility at Blue Plains to accept hauled waste. The project may require modifications to existing infrastructure or construction of a new facility.

**Impact on Operations:**

The new facility will reduce labor required for maintenance at the current receiving location. Labor increases from this project would be a result of sampling and analysis of the hauled waste; while the new hauled waste fee structure, based on strength of waste, will result in increased revenue.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

	<b>NEW</b>
Previous Approved Lifetime Budget	\$0
Current Approved Lifetime Budget	\$5,000,000
Lifetime Budget Increase/Decrease	\$5,000,000
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	4	1,519	1,524	1,429	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	5,000	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Solids Processing  
**Project ID/Project Title:** YZ - Digestion Facilities Site Preparation  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2031

**Project Description:**

This project is comprised of two sub-projects: YZ01 Primary Sludge Screening & Degritting Wet Well Control involves installation of new controls for the primary sludge screens and the Degritting and Grinding Facility wet well at the Blue Plains AWTP; and YZ02 Digestion Facility Demolition and Site Preparation involves demolition of the decommissioned digester gas storage tank and sphere. Project YZ01 is needed to upgrade process technology to improve efficiency and reliability of sludge screening and to minimize potential for sludge spills. Project YZ02 would clear and prepare the site for future use.

**Impact on Operations:**

No significant operating cost impact.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$2,234,454
Current Approved Lifetime Budget	\$2,270,991
Total DC Water Allocated Labor	\$102,777
<b>Total Project Cost</b>	<b>\$2,335,777</b>

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,233	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,234	37	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Solids Processing  
**Project ID/Project Title:** AM - Solids Processing Program Management  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Biosolids Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2028

**Project Description:**

This project provides program management services during planning, design and construction of biosolids process upgrades at the Blue Plains AWTP. These projects will ensure continued reliability of the facilities and compliance with the plant's NPDES discharge permit. Program management services are required because of the comprehensive nature of the upgrades throughout the plant.

**Impact on Operations:**

Program Management has no direct impact on operations; however, the impact of each project on operations is identified on individual project sheets.

**Effective Funding by User (percent):**

DC -	41.72%
EPA/Fed -	0.00%
WSSC -	45.45%
Fairfax -	8.31%
Loudoun/PI -	0.83%

<b>Previous Approved Lifetime Budget</b>	\$16,062,724
<b>Current Approved Lifetime Budget</b>	\$13,041,658
<b>Lifetime Budget Increase/Decrease</b>	(\$3,021,066)
<b>Allocated Labor as of FY 2017</b>	\$1,129,390

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	5,211	706	44	450	465	673	802	842	723	533	555	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	6,692	0	2,000	4,350	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Solids Processing  
**Project ID/Project Title:** BX - Gravity Thickener Upgrades Ph II  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2022

**Project Description:**

The objective of this project is to design and construct the improvements needed to rehabilitate and upgrade the Primary Sludge Screening & Degritting Building (PSSDB) and the Gravity Thickeners (GT) at the Blue Plains Advanced Wastewater Treatment Plant (AWTP). The project will rehabilitate Gravity Thickeners 5 & 6 and replace equipment in Gravity Thickeners 7 - 10.

**Impact on Operations:**

This project will add facilities requiring operations and maintenance.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$70,839,944
<b>Current Approved Lifetime Budget</b>	\$50,696,180
<b>Lifetime Budget Increase/Decrease</b>	(\$20,143,764)
<b>Allocated Labor as of FY 2017</b>	\$167,734

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	6,538	1,740	6,355	14,099	8,586	340	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	7,078	3,860	39,759	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Solids Processing  
**Project ID/Project Title:** EV - Area Substation No. 6  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2008
<b>Completion:</b>	FY 2019

**Project Description:**

This project replaces the 5 KV switchgear, Area Substation No. 4, at the south end of the Blue Plains AWTP, which services the Filtration & Disinfection Facility and Dual Purpose Sedimentation Basins with the proposed new Area Substation No. 6. This project is needed to replace obsolete electrical equipment and ensure reliability of these critical plant processes.

**Impact on Operations:**

This project will eliminate repeated shut-downs, resulting in savings in operating costs.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$22,073,974
<b>Current Approved Lifetime Budget</b>	\$22,102,717
<b>Lifetime Budget Increase/Decrease</b>	\$28,743
<b>Allocated Labor as of FY 2017</b>	\$471,055

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	20,254	165	12	0	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	20,483	1,620	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Solids Processing  
**Project ID/Project Title:** I3 - Biosolids Blending Development Center  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Biosolids Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2021

**Project Description:**

This project, which includes a soil mixer, a concrete pad mixing area, a covered 4 bin material storage area, a covered 4 bin blended material area, and a greenhouse, will provide a facility to blend Class A biosolids with other products such as sawdust or compost to make a commercial soil amendment product. Various blends of mixed material will be used to grow plants in the greenhouse to determine the ideal blend as a soil amendment. Staff will determine the economics of different product production, so that larger commercial-scale operations can be implemented off-site.

**Impact on Operations:**

There would be no impact on Plant operations from implementing this project. However, there could be a beneficial impact on Plant operating costs through reduction in long-distance hauling of biosolids.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

Previous Approved Lifetime Budget	\$2,500,000
Current Approved Lifetime Budget	\$2,101,271
Lifetime Budget Increase/Decrease	(\$398,729)
Allocated Labor as of FY 2017	\$4,065

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	229	272	1,049	58	19	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	502	1,600	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Solids Processing  
**Project ID/Project Title:** LD - Pre-Dewatering Additional Centrifuges  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Biosolids Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2022

**Project Description:**

This project will provide two additional centrifuges and associated feed pumps, polymer pumps, solids chutes and odor control connections at the Main Process Train (MPT) pre-dewatering building. Space for the two additional centrifuges is available in the pre-dewatering building, which has 10 centrifuges that were installed under the Main Process Train project completed in 2015.

**Impact on Operations:**

The additional equipment would require additional maintenance but no new operators.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$10,155,500
<b>Current Approved Lifetime Budget</b>	\$10,155,500
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	0	0	177	426	3,457	2,859	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	850	0	9,306	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Solids Processing  
**Project ID/Project Title:** LE - High Strength Waste Receiving Facility  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Biosolids Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2023

**Project Description:**

Local, readily available high strength liquid wastes produced by industrial processing plants for food, beverages and pharmaceuticals among others, have been proven to enhance digester gas production. This project will provide a high strength waste receiving/processing facility on-site at Blue Plains. The facility would include 5 receiving tanks, freeze protection as well as pumps to transfer the pre screened liquid waste to either the Cambi thermal hydrolysis process or directly to the anaerobic digesters. Odor control would also be provided. These high strength wastes will be delivered by tanker trucks from the local area industries to the receiving facility at Blue Plains.

**Impact on Operations:**

Additional operations personnel will be required to operate the facility however the revenue generated would more than pay for the increased costs after the initial payback period.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%	<b>Previous Approved Lifetime Budget</b>	\$6,008,000
<b>EPA/Fed -</b>	0.00%	<b>Current Approved Lifetime Budget</b>	\$6,008,000
<b>WSSC -</b>	45.84%	<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Fairfax -</b>	8.38%	<b>Allocated Labor as of FY 2017</b>	\$0
<b>Loudoun/PI -</b>	0.84%		

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	0	0	0	194	500	2,854	426	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	471	5,537	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Solids Processing  
**Project ID/Project Title:** XA - New Digestion Facilities  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Biosolids Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 1999
<b>Completion:</b>	FY 2020

**Project Description:**

Project provides for construction of a new advanced digestion facility capable of anaerobically digesting all biosolids generated at the Blue Plains AWTP, as called for in the Biosolids Master Plan. The anaerobic digestion process produces Class A Biosolids and reduces the volume and weight of biosolids to be transported resulting in reduced truck traffic, odor, and noise.

**Impact on Operations:**

The new digestion facility reduces biosolids production by half, produces a stable product for beneficial reuse, and generates excess digester gas that can supply 1/3 of the plant's electrical needs. The facility provides O&M savings beginning in FY 2015

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$553,858,561
<b>Current Approved Lifetime Budget</b>	\$551,451,117
<b>Lifetime Budget Increase/Decrease</b>	(\$2,407,444)
<b>Allocated Labor as of FY 2017</b>	\$14,100,455

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	538,210	8,023	576	321	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	545,580	5,871	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Solids Processing  
**Project ID/Project Title:** XB - Centrifuge Thickener Facility  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 1999
<b>Completion:</b>	FY 2018

**Project Description:**

Project upgrades the existing Dissolved Air Flotation thickening facility, in which all biological waste secondary, nitrification and denitrification sludges generated at the Blue Plains AWTP are thickened. This project provides consistent and reliable production of thickened biological sludge at the desired concentration that is required for efficient operation of the Digester Facility.

**Impact on Operations:**

This project provides improved process efficiency and reliability, and reduces objectionable odors.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$48,669,994
<b>Current Approved Lifetime Budget</b>	\$48,702,532
<b>Lifetime Budget Increase/Decrease</b>	\$32,538
<b>Allocated Labor as of FY 2017</b>	\$2,105,356

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	48,482	59	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	48,703	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Solids Processing  
**Project ID/Project Title:** XZ - Solids Processing Building / DSLF  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 1999
<b>Completion:</b>	FY 2024

**Project Description:**

This project involves repairs to chemical systems and provides for miscellaneous improvements to the Solids Processing Building and Dewatered Sludge Loading Facility. This project replaces aged equipment to ensure integrity and reliability of the systems and facilities which results in improved performance of chemical feed systems and other solids processing operations, and improved biosolids quality. Construction of a vault and switchgear improvements at the main substation are also included in this project.

**Impact on Operations:**

This project could increase operations and maintenance cost depending on final study findings and determination of Clean Air requirements, if any. A study of emissions data is ongoing.

**Effective Funding by User (percent):**

<b>DC -</b>	40.85%
<b>EPA/Fed -</b>	0.37%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$28,690,180
<b>Current Approved Lifetime Budget</b>	\$96,381,508
<b>Lifetime Budget Increase/Decrease</b>	\$67,691,328
<b>Allocated Labor as of FY 2017</b>	\$781,109

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	14,344	264	5,730	2,605	2,275	2,044	726	446	0	0	0	48,667
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	14,772	14,760	100	2,350	0	1,900	0	0	0	0	0	62,500

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Enhanced Nitrogen Removal Facilities Project  
**Project ID/Project Title:** BI - Enhanced Nitrogen Removal North  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 1999
<b>Completion:</b>	FY 2020

**Project Description:**

This project was formally Project BI - Plantwide Fine Bubble in the Plantwide Program. The project replaces the diffusers in the Secondary Treatment process with a more efficient aeration system and rehabilitates equipment to improve reliability of the secondary treatment system to optimize the enhanced nitrogen removal process.

**Impact on Operations:**

This project will add facilities requiring operations and maintenance.

**Effective Funding by User (percent):**

<b>DC -</b>	30.66%
<b>EPA/Fed -</b>	10.56%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$75,472,420
<b>Current Approved Lifetime Budget</b>	\$76,634,230
<b>Lifetime Budget Increase/Decrease</b>	\$1,161,810
<b>Allocated Labor as of FY 2017</b>	\$1,836,212

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	71,058	3,424	184	32	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	75,749	885	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Enhanced Nitrogen Removal Facilities Project  
**Project ID/Project Title:** E8 - Enhanced Clarification Facilities  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2008
<b>Completion:</b>	FY 2021

**Project Description:**

The Enhanced Clarification Facility (ECF) is part of DC Water's proposed Total Nitrogen -Wet Weather (TN/WW) Plan, which addresses the requirements of the Long Term Control Plan as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The principal components of this project are grit removal and screening for influent wastewater followed by an enhanced clarification facility. The new facilities will treat excess flow during wet weather events.

**Impact on Operations:**

Operation of the ECF will increase operating and maintenance costs, and specifically power and chemical costs.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$216,424,443
<b>Current Approved Lifetime Budget</b>	\$218,170,591
<b>Lifetime Budget Increase/Decrease</b>	\$1,746,148
<b>Allocated Labor as of FY 2017</b>	\$5,133,372

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	121,427	23,533	2,891	397	21	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	214,689	3,481	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Enhanced Nitrogen Removal Facilities Project  
**Project ID/Project Title:** E9 - Nitrogen Removal Facilities  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2020

**Project Description:**

This project entails a new or expanded nutrient removal system to lower the concentration of total nitrogen in the Blue Plains effluent to 3 mg/l. The Total Nitrogen Removal Project is part of DC Water’s proposed Total Nitrogen -Wet Weather (TN/WW) Plan, which addresses the requirements of the Long Term Control Plan as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The principal components of this project are this project and Project EE, Centrate Treatment Facilities. Project EE provides for a new treatment system that will remove nitrogen from the recycle stream from solids processing.

**Impact on Operations:**

Operation of the new system will significantly increase operating and maintenance costs. Increased chemical addition and power consumption comprise most of the cost increase.

**Effective Funding by User (percent):**

<b>DC -</b>	35.66%	<b>Previous Approved Lifetime Budget</b>	\$271,456,712
<b>EPA/Fed -</b>	5.57%	<b>Current Approved Lifetime Budget</b>	\$272,794,063
<b>WSSC -</b>	45.83%	<b>Lifetime Budget Increase/Decrease</b>	\$1,337,351
<b>Fairfax -</b>	8.38%	<b>Allocated Labor as of FY 2017</b>	\$6,181,796
<b>Loudoun/PI -</b>	0.84%		

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	268.411	1.458	344	75	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	272.714	80	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Enhanced Nitrogen Removal Facilities Project  
**Project ID/Project Title:** EE - Filtrate Treatment Facilities  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Project Dates</u>	
<b>Start:</b>	FY 2008
<b>Completion:</b>	FY 2020

**Project Description:**

This project provides for a new treatment system that will remove nitrogen from the recycle stream from solids processing. The Total Nitrogen Removal Project is part of DC Water’s proposed Total Nitrogen -Wet Weather (TN/WW) Plan, which addresses the requirements of the Long Term Control Plan as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The principal components are the TN/WW(EE) and project E9, Total Nitrogen Removal. Project E9 entails a new or expanded nitrogen removal process to lower the concentration of total nitrogen in the Blue Plains effluent to 3 mg/l.

**Impact on Operations:**

Operation of the new system will significantly increase operating and maintenance costs beginning in FY 2015. Increased chemical addition and power consumption comprise most of the cost increase.

**Effective Funding by User (percent):**

<b>DC -</b>	40.29%	<b>Previous Approved Lifetime Budget</b>	\$106,345,012
<b>EPA/Fed -</b>	0.93%	<b>Current Approved Lifetime Budget</b>	\$108,479,598
<b>WSSC -</b>	45.84%	<b>Lifetime Budget Increase/Decrease</b>	\$2,134,586
<b>Fairfax -</b>	8.38%	<b>Allocated Labor as of FY 2017</b>	\$2,502,313
<b>Loudoun/PI -</b>	0.84%		

<b>Disbursements</b>	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Budget</b>	95.470	5.011	1.902	411	0	0	0	0	0	0	0	0
<b>Commitments</b>	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Budget</b>	103.188	5.292	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Enhanced Nitrogen Removal Facilities Project  
**Project ID/Project Title:** EG - Blue Plains Tunnel  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Long Term Control Plan Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2020

**Project Description:**

The Blue Plains Tunnel is part of DC Water's proposed Total Nitrogen - Wet Weather (TN/WW) Plan, which addresses the requirements of the Long Term Control Plan as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The principal components of this project are a 23 foot diameter tunnel from Main and O Streets to Blue Plains. The Blue Plains Tunnel has been included in the draft TN/Wet Weather Plan that DC Water submitted to the USEPA. The recommended alternative in the plan removes additional nitrogen from the wastewater prior to discharge and improves the quality of discharge to the Potomac and Anacostia Rivers during wet weather events.

**Impact on Operations:**

Dewatering pump station costs will increase operating and maintenance costs beginning in FY 2018.

**Effective Funding by User (percent):**

<b>DC -</b>	41.22%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.84%
<b>Fairfax -</b>	8.38%
<b>Loudoun/PI -</b>	0.84%

<b>Previous Approved Lifetime Budget</b>	\$177,380,058
<b>Current Approved Lifetime Budget</b>	\$177,523,513
<b>Lifetime Budget Increase/Decrease</b>	\$143,455
<b>Allocated Labor as of FY 2017</b>	\$3,356,920

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	158,400	67	27	8	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	176,190	1,333	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Enhanced Nitrogen Removal Facilities Project  
**Project ID/Project Title:** FG - Secondary Treatment Upgrades for TN  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2008
<b>Completion:</b>	FY 2020

**Project Description:**

This project will expand Secondary Reactors 5 and 6 to double their size to provide adequate secondary treatment capacity for the AWTP at Blue Plains design capacity. This project includes a study phase to assess the most sustainable and cost-effective process to increase the secondary treatment capacity.

**Impact on Operations:**

This project would improve Plant performance but would have marginal increased operational and maintenance costs.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$57,141,625
<b>Current Approved Lifetime Budget</b>	\$57,159,843
<b>Lifetime Budget Increase/Decrease</b>	\$18,218
<b>Allocated Labor as of FY 2017</b>	\$56,915

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,775	0	441	0	0	7	1,280	914	11,049	22,203	8,555	1,060
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,775	500	0	0	0	144	3,065	66	50,328	0	1,282	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Enhanced Nitrogen Removal Facilities Project  
**Project ID/Project Title:** FR - BP Tunnel Dewatering Pumping Sta  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2020

**Project Description:**

This pump station located at Blue Plains at the terminus and lowest point of the tunnel system is designed to dewater the entire contents of the tunnel system and pump it to treatment at Blue Plains treatment plant during and after a rain event.

**Impact on Operations:**

The dewatering pump station is an integral part of the underground storage solution to CSO control. Without a dewatering pump station a deep underground storage tunnel solution cannot be employed. Operations and maintenance costs will increase.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$33,486,972
<b>Current Approved Lifetime Budget</b>	\$34,533,602
<b>Lifetime Budget Increase/Decrease</b>	\$1,046,630
<b>Allocated Labor as of FY 2017</b>	\$1,471,635

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	27,132	2,746	739	329	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	33,172	1,362	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Enhanced Nitrogen Removal Facilities Project  
**Project ID/Project Title:** FS - Bolling Overflow & Diversion  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Long Term Control Plan Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2018

**Project Description:**

This project will include a diversion chamber to capture overflows from the Potomac outfall sewers and direct them into the Anacostia CSO tunnel during a rain event and an overflow structure for the Anacostia CSO tunnel when it reaches it's full capacity. It also includes the internals of the tunnel drop shaft which is constructed a part of Blue Plains tunnel project. This is one of the two overflows for the Anacostia CSO tunnel system.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	0.84%

<b>Previous Approved Lifetime Budget</b>	\$53,404,794
<b>Current Approved Lifetime Budget</b>	\$54,013,180
<b>Lifetime Budget Increase/Decrease</b>	\$608,386
<b>Allocated Labor as of FY 2017</b>	\$2,427,371

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	35,726	9,615	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	53,405	608	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Wastewater Treatment Service Area  
**Program Title:** Enhanced Nitrogen Removal Facilities Project  
**Project ID/Project Title:** LM - ENR Program Management  
**Managing Department:** Department of Wastewater Engineering  
**EPMC:** Nitrogen Removal Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2018

**Project Description:**

Program management services are provided during planning, design, and construction of upgrades to the nitrogen removal facilities at the Blue Plains AWTP to ensure continued reliability of the facilities and compliance with the plant's NPDES discharge permit. Program management services are required for the Enhanced Nitrogen Removal Program due to the size and scope of the projects that comprise this program.

**Impact on Operations:**

Program Management has no direct impact on operations; however, the impact of each project on operations is identified on individual project sheets.

**Effective Funding by User (percent):**

<b>DC -</b>	41.67%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	45.49%
<b>Fairfax -</b>	8.32%
<b>Loudoun/PI -</b>	0.83%

<b>Previous Approved Lifetime Budget</b>	\$43,381,069
<b>Current Approved Lifetime Budget</b>	\$36,780,124
<b>Lifetime Budget Increase/Decrease</b>	(\$6,600,945)
<b>Allocated Labor as of FY 2017</b>	\$65,745

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	8,271	7,750	8,217	1,512	1,514	1,332	768	1,004	883	470	478	0
<b>Commitments Budget</b>	20,828	9,324	6,030	0	0	0	598	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** DC Clean Rivers  
**Project ID/Project Title:** CY - Anacostia LTCP Projects  
**Managing Department:** DC Clean Rivers Project  
**EPMC:** Long Term Control Plan Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2005
<b>Completion:</b>	FY 2023

**Project Description:**

A tunnel will be constructed in 3 segments; the first extends from the Blue Plains Treatment Plant north following the route of the Potomac crosses underneath the Anacostia River north of Poplar Point and terminates at Main and O Pump Station. The second segment commences at Poplar Point crosses the Anacostia runs along the Navy Yard and terminates just south of RFK stadium. The third segment runs from the stadium north east past the national arboretum to the Rhode Island Avenue metro station and will then follow a southwest alignment along Rhode Island Avenue. Construction also includes smaller diameter pipelines or tunnels to intercept flooding in the northeast boundary area and redirect it to the tunnel. In addition, the project includes the construction of numerous surface structures such as diversion chambers to convey flow to the tunnels and overflow structures to relieve the system if overwhelmed.

**Impact on Operations:**

The project will result in increased operations and maintenance costs related to the tunnels, pumping station, intercepting sewer and various diversion structures. Additional operations and maintenance costs will also be incurred for monitoring the completed facilities to assess performance of the CSO controls against predictions established as part of LTCP development.

**Effective Funding by User (percent):**

<b>DC -</b>	90.86%
<b>EPA/Fed -</b>	4.53%
<b>WSSC -</b>	3.66%
<b>Fairfax -</b>	0.62%
<b>Loudoun/PI -</b>	0.06%

<b>Previous Approved Lifetime Budget</b>	\$1,910,974,965
<b>Current Approved Lifetime Budget</b>	\$1,943,833,552
<b>Lifetime Budget Increase/Decrease</b>	\$32,858,587
<b>Allocated Labor as of FY 2017</b>	\$17,927,902

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	1,148,865	126,476	156,776	132,951	121,241	145,383	83,989	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	1,865,051	35,972	42,811	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** DC Clean Rivers  
**Project ID/Project Title:** CZ - Potomac LTCP Projects  
**Managing Department:** DC Clean Rivers Project  
**EPMC:** Long Term Control Plan Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2029

**Project Description:**

The purpose of this project is to capture and provide storage for combined sewer overflows (CSOs) being discharged to the Potomac River. The project comprises construction of a tunnel approximately 3 miles long with a volume of about 58 million gallons, along the Georgetown bank of the river. Construction also includes a pumping station near the Kennedy Center to dewater the tunnel to the existing collection system for treatment of the stored CSO at Blue Plains and various diversion structures to convey combined sewer flow to the tunnel.

**Impact on Operations:**

The project will result in increased operations and maintenance costs related to the tunnels, pumping station, intercepting sewer and various diversion structures. Additional operations and maintenance costs will also be incurred for monitoring the completed facilities to assess performance of the CSO controls against predictions established as part of LTCP development.

**Effective Funding by User (percent):**

<b>DC -</b>	93.91%	<b>Previous Approved Lifetime Budget</b>	\$614,099,999
<b>EPA/Fed -</b>	0.03%	<b>Current Approved Lifetime Budget</b>	\$562,322,753
<b>WSSC -</b>	4.73%	<b>Lifetime Budget Increase/Decrease</b>	(\$51,777,246)
<b>Fairfax -</b>	0.86%	<b>Allocated Labor as of FY 2017</b>	\$63,212
<b>Loudoun/PI -</b>	0.09%		

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	40.310	20.418	24.790	14.510	16.484	29.739	42.178	53.825	36.900	104.145	75.496	71.312
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	71.741	10.024	66.524	0	19.000	30.100	333.934	0	31.000	0	0	0

*(projected disbursements do not include contingencies; commitments budget does not include labor)* (\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** DC Clean Rivers  
**Project ID/Project Title:** DZ - Rock Creek CSS LTCP Project  
**Managing Department:** DC Clean Rivers Project  
**EPMC:** Long Term Control Plan Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2030

**Project Description:**

The purpose of this project is to manage combined sewer overflows (CSO) being discharged to Piney Branch, a tributary to Rock Creek. The work comprises construction of green infrastructure to manage 365 acres of impervious surfaces and modifications to the Piney Branch diversion structure. When completed, the work is expected to reduce CSOs to Rock Creek to 4 overflows per year.

**Impact on Operations:**

The project will result in increased operations and maintenance costs.

**Effective Funding by User (percent):**

DC -	99.85%
EPA/Fed -	0.15%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$238,939,080
<b>Current Approved Lifetime Budget</b>	\$258,099,080
<b>Lifetime Budget Increase/Decrease</b>	\$19,160,000
<b>Allocated Labor as of FY 2017</b>	\$24,542

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	10,469	21,420	7,826	581	564	17,737	24,944	5,744	13,119	24,259	11,701	97,312
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	41,370	2,155	2,619	0	0	46,279	0	0	52,533	0	55,734	57,409

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Program Management  
**Project ID/Project Title:** AV - CSO Program Management <sup>4</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<u>Project Dates</u>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2025

**Project Description:**

Project AV provides engineering project management services for planning, design and rehabilitation projects for DC Water’s combined sewer system for the purpose of reducing adverse impact of combined sewer overflow to the receiving waters

**Impact on Operations:**

Program Management has no direct impact on operations; however, the impact of each project on operations is identified on individual project sheets.

**Effective Funding by User (percent):**

DC -	98.91%
EPA/Fed -	1.09%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$64,562,827
<b>Current Approved Lifetime Budget</b>	\$64,662,619
<b>Lifetime Budget Increase/Decrease</b>	\$99,792
<b>Allocated Labor as of FY 2017</b>	\$722,893

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	25,065	1,934	1,969	2,518	3,495	4,373	4,339	3,012	1,821	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	41,375	3,922	0	19,365	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

4 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted was or will be derived and adopted in accordance with Blue Plains IMA Agreement of 2012 section 5.B 'Determination of Multi Jurisdictional Facilities (MJUFs)'.



FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** BH - Rock Creek CSO Projects  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2004
<b>Completion:</b>	FY 2015

**Project Description:**

These are Combined Sewer System (CSS) Long Term Control Plan (LTCP) early action projects. The regulators at outfalls 033, 036, 047 and 057 will be evaluated to determine if additional combined sewer flows can be contained within the sewer to reduce CSOs to Rock Creek. The CSS area served by outfalls 031, 037, 053, and 058 will be separated into an independent sanitary system and storm sewer system thus eliminating these outfalls and the resultant CSO.

**Impact on Operations:**

Elimination of the outfalls indicated will reduce operating costs by reducing the need for the periodic inspections effort.

<b>Effective Funding by User (percent):</b>		<b>CLOSED</b>	
<b>DC -</b>	52.24%	<b>Previous Approved Lifetime Budget</b>	\$16,670,115
<b>EPA/Fed -</b>	47.76%	<b>Current Approved Lifetime Budget</b>	\$16,670,115
<b>WSSC -</b>	0.00%	<b>Total DC Water Allocated Labor</b>	\$652,944
<b>Fairfax -</b>	0.00%	<b>Total Project Cost</b>	\$15,656,944
<b>Loudoun/PI -</b>	0.00%		

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	15,004	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	16,670	0	0	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies; commitments budget does not include labor) (\$ in thousands)*

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** KI - Main & O St. Pump Stations<sup>3</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<u>Project Dates</u>	
<b>Start:</b>	FY 1999
<b>Completion:</b>	FY 2017

**Project Description:**

Project KI provides for the restoration of the capacity of the Main Pumping Station to its rated flow of 240 MGD and the O Street Pumping Station to 45 MGD. Work will include rebuilding and upgrading the sanitary pumps.

**Impact on Operations:**

Rehabilitation of these stations will increase the amount of flow that can be pumped to Blue Plains thus reducing the quantity of overflows. The project make the facilities safer for personnel by improving the ventilation, providing odor control, installing new lighting, replacing handrails and other safety features, repairing various structural defects in the two structures and eliminating the need to handle screenings by hand.

**Effective Funding by User (percent):**

DC -	55.40%
EPA/Fed -	44.60%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	CLOSED
Previous Approved Lifetime Budget	\$79,900,723
Current Approved Lifetime Budget	\$79,905,638
Total DC Water Allocated Labor	\$2,300,622
<b>Total Project Cost</b>	<b>\$79,704,622</b>

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	77,404	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	79,906	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>3</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013 .

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** BA - DC Water Low Impact Development  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Long Term Control Plan Program Manager  
**Priority:** Court Ordered, Stipulated Agreements, Etc.

<b>Project Dates</b>	
<b>Start:</b>	FY 2002
<b>Completion:</b>	FY 2020

**Project Description:**

This project was developed in accordance with DC Water's commitment to promote Low Impact Development (LID) to control wet weather related pollution, DC Water has or will under take projects to implement LID technology at its own facilities, when and where possible. In addition to reduce stormwater runoff and thereby contribute to the water quality of the receiving waters, this also provides DC Water the opportunity to examine effectiveness of various LID techniques.

**Impact on Operations:**

There will be some increase in O&M activities when these projects are implemented.

**Effective Funding by User (percent):**

DC -	96.79%
EPA/Fed -	3.21%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$2,934,753
<b>Current Approved Lifetime Budget</b>	\$2,869,506
<b>Lifetime Budget Increase/Decrease</b>	(\$65,247)
<b>Allocated Labor as of FY 2017</b>	\$46,235

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,749	312	74	17	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,446	424	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** EJ - Potomac Pumping Station-Ph III Rehab <sup>3</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2020

**Project Description:**

This project will provide a general upgrade to this station that was placed in service in 1963. It will provide for the replacement of the four existing screens, replacement of gate valve actuators, additional sluice gates between the pumps and the wet well, and a replacement lighting system. It will also provide a new fire alarm and suppression system.

**Impact on Operations:**

While there is no financial impact on operations, this project will increase the efficiency and decrease the maintenance costs associated with the Potomac Pumping Station, as well as provide the flexibility to reroute influent from any wet well to another pump, easing the ability to do maintenance while still processing the maximum amount of flows for the station.

**Effective Funding by User (percent):**

<b>DC -</b>	52.52%
<b>EPA/Fed -</b>	1.69%
<b>WSSC -</b>	26.53%
<b>Fairfax -</b>	13.37%
<b>Loudoun/PI -</b>	0.68%

<b>Previous Approved Lifetime Budget</b>	\$22,784,411
<b>Current Approved Lifetime Budget</b>	\$22,784,411
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$1,181,536

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	16,442	2,248	1,596	36	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	22,454	330	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>3</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013 .

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** EK - Long Term Rehab-Main & O Pump Sta <sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<u>Project Dates</u>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2030

**Project Description:**

This project will provide for a 30-year upgrade to the Main Pumping Station and the O Street Pumping Stations. This project will replace the Main Pumping Station's sanitary pumps, motors and controls, all six storm pumps, motors and controls, rebuild or replace various large gates in the channels, provide a new roof, provide general HVAC improvements and provide a new and separate pumping station for the low area sewer. This project will replace the O Street Pumping Station's six storm pumps, motors and controls as necessary and provide miscellaneous structural, architectural and electrical upgrades. It will also provide various site improvements around both stations. Parts of this project that pertained to rehabilitation, and identified as necessary prior to 2019, have been rescheduled under a new project (FQ). Accordingly, the budget for this project has been reduced to reflect the cost of such work transferred to the new Project (FQ).

**Impact on Operations:**

While there is minimal financial impact on Operations, this project provides new sanitary and storm pumps, that will be more efficient than the ones currently in place, which were cast into the concrete in 1908 when the station was built. It also provides the long-term upgrade needed for the station for the next 30 years, and installs variable frequency drives to protect the large motors during startup, when the wet wells are unable to provide the flows necessary to cool such large motors.

**Effective Funding by User (percent):**

DC -	89.70%
EPA/Fed -	0.00%
WSSC -	10.30%
Fairfax -	0.00%
Loudoun/PI -	0.00%

Previous Approved Lifetime Budget	\$55,644,000
Current Approved Lifetime Budget	\$55,644,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	19	51	2,014	6,228	3,520	2,565	4,585	16,545
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	6,094	0	15,885	300	12,435	515	0	20,415

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** EL - Swirl Facility Rehabilitation  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2008
<b>Completion:</b>	FY 2020

**Project Description:**

This project will provide a partial rehabilitation to this facility that was placed in service in 1990. It will provide for the replacement of deteriorated chemical pumps, repair structural damage done by chemicals, make repairs to the control system and wiring for the chemical pumps, replace deteriorated conduits and wiring in the screen room and swirl room as necessary, replace damaged components of HVAC system and repair the control system for the mixing chamber.

**Impact on Operations:**

There will be no significant impacts on operational costs.

**Effective Funding by User (percent):**

DC -	97.98%
EPA/Fed -	2.02%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$4,570,215
<b>Current Approved Lifetime Budget</b>	\$4,450,215
<b>Lifetime Budget Increase/Decrease</b>	(\$120,000)
<b>Allocated Labor as of FY 2017</b>	\$72,423

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,719	26	67	2	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,194	171	0	85	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** EQ - Potomac Pumping Station-Ph IV Rehab <sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<u>Project Dates</u>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2021

**Project Description:**

This project will provide a general upgrade to this station that was placed in service in 1963. It will provide for architectural improvements, painting throughout the station, new men’s and women’s ADA compliant restrooms, an odor control system, and VFD’s for the two large pumps.

**Impact on Operations:**

This project will have no material impact on the operating budget, but will provide protection for the large pumps by installing variable frequency drives to more efficiently handle start ups.

**Effective Funding by User (percent):**

DC -	49.80%
EPA/Fed -	0.00%
WSSC -	29.40%
Fairfax -	14.70%
Loudoun/PI -	0.60%

Previous Approved Lifetime Budget	\$2,325,000
Current Approved Lifetime Budget	\$2,325,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$931,762

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	45	86	1,371	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	325	0	2,000	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** FQ - Main & O St. PS Intermediate Upgrade <sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2022

**Project Description:**

This project will provide for needed replacement of storm water pumps and various sluice gates and gate valves at the Main and O Street Pumping Stations. At Main Pump Station, this project will replace three storm pumps, motors and controls and add a new sluice gate to isolate the suction side of Pump No. 4. Also, the project will replace large valves and sluice gates as well as replacing the discharge flap gates on all six storm pumps. At the O Street Pumping Station this project will replace seven gate valves on the suction and discharge of the four sanitary pumps and automate these gate valves to improve control of the flow within the station. Odor control will be addressed as well as screenings conveyance and handling.

**Impact on Operations:**

There will be no significant impacts on operational costs.

**Effective Funding by User (percent):**

<b>DC -</b>	93.40%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	6.60%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

<b>Previous Approved Lifetime Budget</b>	\$46,184,945
<b>Current Approved Lifetime Budget</b>	\$46,184,945
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$430,132

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	4,609	8,380	6,028	5,430	2,742	1,331	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	20,774	2,291	12,205	10,595	320	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.



FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** FX - Rehab Northeast Boundary Sewer-Ph I  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2030

**Project Description:**

This project will repair several segments of the lower portion of the Northeast Boundary Trunk Sewer (NEBT). The proposed project will rehabilitate approximately 5,700 feet of the sewer from structure B-1098 to structure N-36141, using the appropriate rehabilitation methods.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$18,500,000
<b>Current Approved Lifetime Budget</b>	\$18,591,070
<b>Lifetime Budget Increase/Decrease</b>	\$91,070
<b>Allocated Labor as of FY 2017</b>	\$174,894

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	2,712	228	4	157	513	547	5,236	4,216	69	43	37	96
<b>Commitments Budget</b>	3,573	500	0	231	1,232	924	12,131	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** FZ - Tiber Creek Sewer Lining-Ph I  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2026

**Project Description:**

This project will rehabilitate approximately 6,300 total feet between two sewer segments of the Tiber Creek Trunk Sewer. This project will fix all observed structural defects, restore the structural integrity of the sewer, reduce root intrusion, improve hydraulic capacity and reduce infiltration and inflow into the sewer.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$17,113,000
<b>Current Approved Lifetime Budget</b>	\$17,838,000
<b>Lifetime Budget Increase/Decrease</b>	\$725,000
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	305	441	0	190	729	4,290	6,519	615	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	50	0	1,147	0	0	1,048	1,572	14,022	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** G7 - Combined Sewers Under Buildings<sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<u>Project Dates</u>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2020

**Project Description:**

This new project is the outcome of the recommendations of a comprehensive Sewer System Assessment (SSA) commissioned by DC Water. This study recommended certain High Priority rehabilitation projects that needed to be undertaken to fix structural defects and restore structural integrity of the sewer system. This project rehabilitates combined sewers located under buildings Citywide identified as high priority activities under the SSA. Other activities included in this project are cleaning, pre and post CCTV, sealing joints and repair of offset pipe.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$15,980,798
<b>Current Approved Lifetime Budget</b>	\$15,980,798
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$541,425

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	7,881	291	863	3,763	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,233	317	6,815	616	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** IH - Combined Sewer Rehabilitation 2  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2023

**Project Description:**

This multi-job project to rehabilitate combined sewers in various locations throughout the District is one aspect of the Service Life Improvement Plan outlined in the Sewer System Facilities Plan. Sewer infrastructure to be rehabilitated is prioritized based on the criticality given to sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as any necessary replacement of offset pipes. Multiple jobs provide the annualized program to rehabilitate the large sewer inventory which exhibit deteriorated conditions.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC - 100.00%  
 EPA/Fed - 0.00%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%

<b>Previous Approved Lifetime Budget</b>	\$24,833,200
<b>Current Approved Lifetime Budget</b>	\$24,833,200
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$175,122

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	13,990	82	0	61	1,692	3,626	652	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	15,248	0	0	700	8,885	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** IP - Tiber Creek Trunk Sewer Rehabilitation  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2022
<b>Completion:</b>	FY 2026

**Project Description:**

This project involves the rehabilitation of severely deteriorated sections found at various locations on three (3) segments of the Tiber Creek Combined Trunk Sewer between Massachusetts Avenue NW to the north and N Street SE to the south (approximately 65 locations total) using appropriate rehabilitation techniques. The size of the trunk sewer ranges from 14'-0" by 14'-3" to 10'-5" by 24'-0". Project also includes the cleaning of the entire 6,400 LF combined sewer main, pre- and post CCTV inspections, reinstating service connections and other related activities.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$8,250,000
<b>Current Approved Lifetime Budget</b>	\$8,250,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	108	427	2,241	3,276	363	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	528	924	6,798	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Combined Sewer Overflow Service Area  
**Program Title:** Combined Sewer  
**Project ID/Project Title:** OB - Inflatable Dams Replacement FY24  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<u>Project Dates</u>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2027

**Project Description:**

This project is for the design and construction of inflatable dams, downward opening gates, or bending weirs to replace the eight existing inflatable dams in the system. Alternatives to replacing these dams with other than inflatable dams are to be addressed at time of the replacement. The dams that will be replaced with in-kind dams involve the replacement of the rubber bladder, anchors, and mechanical components associated with the dam operation. Where the dams will be replaced with downward opening gates or bending weirs the existing dam, mechanical equipment, and control vault will be demolished. Then the replacement gates or weirs will be installed within the existing sewer.

**Impact on Operations:**

Not implementing this project may result in the failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC - 100.00%  
 EPA/Fed - 0.00%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%

<b>Previous Approved Lifetime Budget</b>	\$6,675,000
<b>Current Approved Lifetime Budget</b>	\$6,675,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	0	0	0	0	0	136	388	3,807	1,000	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	0	0	0	0	0	626	626	5,423	0	0

*(projected disbursements do not include contingencies; commitments budget does not include labor) (\$ in thousands)*

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** Local Drainage  
**Project ID/Project Title:** A6 - Lining 22nd & P Sts. NW/NWBSO Repair  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2015

**Project Description:**

This project is for the investigation, design and repair of the existing 8'-3" diameter Northwest Boundary Interceptor Sewer which has shown signs of structural defects during prior inspections. The project will decrease further deterioration of the asset.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

**CLOSED**

Previous Approved Lifetime Budget	\$3,039,588
Current Approved Lifetime Budget	\$1,537,016
Total DC Water Allocated Labor	\$166,210
<b>Total Project Cost</b>	<b>\$1,707,210</b>

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,541	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,537	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** Local Drainage  
**Project ID/Project Title:** GY - Storm Sewer Rehab Various Location  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2020

**Project Description:**

This multi-job project rehabilitates storm sewers located throughout the District. Storm sewer infrastructure to be rehabilitated is prioritized based on the criticality given to inspected sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as the repair of any offset pipe. Multiple jobs provide the annualized program to rehabilitate the storm sewer inventory which exhibits deteriorated conditions and is located under buildings.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$5,680,000
<b>Current Approved Lifetime Budget</b>	\$5,676,000
<b>Lifetime Budget Increase/Decrease</b>	(\$4,000)
<b>Allocated Labor as of FY 2017</b>	\$65,380

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	930	92	75	344	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,442	0	1,234	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** Local Drainage  
**Project ID/Project Title:** IE - Storm Sewer Rehabilitation 3  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2026

**Project Description:**

This project rehabilitates storm sewers located throughout the District. Storm sewer infrastructure to be rehabilitated is prioritized based on the criticality given to inspected sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as the repair of any offset pipe. Multiple jobs provide the annualized program to rehabilitate the storm sewer inventory which exhibits deteriorated conditions and is located under buildings.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$7,016,500
<b>Current Approved Lifetime Budget</b>	\$7,016,500
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	10	69	629	267	861	1,050	219	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	144	202	2,013	413	2,287	1,957	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** BD - FY2011 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2011
<b>Completion:</b>	FY 2014

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

**CLOSED**

Previous Approved Lifetime Budget	\$618,000
Current Approved Lifetime Budget	\$581,016
Total DC Water Allocated Labor	\$2,409
<b>Total Project Cost</b>	<b>\$540,409</b>

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	538	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	581	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** CN - FY2013 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2018

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

**CLOSED**

Previous Approved Lifetime Budget	\$660,000
Current Approved Lifetime Budget	\$669,488
Total DC Water Allocated Labor	\$2,084
<b>Total Project Cost</b>	<b>\$671,566</b>

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	669	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	660	9	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** DX - FY2016 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2016
<b>Completion:</b>	FY 2018

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

**CLOSED**

Previous Approved Lifetime Budget	\$720,000
Current Approved Lifetime Budget	\$786,803
Total DC Water Allocated Labor	\$3,811
Total Project Cost	\$790,614

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	787	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	720	67	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** FN - FY2017 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2019

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$745,000
<b>Current Approved Lifetime Budget</b>	\$745,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	125	375	166	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	125	605	15	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** H5 - FY2018 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2020

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$770,000
<b>Current Approved Lifetime Budget</b>	\$770,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	536	68	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	770	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** HM - FY2019 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2020

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

Previous Approved Lifetime Budget	\$794,000
Current Approved Lifetime Budget	\$794,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	373	229	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	794	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** JH - FY2020 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2021

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$820,000
<b>Current Approved Lifetime Budget</b>	\$820,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	371	237	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	820	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** LO - FY2021 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2022

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$845,000
<b>Current Approved Lifetime Budget</b>	\$845,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	380	244	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	845	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** M8 - FY2022 - DSS Stormwater Projects  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2022
<b>Completion:</b>	FY 2023

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$820,000
<b>Current Approved Lifetime Budget</b>	\$820,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	500	201	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	820	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** MG - FY2023 - DSS Stormwater Projects  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2023
<b>Completion:</b>	FY 2024

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$844,600
<b>Current Approved Lifetime Budget</b>	\$844,600
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	521	211	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	845	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** NV - FY2024 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2025

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

Previous Approved Lifetime Budget	\$870,000
Current Approved Lifetime Budget	\$870,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	550	216	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	870	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** PI - FY2025 - DSS Stormwater Projects  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2025
<b>Completion:</b>	FY 2026

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$896,000
<b>Current Approved Lifetime Budget</b>	\$896,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	248	528	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	896	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** QA - FY2026 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2026
<b>Completion:</b>	FY 2027

**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2026 for stormwater infrastructure rehabilitation of the existing stormwater system. Job numbers will be issued to identify different jobs within the project.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>NEW</b>
Previous Approved Lifetime Budget	\$0
Current Approved Lifetime Budget	\$923,000
Lifetime Budget Increase/Decrease	\$923,000
Allocated Labor as of FY 2017	\$0

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	223	498	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	923	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** T9 - FY2027 - DSS Stormwater Projects  
**Managing Department:** Sewer Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2027
<b>Completion:</b>	FY 2028

**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2027 for stormwater infrastructure rehabilitation of the existing stormwater system. Job numbers will be issued to identify different jobs within the project.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>NEW</b>
Previous Approved Lifetime Budget	\$0
Current Approved Lifetime Budget	\$950,000
Lifetime Budget Increase/Decrease	\$950,000
Allocated Labor as of FY 2017	\$0

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	237	466
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	0	950	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** NG - Stormwater Pump Stations Rehabilitation  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<u>Project Dates</u>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2028

**Project Description:**

This project provides for the rehabilitation of 12 of the 16 stormwater pumping stations that were not upgraded in the last 5 years. These stations are aging and require new mechanical and electrical equipment to maintain operations.

**Impact on Operations:**

This project has no material impacts on the operating budget.

**Effective Funding by User (percent):**

DC -	99.92%
EPA/Fed -	0.08%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$25,000,000
<b>Current Approved Lifetime Budget</b>	\$25,232,000
<b>Lifetime Budget Increase/Decrease</b>	\$232,000
<b>Allocated Labor as of FY 2017</b>	\$98,119

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	115	69	3,410	375	1,134	4,065	19	0	0	305	1,397	1,433
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,202	2,970	6,060	200	9,800	0	0	0	0	950	4,050	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** P5 - FY2004 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2004
<b>Completion:</b>	FY 2014

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	0.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

**CLOSED**

Previous Approved Lifetime Budget	\$20,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	\$5,405
Total Project Cost	\$5,405

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** P8 - FY2007 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2007
<b>Completion:</b>	FY 2007

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	0.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$155,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** P9 - FY2008 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2008
<b>Completion:</b>	FY 2008

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	0.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$1,000,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** AR - FY2009 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2015

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

<b>Effective Funding by User (percent):</b>													<b>CLOSED</b>	
DC -	0.00%											Previous Approved Lifetime Budget	\$160,000	
EPA/Fed -	0.00%											Current Approved Lifetime Budget	\$0	
WSSC -	0.00%											Total DC Water Allocated Labor		
Fairfax -	0.00%											Total Project Cost		
Loudoun/PI -	0.00%													
<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>		
Budget	0	0	0	0	0	0	0	0	0	0	0	0		
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>		
Budget	0	0	0	0	0	0	0	0	0	0	0	0		

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** B3 - FY2010 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2015

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	0.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$165,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** BM - FY2011 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2015

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	0.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$170,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** CB - FY2012 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

**Project Dates**  
**Start:**  
**Completion:**

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC - 0.00%  
 EPA/Fed - 0.00%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%

	CLOSED
Previous Approved Lifetime Budget	\$175,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements Budget	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
	Commitments Budget	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** CL - FY2013 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2017

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	0.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$180,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** D8 - FY2014 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2017

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	0.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$185,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	185	-185	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** DK - FY2015 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<u>Project Dates</u>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2017

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	0.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	CLOSED
Previous Approved Lifetime Budget	\$191,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	191	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** DT - FY2016 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2017

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

<b>Effective Funding by User (percent):</b>		<b>CLOSED</b>											
DC -	0.00%											Previous Approved Lifetime Budget	\$196,000
EPA/Fed -	0.00%											Current Approved Lifetime Budget	\$0
WSSC -	0.00%											Total DC Water Allocated Labor	
Fairfax -	0.00%											Total Project Cost	
Loudoun/PI -	0.00%												
<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>	
Budget	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>	
Budget	0	0	0	0	0	0	0	0	0	0	0	0	

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** FM - FY2017 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** Sewer Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2015

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	0.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$205,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** H4 - FY2018 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2019

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$215,000
<b>Current Approved Lifetime Budget</b>	\$3,017,000
<b>Lifetime Budget Increase/Decrease</b>	\$2,802,000
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	3,017	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** HP - FY2019 - DDOT Stormwater Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** Sewer Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2015

**Project Description:**

This project is for the annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$220,000
<b>Current Approved Lifetime Budget</b>	\$220,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	220	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** Research & Program Management  
**Project ID/Project Title:** AT - Stormwater Program Management  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2025

**Project Description:**

This project provides engineering program management services for the stormwater service area capital projects and design management services for the rehabilitation or replacement of 15 stormwater pumping stations. It also provides engineering services for condition assessment of the storm sewer system and development of conceptual design for the storm sewer system capital projects.

**Impact on Operations:**

Program Management has no direct impact on operations; however, the impact of each project on operations is identified on individual project sheets.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$12,013,222
<b>Current Approved Lifetime Budget</b>	\$12,013,222
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$284,543

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,753	314	156	36	115	402	204	163	128	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	10,325	55	0	1,634	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Stormwater Service Area  
**Program Title:** Trunk/Force Sewers  
**Project ID/Project Title:** BO - Future Stormwater Projects  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2005
<b>Completion:</b>	FY 2021

**Project Description:**

This project provides design and construction services for stormwater sewer interceptors, trunk sewers and force mains that require upgrades. Sewers rehabilitated by this project are defined by the major planning and condition assessment program underway for the stormwater sewer system. As the assessment of the storm sewer system progresses and specific rehabilitation needs are identified, jobs will be created under this project to remediate system problems.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	96.45%
EPA/Fed -	3.55%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$15,597,208
<b>Current Approved Lifetime Budget</b>	\$15,365,208
<b>Lifetime Budget Increase/Decrease</b>	(\$232,000)
<b>Allocated Labor as of FY 2017</b>	\$413,991

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	7,357	95	194	966	377	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	14,596	359	10	401	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** JX - Sanitary Sewer Rehabilitation 10  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2023

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the city.

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$13,600,000
<b>Current Approved Lifetime Budget</b>	\$13,600,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$30,743

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	3	6	6	2,185	2,528	106	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	297	0	0	13,303	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** JU - Sanitary Sewer Rehabilitation I3  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2023

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$15,175,000
<b>Current Approved Lifetime Budget</b>	\$15,175,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	52	400	3,486	2,060	205	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	1,011	1,521	12,643	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** JS - Sanitary Sewer Rehabilitation I5  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2023

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$13,830,250
<b>Current Approved Lifetime Budget</b>	\$13,830,250
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	55	499	3,999	1,330	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	1,000	1,400	11,430	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** PY - Sanitary Sewer Rehabilitation I 6  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2023

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$16,100,000
<b>Current Approved Lifetime Budget</b>	\$16,100,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	186	743	5,741	69	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	706	15,394	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** LK - Sanitary Sewer Rehabilitation 17  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2023

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$16,100,000
<b>Current Approved Lifetime Budget</b>	\$16,100,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	49	372	3,849	2,197	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	1,040	1,820	13,240	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** LL - Sanitary Sewer Rehabilitation I8  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2023
<b>Completion:</b>	FY 2026

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$16,582,000
<b>Current Approved Lifetime Budget</b>	\$16,582,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	453	942	6,633	133	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	1,467	15,115	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** NF - Sanitary Sewer Rehabilitation 19  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2024

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$15,164,000
<b>Current Approved Lifetime Budget</b>	\$15,164,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	82	523	3,648	2,675	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	1,400	2,160	11,604	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** MO - Sanitary Sewer Rehabilitation 20  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2027

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$15,000,000
<b>Current Approved Lifetime Budget</b>	\$15,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	397	919	6,183	139	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	1,200	13,800	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** NI - Sanitary Sewer Rehabilitation 21  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2027

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$17,100,000
<b>Current Approved Lifetime Budget</b>	\$17,100,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	90	584	5,041	3,192	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	1,300	2,000	13,800	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** MP - Sanitary Sewer Rehabilitation 22  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2023
<b>Completion:</b>	FY 2026

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$17,600,000
<b>Current Approved Lifetime Budget</b>	\$17,600,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	381	1,229	7,113	30	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	1,236	16,364	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** NC - Sanitary Sewer Rehabilitation 23  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2023
<b>Completion:</b>	FY 2026

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$17,600,000
<b>Current Approved Lifetime Budget</b>	\$17,600,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	104	681	5,003	3,073	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	1,600	2,291	13,709	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** MZ - Sanitary Sewer Rehabilitation 24  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2027

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$18,100,000
<b>Current Approved Lifetime Budget</b>	\$18,100,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	377	1,092	7,478	107	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	1,273	16,827	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** NX - Sanitary Sewer Rehabilitation 25  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2027

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$18,664,000
<b>Current Approved Lifetime Budget</b>	\$18,664,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	123	759	6,986	1,488	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	1,960	0	16,704	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** NY - Sanitary Sewer Rehabilitation 26  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2025
<b>Completion:</b>	FY 2027

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$19,100,000
<b>Current Approved Lifetime Budget</b>	\$19,100,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	555	1,761	7,883	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	1,600	17,500	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** QB - Sanitary Sewer Rehabilitation 27  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2026
<b>Completion:</b>	FY 2028

**Project Description:**

This multi-job project to rehabilitate sanitary sewers in various locations throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer infrastructure to be rehabilitated is prioritized based on the criticality given to sewer segments. Sewer infrastructure will be rehabilitated utilizing appropriate lining methods as well as any necessary replacement of offset pipes. Multiple jobs provide the annualized program to rehabilitate the large sewer inventory which exhibits deteriorated conditions.

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$45,000,000
<b>Current Approved Lifetime Budget</b>	\$45,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	1,204	3,974	15,288
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	3,800	41,200	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** J3 - Sewer Upgrade - City Wide  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2022

**Project Description:**

This project is for the assessment, design and construction of sanitary sewer interceptors, trunk sewers and force mains that require upgrade. Sewers rehabilitated by this project are defined by the major planning and condition assessment program underway for the sanitary sewer system. This project consists of four jobs to address sewer upgrade needs. It increases the reliability, restores the integrity, and maintains the capacity of DC Water's sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$18,003,710
<b>Current Approved Lifetime Budget</b>	\$18,003,710
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$953,095

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	5,174	1,928	1,170	393	562	157	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	14,072	1,439	0	2,493	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** GI - Small Local Sewer Rehab I  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2019

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the City.

**Impact on Operations:**

Not implementing this project may result in the failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$28,114,327
<b>Current Approved Lifetime Budget</b>	\$28,451,868
<b>Lifetime Budget Increase/Decrease</b>	\$337,541
<b>Allocated Labor as of FY 2017</b>	\$566,261

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	9,196	2,319	16	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	24,594	3,858	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** G8 - Small Local Sewer Rehab 2  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2018

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 10,000 liner feet of defective sewer pipes with an average sewer diameter of 18 inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$2,842,234
<b>Current Approved Lifetime Budget</b>	\$2,869,092
<b>Lifetime Budget Increase/Decrease</b>	\$26,858
<b>Allocated Labor as of FY 2017</b>	\$240,432

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,219	14	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,550	319	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** G9 - Small Local Sewer Rehab 3  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2018

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 20,000 liner feet of defective sewer pipes with an average sewer diameter of 18 inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$368,000
<b>Current Approved Lifetime Budget</b>	\$368,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$62,770

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	303	3	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	363	5	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** GA - Small Local Sewer Rehab 4  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2018

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 30,000 liner feet of defective sewer pipes with an average sewer diameter of 18 inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$8,557,261
<b>Current Approved Lifetime Budget</b>	\$8,557,261
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$352,189

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,904	220	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,170	388	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** U3 - B St/NJ Ave Trunk Sewer Rehab - Phase 2  
**Managing Department:** Engineering and Technical Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2022
<b>Completion:</b>	FY 2025

**Project Description:**

This project addresses the remaining rehabilitation of the B Street/New Jersey Avenue Trunk Sewer following completion of the Phase I Rehabilitation. The 4-mile long brick and concrete sewer was constructed circa 1900, and is a major sewer conveying flows from the Rock Creek Main Interceptor and Easby Point Trunk Sewer to the Main Pumping Station. Phase 2 activities will include renewal of much of the upper 7,000 linear feet of circular sewer.

**Impact on Operations:**

This project will increase the remaining useful life of this critical asset, and reduce the risk of emergency repair work.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>NEW</b>
<b>Previous Approved Lifetime Budget</b>	\$0
<b>Current Approved Lifetime Budget</b>	\$20,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$20,000,000
<b>Allocated Labor as of FY 2017</b>	\$0

	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Disbursements Budget</b>	0	0	0	0	0	737	645	4,625	2,595	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	3,000	17,000	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** QE - Operations Paving for CIP Projects  
**Managing Department:** Sewer Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function  
**Project Description:**  
**Impact on Operations:** No operating cost impact.

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2037

**Effective Funding by User (percent):**

	<b>NEW</b>
DC -	Previous Approved Lifetime Budget
EPA/Fed -	\$0
WSSC -	Current Approved Lifetime Budget
Fairfax -	\$33,653
Loudoun/PI -	Lifetime Budget Increase/Decrease
	\$33,653
	Allocated Labor as of FY 2017
	\$0

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	34	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Collection Sewers  
**Project ID/Project Title:** QC - Sanitary Sewer Rehabilitation 28  
**Managing Department:** Sewer Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2027
<b>Completion:</b>	FY 2029

**Project Description:**

This multi-job project to rehabilitate sanitary sewers in various locations throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer infrastructure to be rehabilitated is prioritized based on the criticality given to sewer segments. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as any necessary replacement of offset pipes. Multiple jobs provide the annualized program to rehabilitate the large sewer inventory which exhibits deteriorated conditions.

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>NEW</b>
<b>Previous Approved Lifetime Budget</b>	\$0
<b>Current Approved Lifetime Budget</b>	\$55,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$55,000,000
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	1,561	23,134
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	4,650	50,350

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** Q3 - FY2003 - DSS Sanitary Sewer Projects  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2003
<b>Completion:</b>	FY 2018

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

<b>DC -</b>	85.34%
<b>EPA/Fed -</b>	14.66%
<b>WSSC -</b>	0.00%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

<b>Previous Approved Lifetime Budget</b>	\$13,863,052
<b>Current Approved Lifetime Budget</b>	\$13,863,052
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$798,172

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	9,419	159	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	11,321	2,542	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** BF - FY2011 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2011
<b>Completion:</b>	FY 2018

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$8,165,000
<b>Current Approved Lifetime Budget</b>	\$8,174,644
<b>Lifetime Budget Increase/Decrease</b>	\$9,644
<b>Allocated Labor as of FY 2017</b>	\$26,652

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,776	67	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,175	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** D6 - FY2014 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2018

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$10,575,000
<b>Current Approved Lifetime Budget</b>	\$10,575,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$100,901

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,762	1,250	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	10,575	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** DI - FY2015 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2018

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$10,846,000
<b>Current Approved Lifetime Budget</b>	\$11,187,982
<b>Lifetime Budget Increase/Decrease</b>	\$341,982
<b>Allocated Labor as of FY 2017</b>	\$113,849

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	10,214	591	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	11,188	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** DW - FY2016 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2019

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$14,600,593
<b>Current Approved Lifetime Budget</b>	\$14,600,593
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$63,163

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	13,476	601	257	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	14,601	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** FP - FY2017 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2017
<b>Completion:</b>	FY 2019

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$11,500,000
<b>Current Approved Lifetime Budget</b>	\$11,500,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$22,481

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,634	4,362	555	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	7,987	3,513	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** H6 - FY2018 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2019

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$11,845,000
<b>Current Approved Lifetime Budget</b>	\$11,845,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	2,971	2,880	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	11,845	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** HN - FY2019 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2020

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$12,200,000
<b>Current Approved Lifetime Budget</b>	\$12,200,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	5,925	4,417	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	12,200	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** JJ - FY2020 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2021

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$12,568,000
<b>Current Approved Lifetime Budget</b>	\$12,568,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	5,058	5,754	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	12,568	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** LN - FY2021 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2022

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$12,945,000
<b>Current Approved Lifetime Budget</b>	\$12,945,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	0	0	0	0	4,645	5,358	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	12,945	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** M9 - FY2022 - DSS Sanitary Sewer Projects  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2022
<b>Completion:</b>	FY 2023

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$13,335,350
<b>Current Approved Lifetime Budget</b>	\$13,335,350
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	4,624	5,658	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	13,335	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** MF - FY2023 - DSS Sanitary Sewer Projects  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2023
<b>Completion:</b>	FY 2024

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$13,735,411
<b>Current Approved Lifetime Budget</b>	\$13,735,411
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	4,877	5,886	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	13,735	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** NW - FY2024 - DSS Sanitary Sewer Projects  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2025

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$14,224,914
<b>Current Approved Lifetime Budget</b>	\$14,224,914
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	5,192	6,074	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	14,225	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** OX - FY2025 - DSS Sanitary Sewer Projects  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2025
<b>Completion:</b>	FY 2026

**Project Description:**

This project is for the annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$14,650,000
<b>Current Approved Lifetime Budget</b>	\$14,650,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	5,328	6,143	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	14,650	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** PZ - FY2026 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2026
<b>Completion:</b>	FY 2027

**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2026 for sanitary infrastructure improvements. Job numbers will be issued to identify location of projects.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>NEW</b>
Previous Approved Lifetime Budget	\$0
Current Approved Lifetime Budget	\$15,090,000
Lifetime Budget Increase/Decrease	\$15,090,000
Allocated Labor as of FY 2017	\$0

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	5,447	6,317	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	15,090	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** T8 - FY2027 - DSS Sanitary Sewer Projects  
**Managing Department:** Sewer Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2027
<b>Completion:</b>	FY 2028

**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2027 for sanitary infrastructure improvements. Job numbers will be issued to identify location of projects.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>NEW</b>
Previous Approved Lifetime Budget	\$0
Current Approved Lifetime Budget	\$15,550,000
Lifetime Budget Increase/Decrease	\$15,550,000
Allocated Labor as of FY 2017	\$0

	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	5,706	5,967
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	0	15,550	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** HB - DSS Sewer Pumping Project  
**Managing Department:** Sewer Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2017

**Project Description:**

This project will support the Department of Sewer Services pumping maintenance program. Large, expensive, and long lived equipment needs to be periodically replaced due to wear or premature failure. Major pumps, motors, valves, screens and related equipment will be replaced or rebuilt in each of the department's more than twenty pump stations as needed.

**Impact on Operations:**

Failure to proceed with this project will increase overtime and parts and labor costs in the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$4,560,000
Current Approved Lifetime Budget	\$3,952,705
Total DC Water Allocated Labor	\$14,002
<b>Total Project Cost</b>	<b>\$3,966,706</b>

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,953	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,953	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** CX - Sewer Facilities Security Upgrades  
**Managing Department:** Security  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2020

**Project Description:**

This project will provide for a security assessment, placement of exterior and interior cameras throughout Sewer Services Facilities, install traffic control devices (i.e., bollards & speed bumps), and install perimeter fencing (i.e., shoreline enclosures).

**Impact on Operations:**

This project will have no material impact on the operating budget, however minor O & M costs for maintenance and monitoring of security cameras will occur in future budget years.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$1,335,076
<b>Current Approved Lifetime Budget</b>	\$1,334,311
<b>Lifetime Budget Increase/Decrease</b>	(\$765)
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	815	102	0	14	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,282	0	0	52	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** GZ - Sewer Instrumentation & Control<sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2012
<b>Completion:</b>	FY 2019

**Project Description:**

This project will provide instrumentation and control enhancements at sewer pump stations and other sewer facilities located outside of Blue Plains throughout the District. The proposed controls would maximize flows to Blue Plains in wet weather, automate data capture for more efficient responses and optimize energy use at the sewer facilities. Project includes installation of flow meters, rain gauges, and SCADA equipment and controls. This project is a suggested project in the 2009 Sewer System Facilities Plan.

**Impact on Operations:**

Project would reduce wet weather CSO flow during high intensity, short duration events, reduce energy costs and would increase the useful life of DC Water facilities.

**Effective Funding by User (percent):**

DC -	91.08%
EPA/Fed -	0.00%
WSSC -	5.67%
Fairfax -	2.45%
Loudoun/PI -	0.17%

Previous Approved Lifetime Budget	\$8,785,000
Current Approved Lifetime Budget	\$8,785,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$222,249

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,527	609	212	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	6,285	2,500	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** LY - Sewer Facilities Security Upgrades  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2023

**Project Description:**

This project will provide an upgrade to the Sewage Service Facilities & CSOs requiring immediate security attention to implement exterior and interior security elements (CCTV cameras, access card readers, sensors, etc), other control surveillance devices and systems to protect the existing infrastructure and critical assets against vandalism, criminal activity, and possible future terrorism; as well as to protect DC Water personnel.

**Impact on Operations:**

This project will have no material impact on the operating budget, however, minor O & M costs for maintenance and monitoring of security cameras will occur in future budget years.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$2,000,000
<b>Current Approved Lifetime Budget</b>	\$2,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	14	46	48	29	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	2,000	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** MB - 3rd St & Constitution Ave NW PS  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2024

**Project Description:**

This project provides for the rehabilitation of the 3rd Street and Constitution Avenue NW, Pumping Station. Job MB01 (3rd Street and Constitution Avenue NW, Pumping Station Interim Rehabilitation) provides for the rehabilitation or replacement of most electrical and mechanical equipment and instrumentation in the station and the installation of an odor control system. Job MB02 (3rd Street and Constitution Avenue NW, Pumping Station Long-Term Rehabilitation) provides for the installation or replacement of several major items in the station including a new entrance to the wet well, replacement of the switchgear and feeders, and rehabilitation of the force main.

**Impact on Operations:**

This project will have no material impact on operating budgets.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$7,373,800
<b>Current Approved Lifetime Budget</b>	\$7,373,800
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$142,598

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,582	36	11	11	10	662	1,326	214	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,308	0	0	0	0	5,065	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** MC - Additional Sewer SCADA System Sites  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2016
<b>Completion:</b>	FY 2022

**Project Description:**

This project implements recommendations of the 2013 SCADA Master Plan. It is to add additional sites and also optimize the existing Sewer SCADA System. The initial focus will be to develop standards, implement changes needed for existing SCADA sites to conform to the standards, and perform system-wide testing to promote reliable monitoring and control of Sewer System SCADA sites. The project also includes assessments to leverage SCADA for Energy Management, additional operational reports and organizational performance matrices in support of the Blue Horizon 2020 strategic plan. In the future, a fully optimized SCADA will move Sewer operations from an operator-based automation system to a centralized computer decision system that forecasts demand and continuously calculates optimal system settings within established operating constraints.

**Impact on Operations:**

The primary purpose of the SCADA System is to monitor the health of the distribution system and control water system equipment in order to meet water quality requirements and customer needs. Water and sewer operators need to understand alarms and see discrepancies between known field conditions and SCADA System displays. This affects operations ability to make effective operating decisions and respond appropriately to unexpected changes in system operation.

**Effective Funding by User (percent):**

<b>DC -</b>	100.00%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	0.00%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

<b>Previous Approved Lifetime Budget</b>	\$8,000,000
<b>Current Approved Lifetime Budget</b>	\$8,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$34,609

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	483	548	139	626	953	157	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	2,843	271	4,886	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** PM - East Side Pumping Station  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2022

**Project Description:**

The East Side Pumping Station does not have any upgrades planned in the future, but the Department of Distribution and Conveyance Systems has requested installation of a screenings handling system of conveyors with washer and compactor to facilitate more efficient operations.

**Impact on Operations:**

This project will have no material impact on operating budgets.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

Previous Approved Lifetime Budget	\$4,000,000
Current Approved Lifetime Budget	\$4,000,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	66	170	1,308	55	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	400	3,600	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** PT - Existing Sewer Facilities Building Optimization  
**Managing Department:** Facilities Management  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2023

**Project Description:**

To meet EPA guidelines for energy efficiency, water efficiency, sustainable buildings, renewable energy, safety requirements, and environmental management systems, all DC Water buildings, supporting sewer pumping, should be upgraded to an electronic integrated Building Automation System for proper performance and remote control monitoring related with HVAC, Plumbing Elevators, and Life Safety Equipment. The Sewer Pumping Buildings requiring upgrades are as follows: Main Pumping Station (\$305,000), O Pumping Station (\$200,000), and Potomac Pumping Station (\$200,000).

**Impact on Operations:**

This project will have no material impact on operating budgets.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$705,000
<b>Current Approved Lifetime Budget</b>	\$705,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	6	15	83	205	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	15	50	640	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Program Management  
**Project ID/Project Title:** AU - Sanitary Sewer Program Management <sup>4</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2025

**Project Description:**

This project provides engineering program management services for the sanitary sewer service area in the District. This multi-year project involves planning, assessments, and conceptual designs for capital projects related to the sanitary sewer system. This project also provides design management services for the rehabilitation of sewage pumping stations. This project increases the reliability, restores the integrity, and maintains the capacity of DC Water’s sanitary sewer system.

**Impact on Operations:**

Program Management has no direct impact on operations; however, the impact of each project on operations is identified on individual project sheets.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$75,900,704
<b>Current Approved Lifetime Budget</b>	\$75,900,703
<b>Lifetime Budget Increase/Decrease</b>	(\$1)
<b>Allocated Labor as of FY 2017</b>	\$286,289

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	40,788	1,506	998	1,311	3,071	4,052	4,437	3,386	2,566	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	54,734	366	0	20,800	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies; commitments budget does not include labor)* (\$ in thousands)

<sup>4</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted was or will be derived and adopted in accordance with Blue Plains IMA Agreement of 2012 section 5.B 'Determination of Multi Jurisdictional Facilities (MJUFs)'.



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Program Management  
**Project ID/Project Title:** DN - Sewer Inspection Program  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2027

**Project Description:**  
 The program will provide an ongoing effort to further inspect the Authority's existing sewer system

**Impact on Operations:**  
 This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	97.22%
EPA/Fed -	0.00%
WSSC -	2.78%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$54,889,922
<b>Current Approved Lifetime Budget</b>	\$44,071,342
<b>Lifetime Budget Increase/Decrease</b>	(\$10,818,580)
<b>Allocated Labor as of FY 2017</b>	\$373,432

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	10,925	1,294	1,875	5,894	1,961	2,358	2,540	2,742	2,585	1,624	115	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	12,714	12,440	2,500	5,186	601	2,079	2,000	4,383	2,170	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Program Management  
**Project ID/Project Title:** LR - Sanitary Sewer Asset Management<sup>4</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2019

**Project Description:**

This project is to implement a comprehensive Asset Management program for Sanitary Sewer operations. The program consists of a variety of elements, including but not limited to technology and data, maintenance and work management, reliability and condition assessment and asset life cycle management activities. Asset Management implementation is expected to take place over a five year period.

**Impact on Operations:**

Additional operating/maintenance costs will be required, but greater savings through improved asset life cycle costing is anticipated.

**Effective Funding by User (percent):**

DC -	75.51%
EPA/Fed -	0.00%
WSSC -	18.78%
Fairfax -	3.74%
Loudoun/PI -	0.35%

<b>Previous Approved Lifetime Budget</b>	\$5,000,000
<b>Current Approved Lifetime Budget</b>	\$4,999,500
<b>Lifetime Budget Increase/Decrease</b>	(\$500)
<b>Allocated Labor as of FY 2017</b>	\$169,321

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,026	199	201	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,633	0	367	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>4</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted was or will be derived and adopted in accordance with Blue Plains IMA Agreement of 2012 section 5.B 'Determination of Multi Jurisdictional Facilities (MJUFs)'.

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** A4 - Future Sewer System Upgrades <sup>3</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2004
<b>Completion:</b>	FY 2020

**Project Description:**

This project is to design and construct sanitary sewer interceptors, trunk sewers and force mains identified as requiring upgrade by the major planning and condition assessment program underway for the sanitary sewer system. This project is needed to construct new and rehabilitate or replace aged infrastructure to restore integrity and reliability of DC Water's sanitary sewer system.

**Impact on Operations:**

This project includes activities that will enhance system reliability and reduce emergency maintenance or repairs. Therefore, the project provides cost avoidance to future operating budgets.

**Effective Funding by User (percent):**

DC -	75.25%
EPA/Fed -	5.45%
WSSC -	14.70%
Fairfax -	3.46%
Loudoun/PI -	0.22%

<b>Previous Approved Lifetime Budget</b>	\$43,455,666
<b>Current Approved Lifetime Budget</b>	\$43,669,088
<b>Lifetime Budget Increase/Decrease</b>	\$213,422
<b>Allocated Labor as of FY 2017</b>	\$3,328,719

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	24,779	2,000	1,676	1,009	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	33,977	1,898	5,446	2,348	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>3</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013 .

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** DM - UAMI Relief Sewer  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2024

**Project Description:**

The existing Upper Anacostia Main Interceptor (UAMI) conveys sewage from the Eastland Gardens and Kenilworth neighborhoods to the Upper Anacostia Pumping Station on Anacostia Avenue, NE. The UAMI was constructed in the early 1930's and ranges in size from 18-inches to 24-inches in diameter. Due to population growth and pipe deterioration, the UAMI trunk and collection sewers were assessed for rehabilitation and capacity needs. This project includes the construction of a new 30-inch relief sanitary sewer and several repairs to the collection sewers tributary to the UAMI.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$14,505,255
<b>Current Approved Lifetime Budget</b>	\$17,125,764
<b>Lifetime Budget Increase/Decrease</b>	\$2,620,509
<b>Allocated Labor as of FY 2017</b>	\$55,176

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	477	0	231	318	47	3,186	3,976	11	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	477	0	1,240	189	199	15,021	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** DR - Low Area Trunk Sewer Rehabilitation  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2020

**Project Description:**

This project provides for the cleaning, assessing, design and rehabilitation of the 11,700 foot long Low Area Trunk Sewer after a collapse of a section of the sewer near the US Capitol Building. The line extends from 13th Street NW, to the Main Pumping Station. The majority of the work will be Cured In-Place Pipe (CIPP) and manhole rehabilitation.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$17,734,961
<b>Current Approved Lifetime Budget</b>	\$22,674,297
<b>Lifetime Budget Increase/Decrease</b>	\$4,939,336
<b>Allocated Labor as of FY 2017</b>	\$289,075

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,708	547	4,172	2,593	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,560	18,114	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** FW - Rehab Piney Branch Trunk Sewer  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2011
<b>Completion:</b>	FY 2024

**Project Description:**

This project will rehabilitate the Piney Branch Trunk Sewer from the intersection of 3rd Street and Madison Street, NW to Structure No. 70, which is located at the outfall to Piney Branch in the vicinity of Piney Branch Parkway and 17th Street, NW. The project proposes to rehabilitate approximately 11,200 feet of the deteriorated sewer with an internal lining method.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$40,443,062
<b>Current Approved Lifetime Budget</b>	\$40,456,221
<b>Lifetime Budget Increase/Decrease</b>	\$13,159
<b>Allocated Labor as of FY 2017</b>	\$151,904

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,162	0	34	470	1,712	9,405	4,930	907	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,269	0	20	1,499	37,667	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** FY - Rehab Upstream Rock Creek Main Interceptor<sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2025

**Project Description:**

This project will rehabilitate approximately 13,800 feet of the upper part of the Rock Creek Main Interceptor (RCMI). The project will repair all known defects of the RCMI including broken pipes, holes, missing mortar, and visibly exposed aggregate and structural reinforcement. The project proposes rehabilitation by lining methods of the Rock Creek Main Interceptor between the intersection of Joyce Road & Ross Drive, NW and Beach Drive, NW close to the intersection of Oregon Avenue, NW and Western Avenue.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	50.15%
EPA/Fed -	0.00%
WSSC -	49.85%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$29,560,000
<b>Current Approved Lifetime Budget</b>	\$29,553,412
<b>Lifetime Budget Increase/Decrease</b>	(\$6,588)
<b>Allocated Labor as of FY 2017</b>	\$100,080

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,202	63	57	0	36	538	1,145	7,020	2,869	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,457	0	976	0	3,356	0	4,034	19,730	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** G2 - Sewer Structure Rehabilitation (1)<sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Project Dates</u>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2022

**Project Description:**

This multi-phase / multi-job project was developed from the suggested project list included in the 2009 Sewer System Facilities Plan. Each job within the project proposes improvements to various sewer structures throughout the District. Project includes job G201, Rehabilitation of Structure 35B, to abandon the existing sewer structure inside the Kennedy Center and reinstate the structure at the intersection of 27th & G Street, NW. Project includes job G202, Sewer Structure 24 and 34 Improvements, to install access to the inflatable dams and rehabilitate Structures 24 and 34. Project includes job G203, Access Improvements to CSO 061, to provide maintenance accessibility to NPDES Outfall 061. Project includes job G204, Rehabilitation of Gates at Structures 5A, 5B and 5C, to replace the sluice gates for the sewer structures located outside of the Poplar Point Pumping Station.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

<b>DC -</b>	86.86%	<b>Previous Approved Lifetime Budget</b>	\$9,181,550
<b>EPA/Fed -</b>	0.00%	<b>Current Approved Lifetime Budget</b>	\$9,223,644
<b>WSSC -</b>	13.14%	<b>Lifetime Budget Increase/Decrease</b>	\$42,094
<b>Fairfax -</b>	0.00%	<b>Allocated Labor as of FY 2017</b>	\$73,112
<b>Loudoun/PI -</b>	0.00%		

<b>Disbursements</b>	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Budget</b>	400	8	723	81	129	1,245	0	0	0	0	0	0
<b>Commitments</b>	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Budget</b>	491	3,740	1,992	200	2,800	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** G4 - Upper Potomac Intercept Sewer Rehab.  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2024

**Project Description:**

Repair and return to service approximately 2,000 feet of the 48-inch diameter Upper Potomac Interceptor Sewer, which has been out of service since a failure occurred during Hurricane Agnes in June 1972. This project will divert future flow from the Upper Potomac Interceptor Relief Sewer, which will be at capacity in future years.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	79.68%
EPA/Fed -	0.00%
WSSC -	15.74%
Fairfax -	3.22%
Loudoun/PI -	0.11%

<b>Previous Approved Lifetime Budget</b>	\$13,514,041
<b>Current Approved Lifetime Budget</b>	\$13,520,330
<b>Lifetime Budget Increase/Decrease</b>	\$6,289
<b>Allocated Labor as of FY 2017</b>	\$256,141

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,552	287	27	0	77	791	2,247	1,388	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,656	1,365	0	0	1,800	1,300	6,400	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

3 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013 .

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** G5 - Sewer Rehab Near Creek Beds  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Health Safety

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2025

**Project Description:**

This project consists of multiple jobs to protect infrastructure in the vicinity of streams and creeks located throughout the District. The project intends to relocate and rehabilitate manholes and sewer pipes vulnerable to flooding or erosion, infrastructure exposed to or adjacent to surface waters. Project also includes rehabilitation for outfalls and other tasks required to protect exposed sewers due to stream bank erosion.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$50,893,153
<b>Current Approved Lifetime Budget</b>	\$60,133,309
<b>Lifetime Budget Increase/Decrease</b>	\$9,240,156
<b>Allocated Labor as of FY 2017</b>	\$419,362

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,542	1,011	454	3,216	5,707	6,870	2,602	1,249	168	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	9,118	5,439	4,570	9,909	27,360	0	1,258	2,347	132	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** G6 - Sanitary Sewers Under Buildings I  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2020

**Project Description:**

This project rehabilitates sanitary sewers located under buildings citywide. Other activities included in this project are cleaning, pre- and post-CCTV, sealing joints and repair of offset pipe.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$6,665,692
<b>Current Approved Lifetime Budget</b>	\$6,749,089
<b>Lifetime Budget Increase/Decrease</b>	\$83,397
<b>Allocated Labor as of FY 2017</b>	\$175,012

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,780	17	270	1,209	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,149	0	3,600	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** GG - Large Sewer Rehab 2  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2018

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the city.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$452,000
<b>Current Approved Lifetime Budget</b>	\$452,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$17,295

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	378	4	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	452	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** GH - Large Sewer Rehab 3  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2012
<b>Completion:</b>	FY 2025

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the city.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$20,195,000
<b>Current Approved Lifetime Budget</b>	\$20,195,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$23,222

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	382	47	0	0	0	0	53	7,800	1,680	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	605	0	0	0	0	0	105	19,485	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** HS - Rehabilitation of Influent Sewers<sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2030

**Project Description:**

This project addresses the need to conduct detailed assessments of several major sewers within the District prior to proceeding with implementation of corrective actions. The relevant sewers include three of the major influent sewers to Blue Plains WWTP: the East Outfall Relief Sewer, the West Outfall Sewer and the West Outfall Relief Sewer. Activities would include cleaning, and inspection as necessary of 32,000 linear feet to fully ascertain the pipe condition, prior to future (as yet unfunded) rehabilitation.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences. Due to the size of the sewer and volume of flow, the negative effects on public health and safety in the event of a collapse would be substantial.

**Effective Funding by User (percent):**

DC -	60.81%
EPA/Fed -	0.00%
WSSC -	28.94%
Fairfax -	7.73%
Loudoun/PI -	0.46%

<b>Previous Approved Lifetime Budget</b>	\$97,430,000
<b>Current Approved Lifetime Budget</b>	\$97,430,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	787	717	471	2,358	6,701	5,409	2,094	1,188	5,287	25,315
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	2,450	2,679	0	31,751	4,231	550	0	7,566	48,203	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** HT - Rehabilitation of Anacostia Force Main <sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Project Dates</u>	
<b>Start:</b>	FY 2012
<b>Completion:</b>	FY 2025

**Project Description:**

This project was developed to evaluate, rehabilitate and protect the Anacostia Force Main (AFM). The 108-inch diameter AFM extends 32,700 linear feet from the Maryland / District border to its terminus near South Capital Street and Firth Sterling Ave, SE. The AFM carries approximately 244 MGD (1/3 of WSSC's wastewater flow) to Blue Plains. This critical sewer consists largely of pre-stressed concrete cylinder pipe (PCCP) which has a history of failures throughout the industry. Job HT01 is to repair the force main's Cathodic Protection system due to its critical nature in protecting PCCP. Job HT02 is to repair known damaged pipe in 8 locations. Job HT05 plans for the future analysis and condition assessment of the AFM and Job HT06 is for a feasibility study to determine if the original force main can be put back into service.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	39.86%	<b>Previous Approved Lifetime Budget</b>	\$11,289,817
<b>EPA/Fed -</b>	0.00%	<b>Current Approved Lifetime Budget</b>	\$11,289,818
<b>WSSC -</b>	60.14%	<b>Lifetime Budget Increase/Decrease</b>	\$1
<b>Fairfax -</b>	0.00%	<b>Allocated Labor as of FY 2017</b>	\$112
<b>Loudoun/PI -</b>	0.00%		

<b>Disbursements</b>	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Budget</b>	1,220	25	0	54	321	190	846	1,640	258	0	0	0
<b>Commitments</b>	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Budget</b>	1,405	2,715	0	990	270	450	5,460	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** IF - Sanitary Sewer Rehabilitation 2  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2018

**Project Description:**

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer segments will be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated will be distributed throughout the four quadrants of the city.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$1,540,270
<b>Current Approved Lifetime Budget</b>	\$1,540,270
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$81,400

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	704	122	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,506	34	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** IK - Potomac Force Main Rehabilitation <sup>3</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2024

**Project Description:**

The project will provide for the rehabilitation of the Potomac Force Main. This is necessary in order to continue to gather information for the prioritization of rehabilitation projects established for both mainline sewers and sewer lateral repair work.

**Impact on Operations:**

This project will provide information regarding the status and condition of the sewer system and improve planning for the sewer system rehabilitation needs. This allows for the evaluation and prioritization of work for the large sewer rehabilitation program and local sewer rehabilitation program, as well as other aspects of the Service Life Improvement Plan.

**Effective Funding by User (percent):**

<b>DC -</b>	47.85%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	28.10%
<b>Fairfax -</b>	18.14%
<b>Loudoun/PI -</b>	1.10%

<b>Previous Approved Lifetime Budget</b>	\$6,074,391
<b>Current Approved Lifetime Budget</b>	\$6,074,391
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$25,489

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	700	63	262	104	81	914	1,076	23	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	700	875	0	414	0	4,086	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>3</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013 .

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** IL - Creekbed Sewer Rehabilitation 2<sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Health Safety

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2024

**Project Description:**

This project consists of multiple jobs to protect infrastructure in the vicinity of streams and creeks located throughout the District. The project intends to relocate and rehabilitate manholes and sewer pipes vulnerable to flooding or erosion and infrastructure exposed to or adjacent to surface waters. The project also includes the rehabilitation of outfalls and other tasks required to protect exposed sewers due to stream bank erosion.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	93.94%
EPA/Fed -	0.00%
WSSC -	6.06%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$52,614,859
<b>Current Approved Lifetime Budget</b>	\$56,599,884
<b>Lifetime Budget Increase/Decrease</b>	\$3,985,025
<b>Allocated Labor as of FY 2017</b>	\$970,296

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	6,700	4,437	4,292	1,273	3,221	74	31	2,195	0	0	0	110
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	30,711	1,967	4,403	9,772	23	0	4,922	0	0	304	0	4,498

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** IM - Creekbed Sewer Rehabilitation 3<sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Health Safety

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2028

**Project Description:**

This project consists of multiple jobs to protect infrastructure in the vicinity of streams and creeks located throughout the District. The project intends to relocate and rehabilitate manholes and sewer pipes vulnerable to flooding or erosion and infrastructure exposed to or adjacent to surface waters. The project also includes the rehabilitation of outfalls and other tasks required to protect exposed sewers due to stream bank erosion.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$15,462,000
<b>Current Approved Lifetime Budget</b>	\$15,462,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$37,804

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	270	0	0	88	399	1,006	191	2,646	1,117	1,139	4	3
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	270	2,199	0	1,048	2,534	160	695	5,064	3,492	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** IN - Upper East Side Trunk Sewer Rehabilitation  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2024

**Project Description:**

This project will be a multi job project for the rehabilitation of the Upper East Side Trunk Sewer. Job IN01 is associated with the cleaning and pre- and post-CCTV inspection of part of the Upper East Side Interceptor (ESI) located between the Arboretum and the intersection of this interceptor with the Northeast Boundary Trunk Sewer (NEBT). The section has a total length of approximately 6,370 linear feet. Job IN02 will rehabilitate the ESI by relining the pipe utilizing the appropriate methodology and reinstating service connections.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$19,001,740
<b>Current Approved Lifetime Budget</b>	\$19,001,740
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$70,016

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	641	0	0	583	918	183	1,597	5,600	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	641	0	0	1,629	1,662	354	14,716	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** IQ - Slash Run Sewer Rehabilitation  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2024

**Project Description:**

This project addresses one of the major sewer rehabilitation projects listed in the 2009 Sewer System Facilities Plan (SSFP). This project is intended to rehabilitate and repair Slash Run sewer as one aspect of the Service Life Improvement Plan.

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$10,000,000
<b>Current Approved Lifetime Budget</b>	\$10,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	231	466	3,999	326	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	900	9,100	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** IR - Anacostia Main Interceptor Rehabilitation  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2024

**Project Description:**

This project involves the rehabilitation of the Anacostia Main Interceptor (AMI) in three distinct phases as outlined in the 2009 Sewer System Facilities Plan (SSFP). The request is for the first phase of the proposed rehabilitation of the AMI which is located between Benning Road and East Capitol Street, NE (Job IR01). This phase includes the lining of approximately 4,590 linear feet of sewer pipe, hydraulically cleaning the entire line, repairing service connections, manhole rehabilitation and conducting pre- and post-remediation inspections.

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$14,250,000
<b>Current Approved Lifetime Budget</b>	\$14,250,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	109	1,148	3,403	2,105	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	2,600	2,150	9,500	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** J0 - B St/New Jersey Ave Trunk Sewer Rehab <sup>3</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2004
<b>Completion:</b>	FY 2020

**Project Description:**

This project involves a condition assessment and conceptual design for repair of the B Street / New Jersey Avenue trunk sewer. This project identifies the structural integrity of the sewer system, and develops adequate and cost effective repair approaches. This project increases the reliability, restores the integrity, and maintains the capacity of the sewer.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	85.60%
EPA/Fed -	0.00%
WSSC -	14.40%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$16,199,995
<b>Current Approved Lifetime Budget</b>	\$16,199,995
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$74,649

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	690	755	4,108	1,270	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	887	15,313	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>3</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013 .

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** J1 - Oxon Run Sewer Rehabilitation <sup>3</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<u>Project Dates</u>	
<b>Start:</b>	FY 2004
<b>Completion:</b>	FY 2031

**Project Description:**

This project assesses the condition and develops needed repairs for a segment of sewer that crosses Oxon Run. This project will increase the reliability, restore the integrity, stop leakage from the pipe, and maintain the capacity of the sewer.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	26.95%
EPA/Fed -	0.00%
WSSC -	73.05%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$30,050,958
<b>Current Approved Lifetime Budget</b>	\$30,050,958
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$105,670

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,211	185	0	0	0	0	162	976	546	364	756	12,091
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,211	604	0	0	0	0	2,786	0	1,362	0	24,088	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>3</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013 .



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** JK - Little Falls Rehabilitation Project<sup>4</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2026
<b>Completion:</b>	FY 2029

**Project Description:**

This project to rehabilitate and repair the Little Run Trunk Sewer is one aspect of the Service Life Improvement Program outlined in the Sewer System Facilities Plan (SSFP). After the inspection, evaluation, and prioritization is completed by the sewer inspection team, sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs.

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$4,000,000
<b>Current Approved Lifetime Budget</b>	\$4,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	0	0	0	0	0	0	0	72	190	1,951
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	0	0	0	0	0	0	0	0	0	400	600	3,000

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>4</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted was or will be derived and adopted in accordance with Blue Plains IMA Agreement of 2012 section 5.B 'Determination of Multi Jurisdictional Facilities (MJUFs)'.

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** JM - Northwest Major Sewer Rehabilitation  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2027

**Project Description:**

This project consists of combined sewer rehabilitation projects listed in the 2009 Sewer System Facilities Plan (SSFP). The proposed Job JM01 (Northwest Boundary Trunk Sewer (NWBT) Rehabilitation) focuses on reducing inflow and infiltration (I/I) for approximately 7,625 linear feet of NWBT sewer. Efforts will include identifying sources of I/I prior to planning and implementing long-lasting remedial measures. Defective service connections and manholes will also be

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$7,000,000
<b>Current Approved Lifetime Budget</b>	\$7,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	242	502	3,143	70	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	700	6,300	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** LZ - Potomac Interceptor - Rehab Phase 2<sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Project Dates</u>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2029

**Project Description:**

This project will provide funding to rehabilitate segments of the Potomac Interceptor (PI) Sewer after the inspection, evaluation, and prioritization is determined by the Potomac Interceptor Sewer Inspection Program. Sewer segments would be rehabilitated using appropriate rehabilitation technology and include any necessary cleaning and point repairs. The project will include engineering services for the design, permitting, bid, and construction phases and funding for capital construction, construction management, and site access planning. The funding will also install flow meters and rain gauge systems to monitor real-time flow and rainfall rates to facilitate rehabilitation along the PI. Funding will also be used to develop a program that will monitor the Hydrogen Sulfide levels in the Potomac Interceptor (PI) Sewer for a period of 5 years. The program will evaluate the effectiveness of the Potomac Interceptor Long Term Odor Control projects. This will include the establishment of permanent monitoring stations as well as recommendations on how to further reduce Hydrogen Sulfide and related corrosion and odor.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	3.16%
EPA/Fed -	0.00%
WSSC -	34.11%
Fairfax -	40.03%
Loudoun/PI -	3.47%

<b>Previous Approved Lifetime Budget</b>	\$99,189,968
<b>Current Approved Lifetime Budget</b>	\$99,189,968
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$55,590

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	992	772	1,255	1,598	5,453	8,164	7,350	5,562	5,910	3,032	1,025	1,926
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,416	7,153	2,599	14,870	3,862	30,996	15,223	10,733	6,454	0	5,884	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** N7 - Potomac Sewer System Rehab.  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** High Profile, Good Neighbor Policy

<b>Project Dates</b>	
<b>Start:</b>	FY 2000
<b>Completion:</b>	FY 2020

**Project Description:**

This project provides odor control, sewer modifications, and rehabilitation of the Potomac Interceptor (PI) system. This project consists of eight jobs to control odors, and rehabilitate and modify manholes, sewer pipe, sewer vents, and other related components of the PI system. Implementation of this project will reduce odor complaints, maintain and restore structural integrity, and maintain the design hydraulic capacity of the sewer.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	13.01%
EPA/Fed -	0.00%
WSSC -	27.60%
Fairfax -	35.73%
Loudoun/PI -	5.27%

<b>Previous Approved Lifetime Budget</b>	\$48,019,116
<b>Current Approved Lifetime Budget</b>	\$48,089,117
<b>Lifetime Budget Increase/Decrease</b>	\$70,001
<b>Allocated Labor as of FY 2017</b>	\$1,912,196

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	42,220	452	100	101	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	45,849	1,714	52	474	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies; commitments budget does not include labor)* (\$ in thousands)

3 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013 .

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** O4 - Southwest Interceptor Inspection/Rehab  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2027

**Project Description:**

The Southwest Interceptor Rehabilitation project includes the cleaning and localized repair of approximately 5,600 linear feet of the Southwest Interceptor. There are about fifteen known localized defects including broken pipes, holes, various forms of infiltration, and deposits. Investigation of sources of leakage before repairs are implemented will be mandatory and other activities will include repairing service connections and manholes and pre- and post-remediation closed-circuit television (CCTV) inspection. It is noted that the lower portion of this sewer is located under Nationals Stadium.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$4,530,000
<b>Current Approved Lifetime Budget</b>	\$4,530,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	153	182	1,316	744	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	625	420	3,485	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** O7 - East Rock Creek Diversion Inspect/Rehab  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2024

**Project Description:**

The East Rock Creek Diversion Sewer provides relief to the Potomac Interceptor and the Rock Creek Main Interceptor. This project includes the inspection and rehabilitation of approximately 18,000 linear feet. Investigation of leakage sources before repairs are implemented will be mandatory. Other activities will include repairing service connections and manholes and pre- and post-remediation closed-circuit television (CCTV) inspection.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$6,600,000
<b>Current Approved Lifetime Budget</b>	\$6,600,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	145	412	2,676	67	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	500	6,100	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** OA - West Rock Creek Diversion Inspect/Rehab  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2022
<b>Completion:</b>	FY 2025

**Project Description:**

The West Rock Creek Diversion Sewer provides relief to the Rock Creek Main Interceptor. This project includes the inspection and rehabilitation of approximately 9,000 linear feet. Investigation of sources of leakage before repairs are implemented will be mandatory and other activities will include repairing service connections and manholes and pre- and post-remediation closed-circuit television (CCTV) inspection.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$3,810,000
<b>Current Approved Lifetime Budget</b>	\$3,810,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	13	141	1,205	705	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	300	400	3,110	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** PJ - Re-Activation Of Anacostia Force Main <sup>2</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Project Dates</u>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2022

**Project Description:**

This project is to rehabilitate the old Anacostis Force Main (AFM) so that it can behave as a relief sewer for the 108-inch diameter AFM. The AFM extends 32,700 linear feet from the Maryland / District border to its terminus near South Capital Street and Firth Sterling Ave, SE and is within National Park Service property (NPS). The AFM carries approximately 244 MGD (1/3 of WSSC's wastewater flow) to Blue Plains. This critical sewer consists largely of pre-stressed concrete cylinder pipe (PCCP) which has a history of failures throughout the industry.

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	15.40%
EPA/Fed -	0.00%
WSSC -	84.60%
Fairfax -	0.00%
Loudoun/PI -	0.00%

Previous Approved Lifetime Budget	\$20,000,000
Current Approved Lifetime Budget	\$20,000,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	225	135	751	7,952	60	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	545	605	0	18,850	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is, or will be, based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.



FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** PU - Easby Point Trunk Sewer  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2024

**Project Description:**

This project is to rehabilitate 9,940 linear feet of the Easby Point Trunk Sewer. Currently, there is a need to perform a current inspection of these assets as the basis for development of a Condition Assessment Report to commence rehabilitation design. These inspections will evaluate any further deterioration and identify immediate repairs required. This project provides funding for the immediate repairs identified to prevent further deterioration between the current inspection and the proposed rehabilitation (typically at least three years, but possibly longer depending on funding).

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$7,000,000
<b>Current Approved Lifetime Budget</b>	\$7,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	348	476	2,582	73	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	1,200	5,800	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Sanitary Sewer Service Area  
**Program Title:** Interceptor/Trunk/Force Sewers  
**Project ID/Project Title:** PV - Broad Branch Trunk Sewer  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Project Dates</u>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2027

**Project Description:**

This project is to rehabilitate 18,100 linear feet of the Broad Branch Trunk and Relief Sewer. Currently, there is a need to perform an inspection of these assets as the basis for development of a Condition Assessment Report to commence rehabilitation design. These inspections will evaluate any further deterioration and identify immediate repairs required. This project provides funding for the immediate repairs identified to prevent further deterioration between the current inspection and the proposed rehabilitation (typically at least three years, but possibly longer depending on funding).

**Impact on Operations:**

This project would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$13,000,000
<b>Current Approved Lifetime Budget</b>	\$13,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	758	1,045	5,413	114	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	2,200	10,800	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** BZ - Large Valve Repl. (Contracts 8 - 9 & 10)  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2018

**Project Description:**

Replacement of approximately 60 broken large diameter valves under separate contracts throughout the water distribution system. Replacement of inoperable valves will improve the reliability of the system by reducing the number of valves that would need to be closed under emergency conditions. Increasing the number of operable valves in the system will also reduce the number of customers that may be impacted during emergency conditions.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

**Effective Funding by User (percent):**

<b>DC -</b>	38.36%
<b>EPA/Fed -</b>	61.64%
<b>WSSC -</b>	0.00%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

	<b>CLOSED</b>
<b>Previous Approved Lifetime Budget</b>	\$12,703,316
<b>Current Approved Lifetime Budget</b>	\$9,010,396
<b>Total DC Water Allocated Labor</b>	\$1,187,684
<b>Total Project Cost</b>	\$10,237,684

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	9,050	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	9,010	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** IB - Large Valve Replacement (Contract 17-19)  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2024

**Project Description:**

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

**CLOSED**

Previous Approved Lifetime Budget	\$20,130,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** KA - Large Valve Replacement Contracts 20 - 21 & 22  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2027

**Project Description:**

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$17,610,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	-480	0	480	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** KB - Large Valve Replacement Contracts 23 - 24 & 25  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2029

**Project Description:**

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

**CLOSED**

Previous Approved Lifetime Budget	\$19,220,000
Current Approved Lifetime Budget	\$0
Total DC Water Allocated Labor	
Total Project Cost	

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** C9 - Large Diameter Water Mains I  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<u>Project Dates</u>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2021

**Project Description:**

This project is to replace/rehabilitate large diameter (16-inch and larger) pipe based upon age, break history and condition assessment information. The project is part of the large diameter water main program included in the draft Water System Facility Plan Update.

**Impact on Operations:**

This project will have no material impact in the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

Previous Approved Lifetime Budget	\$19,250,668
Current Approved Lifetime Budget	\$19,666,569
Lifetime Budget Increase/Decrease	\$415,901
Allocated Labor as of FY 2017	\$101,363

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,069	803	5,223	1,891	2,629	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,467	10,230	0	5,970	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** DE - Small Diameter Water Main Rehab 12  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2021

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$39,850,000
<b>Current Approved Lifetime Budget</b>	\$42,812,155
<b>Lifetime Budget Increase/Decrease</b>	\$2,962,155
<b>Allocated Labor as of FY 2017</b>	\$752,615

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,196	8,211	9,073	4,405	109	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	21,091	4,627	14,060	3,034	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** FI - Small Diameter Water Main Rehab I3  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2021

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

<b>DC -</b>	100.00%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	0.00%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

<b>Previous Approved Lifetime Budget</b>	\$31,170,000
<b>Current Approved Lifetime Budget</b>	\$35,126,099
<b>Lifetime Budget Increase/Decrease</b>	\$3,956,099
<b>Allocated Labor as of FY 2017</b>	\$303,161

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	440	186	2,757	13,077	3,821	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	926	990	16,575	16,635	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** F2 - Small Diameter Water Main Rehab I4  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<u>Project Dates</u>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2021

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$40,470,000
<b>Current Approved Lifetime Budget</b>	\$43,489,000
<b>Lifetime Budget Increase/Decrease</b>	\$3,019,000
<b>Allocated Labor as of FY 2017</b>	\$49,420

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	102	380	11,888	12,266	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	50	627	65	42,747	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** F6 - Steel Water Main Rehab - Phase I  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<u>Project Dates</u>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2023

**Project Description:**

This project is to rehabilitate, replace and/or install cathodic protection systems on high priority large diameter steel water mains, where there is a near-term need to mitigate the effects of corrosion degradation on these critical pipelines based upon recent evaluations.

**Impact on Operations:**

This project will have some impact on the operating budget to maintain installed cathodic protection systems.

**Effective Funding by User (percent):**

DC -	77.28%
EPA/Fed -	22.72%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$9,944,281
<b>Current Approved Lifetime Budget</b>	\$12,121,472
<b>Lifetime Budget Increase/Decrease</b>	\$2,177,192
<b>Allocated Labor as of FY 2017</b>	\$682,016

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	5,337	0	0	93	205	3,360	838	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	5,406	18	0	360	6,337	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** FE - 20 Low Service Main & PRV  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Project Dates</u>	
<b>Start:</b>	FY 2012
<b>Completion:</b>	FY 2018

**Project Description:**

This project includes the installation of approximately 4,700 linear feet of 20-inch water main in the Low Service Area and a pressure reducing valve (PRV) between the 1st High and the Low Service Areas. The existing Low Service 20-inch main will be extended from the intersection of 17th and C Streets, NE to the intersection of Potomac Avenue, G Street and Kentucky Avenue, SE where it will connect to the existing Low Service 30-inch water main.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$8,008,289
<b>Current Approved Lifetime Budget</b>	\$8,393,473
<b>Lifetime Budget Increase/Decrease</b>	\$385,184
<b>Allocated Labor as of FY 2017</b>	\$786,754

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	6,167	529	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,293	100	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** FT - Water Mains Rehab Phase II  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2025

**Project Description:**

This project is to replace/rehabilitate large diameter (16-inch and larger) pipe based upon age, break history and condition assessment information. The project is part of the large diameter water main program included in the draft Water System Facility Plan Update.

**Impact on Operations:**

Regular inspections and testing of CP systems would be required in the future, which would impact the operating budget. Temporary outages of large diameter pipelines due to assessment and/or construction activities will require coordination and adjustments to operations.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$39,980,000
<b>Current Approved Lifetime Budget</b>	\$35,478,077
<b>Lifetime Budget Increase/Decrease</b>	(\$4,501,923)
<b>Allocated Labor as of FY 2017</b>	\$47,840

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	926	1,309	1,242	1,806	2,420	7,872	4,246	722	153	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	17,073	470	275	5,540	4,150	7,970	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** GQ - Fire Hydrant Replacement Program - Ph II  
**Managing Department:** Water Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2022

**Project Description:**

This project provides funding for the replacement and upgrade of fire hydrants in the District. It is expected that approximately 2,700 broken and older model type fire hydrants will be replaced and 2,700 will be upgraded under this project if accepted by The District of Columbia under the October 2007 Memorandum of Understanding. This program is expected to be totally reimbursed by The District Government and will not impact retail rate payers.

**Impact on Operations:**

This project will have no material impact on the DC Water operating budget, because the maintenance cost of fire hydrants is reimbursed by the District.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$28,244,481
<b>Current Approved Lifetime Budget</b>	\$28,302,410
<b>Lifetime Budget Increase/Decrease</b>	\$57,929
<b>Allocated Labor as of FY 2017</b>	\$953,871

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	7,370	345	51	51	30	21	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	12,633	9,293	3,035	3,125	217	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** GR - Small Diameter Water Main Rehab I5  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2022

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$39,750,000
<b>Current Approved Lifetime Budget</b>	\$52,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$12,250,000
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	766	1,116	16,905	8,088	1,028	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	7,500	25,250	19,250	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** GX - Large Dia. Water Main Repl. II  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2028

**Project Description:**

This project is to replace or rehabilitate large diameter (16-inch and larger) water mains. The objective of this project is to rehabilitate large diameter mains when the pipe is in sound condition or to replace it if the condition warrants.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$23,180,000
<b>Current Approved Lifetime Budget</b>	\$30,090,000
<b>Lifetime Budget Increase/Decrease</b>	\$6,910,000
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	30,090	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** HX - Small Diameter Water Main Rehab I6  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2026

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$37,350,000
<b>Current Approved Lifetime Budget</b>	\$52,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$14,650,000
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	813	207	0	37	1,158	4,842	18,442	9,028	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	7,500	0	0	2,538	0	41,962	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** 18 - Large Valve Replacement (Contract 11-13)  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2012
<b>Completion:</b>	FY 2018

**Project Description:**

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

**Effective Funding by User (percent):**

DC -	78.42%
EPA/Fed -	21.58%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$18,548,979
<b>Current Approved Lifetime Budget</b>	\$19,137,746
<b>Lifetime Budget Increase/Decrease</b>	\$588,767
<b>Allocated Labor as of FY 2017</b>	\$1,256,969

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	9,087	1,382	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	14,319	4,819	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** J7 - Small Diameter Water Main Rehab 17  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2027

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$46,650,000
<b>Current Approved Lifetime Budget</b>	\$46,650,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	4,157	1,043	0	45	1,428	4,253	14,367	7,398	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	10,400	0	0	2,980	0	33,270	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** JZ - Large Dia Water Main Repl 3 - 4 & 5  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2027

**Project Description:**

This project is to replace/rehabilitate large diameter (16-inch and larger) pipe based upon age, break history and condition assessment information. The project is part of the large diameter water main program included in the draft Water System Facility Plan Update.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$63,710,000
<b>Current Approved Lifetime Budget</b>	\$81,320,000
<b>Lifetime Budget Increase/Decrease</b>	\$17,610,000
<b>Allocated Labor as of FY 2017</b>	\$0

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	0	0	0	0	1,008	3,448	7,000	14,251	17,436	11,709	2,563	0
<b>Commitments Budget</b>	0	0	0	0	7,410	21,250	27,240	25,420	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** K7 - Large Diameter Water Main Replacement 6 - 7 & 8  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Project Dates</u>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2030

**Project Description:**

This project is to replace/rehabilitate large diameter (16-inch and larger) pipe based upon age, break history and condition assessment information. The project is part of the large diameter water main program included in the draft Water System Facility Plan Update.

**Impact on Operations:**

This project will have no material impact in the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$69,920,000
<b>Current Approved Lifetime Budget</b>	\$89,140,000
<b>Lifetime Budget Increase/Decrease</b>	\$19,220,000
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	469	1,937	8,714	18,862	33,730
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	2,400	28,900	29,780	28,060	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** KE - Small Diameter Water Main Rehab I8  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<u>Project Dates</u>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2025

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$46,340,000
<b>Current Approved Lifetime Budget</b>	\$46,340,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	4,327	2,623	8,292	12,778	3,483	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	12,070	34,270	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** KF - Small Diameter Water Main Rehab I9  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<u>Project Dates</u>	
<b>Start:</b>	FY 2022
<b>Completion:</b>	FY 2026

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$47,730,000
<b>Current Approved Lifetime Budget</b>	\$47,730,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	4,663	2,846	8,982	13,543	3,582	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	12,440	35,290	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** KG - Small Diameter Water Main Rehab 20  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2023
<b>Completion:</b>	FY 2027

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$49,160,000
<b>Current Approved Lifetime Budget</b>	\$49,160,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	5,221	3,098	9,632	13,864	3,812	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	12,810	36,350	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** KH - Small Diameter Water Main Rehab 21  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2028

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact in the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$50,640,000
<b>Current Approved Lifetime Budget</b>	\$50,640,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	5,769	3,297	9,588	14,393	3,483
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	13,190	37,450	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** KI - Small Diameter Water Main Rehab 22  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2025
<b>Completion:</b>	FY 2029

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact in the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$52,160,000
<b>Current Approved Lifetime Budget</b>	\$52,160,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	6,862	3,595	10,592	17,805
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	13,590	38,570	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** KJ - Small Diameter Water Main Rehab 23  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2026
<b>Completion:</b>	FY 2030

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe if in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$53,720,000
<b>Current Approved Lifetime Budget</b>	\$53,720,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	7,056	3,867	28,346
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	14,000	39,720	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** MU - Small Diameter Water Main Rehab 2  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<u>Project Dates</u>	
<b>Start:</b>	FY 2002
<b>Completion:</b>	FY 2017

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe, improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$15,043,352
<b>Current Approved Lifetime Budget</b>	\$12,666,818
<b>Lifetime Budget Increase/Decrease</b>	(\$2,376,534)
<b>Allocated Labor as of FY 2017</b>	\$803,611

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	12,667	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	12,667	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** MV - Small Diameter Water Main Rehab 3  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2006
<b>Completion:</b>	FY 2020

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

<b>DC -</b>	49.51%
<b>EPA/Fed -</b>	50.49%
<b>WSSC -</b>	0.00%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

<b>Previous Approved Lifetime Budget</b>	\$15,623,724
<b>Current Approved Lifetime Budget</b>	\$15,676,141
<b>Lifetime Budget Increase/Decrease</b>	\$52,417
<b>Allocated Labor as of FY 2017</b>	\$786,853

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	12,545	38	31	1,534	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	12,694	560	10	2,412	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** NA - Clean & Line 20 4th High Wtrmain  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<u>Project Dates</u>	
<b>Start:</b>	FY 2002
<b>Completion:</b>	FY 2019

**Project Description:**

This project is to install approximately 2,000 linear feet of 20-inch diameter water main in the 4th High Service Area, to relocate portions of the existing 20-inch cast iron water main from private properties to public space.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$4,556,283
<b>Current Approved Lifetime Budget</b>	\$4,606,860
<b>Lifetime Budget Increase/Decrease</b>	\$50,577
<b>Allocated Labor as of FY 2017</b>	\$190,583

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,444	81	22	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,607	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** 00 - Small Diameter Water Main Rehab 8  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2011
<b>Completion:</b>	FY 2018

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

<b>DC -</b>	49.06%
<b>EPA/Fed -</b>	50.94%
<b>WSSC -</b>	0.00%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

<b>Previous Approved Lifetime Budget</b>	\$20,680,842
<b>Current Approved Lifetime Budget</b>	\$21,037,593
<b>Lifetime Budget Increase/Decrease</b>	\$356,751
<b>Allocated Labor as of FY 2017</b>	\$1,390,391

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	20,061	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	20,597	440	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** O1 - Small Diameter Water Main Rehab 9  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2012
<b>Completion:</b>	FY 2018

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

<b>DC -</b>	88.98%
<b>EPA/Fed -</b>	11.02%
<b>WSSC -</b>	0.00%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

<b>Previous Approved Lifetime Budget</b>	\$24,986,852
<b>Current Approved Lifetime Budget</b>	\$26,087,353
<b>Lifetime Budget Increase/Decrease</b>	\$1,100,501
<b>Allocated Labor as of FY 2017</b>	\$1,999,502

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	17,923	2,155	0	0	0	0	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	25,300	787	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** O2 - Small Diameter Water Main Rehab 10  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<u>Project Dates</u>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2019

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$36,842,024
<b>Current Approved Lifetime Budget</b>	\$38,222,668
<b>Lifetime Budget Increase/Decrease</b>	\$1,380,644
<b>Allocated Labor as of FY 2017</b>	\$2,883,265

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	29,482	2,198	869	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	36,087	2,135	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** O3 - Small Diameter Water Main Rehab II  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<u>Project Dates</u>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2019

**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. Work includes the elimination of dead end pipelines in the system, reconfiguration of inefficient alignments, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other similar work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality. The IIb contract consists of replacement of 8-inch water mains at a number of locations.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

<b>DC -</b>	65.28%	<b>Previous Approved Lifetime Budget</b>	\$38,957,024
<b>EPA/Fed -</b>	34.72%	<b>Current Approved Lifetime Budget</b>	\$39,988,507
<b>WSSC -</b>	0.00%	<b>Lifetime Budget Increase/Decrease</b>	\$1,031,483
<b>Fairfax -</b>	0.00%	<b>Allocated Labor as of FY 2017</b>	\$1,919,708
<b>Loudoun/PI -</b>	0.00%		

<b>Disbursements</b>	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Budget</b>	14.909	10.240	1.348	0	0	0	0	0	0	0	0	0
<b>Commitments</b>	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Budget</b>	37.523	2.466	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** PK - Large Meter Vault And Piping Improvements  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2016
<b>Completion:</b>	FY 2018

**Project Description:**  
 Construction of a large meter vault and piping improvements in the vicinity of Key Bridge to measure the flows in a 16-inch and a 30-inch mains that feed the Pentagon, Arlington Cemetery and the Reagan National Airport.

**Impact on Operations:**  
 This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$980,000
<b>Current Approved Lifetime Budget</b>	\$980,093
<b>Lifetime Budget Increase/Decrease</b>	\$93
<b>Allocated Labor as of FY 2017</b>	\$11,226

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	172	11	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	770	210	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** S3 - Large Valve Replacement (Contract 3-7)  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Project Dates</u>	
<b>Start:</b>	FY 1999
<b>Completion:</b>	FY 2018

**Project Description:**

This project replaces approximately 100 inoperable large diameter valves throughout the distribution system. This project includes four separate valve replacement contracts. Replacement of inoperable valves will improve the reliability of the system by reducing the number of valves that would need to be closed under emergency conditions. Increasing the number of operable valves in the system will also reduce the number of customers that may be impacted during emergency conditions.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

**Effective Funding by User (percent):**

<b>DC -</b>	61.18%
<b>EPA/Fed -</b>	38.82%
<b>WSSC -</b>	0.00%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

<b>Previous Approved Lifetime Budget</b>	\$23,099,692
<b>Current Approved Lifetime Budget</b>	\$23,166,684
<b>Lifetime Budget Increase/Decrease</b>	\$66,992
<b>Allocated Labor as of FY 2017</b>	\$3,440,547

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	21,450	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	22,652	515	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** S5 - Large Dia Wtrmain Int. Repairs  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2001
<b>Completion:</b>	FY 2018

**Project Description:**

This project includes the installation of internal pipe joint repairs to approximately 50,000 linear feet of large diameter water mains with a high frequency of joint leakage. This project also includes the cleaning and lining of approximately 5,000 linear feet of 20-inch cast iron pipe prior to the installation of internal joint seals. This project will eliminate the costly repairs and need to temporarily shutdown these mains to undertake the repairs associated with joint leaks.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	79.63%
EPA/Fed -	20.37%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$16,972,404
<b>Current Approved Lifetime Budget</b>	\$17,299,159
<b>Lifetime Budget Increase/Decrease</b>	\$326,755
<b>Allocated Labor as of FY 2017</b>	\$1,315,969

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	12,902	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	14,975	2,324	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** K8 - Large Diameter Water Main Replacement 9 - 10 & 11  
**Managing Department:** Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2027
<b>Completion:</b>	FY 2033

**Project Description:**

This project is to replace/ rehabilitate large diameter (16-inch and larger) pipe based upon age, break history and condition assessment information. The project is part of the large diameter water main program included in the draft Water System Facility Plan Update.

**Impact on Operations:**

This project will have no material impact in the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

<b>Effective Funding by User (percent):</b>		<b>NEW</b>											
DC -	100.00%											Previous Approved Lifetime Budget	\$0
EPA/Fed -	0.00%											Current Approved Lifetime Budget	\$76,400,000
WSSC -	0.00%											Lifetime Budget Increase/Decrease	\$76,400,000
Fairfax -	0.00%											Allocated Labor as of FY 2017	\$0
Loudoun/PI -	0.00%												
<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>	
Budget	0	0	0	0	0	0	0	0	0	0	431	52,457	
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>	
Budget	0	0	0	0	0	0	0	0	0	0	2,060	74,340	

*(projected disbursements do not include contingencies; commitments budget does not include labor)* *(\$ in thousands)*

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Distribution Systems  
**Project ID/Project Title:** KK - Small Diameter Water Main Rehab 24  
**Managing Department:** Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2027
<b>Completion:</b>	FY 2031

**Project Description:**

The annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe is in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants, and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact in the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>NEW</b>
Previous Approved Lifetime Budget	\$0
Current Approved Lifetime Budget	\$55,330,000
Lifetime Budget Increase/Decrease	\$55,330,000
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	7,571	32,830
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	0	14,410	40,920

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Lead Program  
**Project ID/Project Title:** BW - Lead Service Replacement Program  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Lead Services Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2003
<b>Completion:</b>	FY 2030

**Project Description:**

Replacement of approximately 30,050 lead water service lines with copper piping throughout the water distribution system. The Lead Service Replacement Program started in FY 2004 and will continue in conjunction with scheduled water main replacement and DDOT road work (new FY 2008 policy). This project replaces lead service lines within Public Space and offers the property owner the option to replace the lead service on private property at cost.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	93.08%
EPA/Fed -	6.92%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$208,939,999
<b>Current Approved Lifetime Budget</b>	\$209,244,509
<b>Lifetime Budget Increase/Decrease</b>	\$304,510
<b>Allocated Labor as of FY 2017</b>	\$4,373,262

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	149,530	3,422	1,487	1,252	1,422	1,528	1,658	1,718	903	235	75	7,677
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	154,126	11,778	3,930	3,850	3,960	4,080	4,200	4,320	0	0	0	19,000

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** D5 - FY2014 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2020

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$10,146,589
<b>Current Approved Lifetime Budget</b>	\$10,229,245
<b>Lifetime Budget Increase/Decrease</b>	\$82,656
<b>Allocated Labor as of FY 2017</b>	\$162,446

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,830	491	0	87	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	9,491	638	0	100	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** DG - FY2015 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2015
<b>Completion:</b>	FY 2018

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

Previous Approved Lifetime Budget	\$9,630,000
Current Approved Lifetime Budget	\$9,876,201
Lifetime Budget Increase/Decrease	\$246,201
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,484	2	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,487	1,389	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** DY - FY2016 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2016
<b>Completion:</b>	FY 2019

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$9,630,000
<b>Current Approved Lifetime Budget</b>	\$9,846,488
<b>Lifetime Budget Increase/Decrease</b>	\$216,488
<b>Allocated Labor as of FY 2017</b>	\$14,628

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	7,337	623	307	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,249	1,597	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** FK - FY2017 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2016
<b>Completion:</b>	FY 2019

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$9,630,000
<b>Current Approved Lifetime Budget</b>	\$9,630,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,917	3,097	1,302	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	9,630	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** GS - FY2018 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2018
<b>Completion:</b>	FY 2019

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

Previous Approved Lifetime Budget	\$9,630,000
Current Approved Lifetime Budget	\$9,630,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	4,766	781	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	9,630	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** HY - FY2019 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2020

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$9,630,000
<b>Current Approved Lifetime Budget</b>	\$9,630,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	6,088	108	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	9,630	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** JA - FY2020 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2021

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$9,630,000
<b>Current Approved Lifetime Budget</b>	\$9,630,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	4,654	839	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	9,630	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** KW - FY2021 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2022

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$9,630,000
<b>Current Approved Lifetime Budget</b>	\$9,630,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	6,389	1,168	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	9,630	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** KX - FY2022 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2022
<b>Completion:</b>	FY 2023

**Project Description:**  
 This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**  
 This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$9,664,000
<b>Current Approved Lifetime Budget</b>	\$9,664,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	5,950	1,124	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	9,664	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** KY - FY2023 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2023
<b>Completion:</b>	FY 2024

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$10,150,000
<b>Current Approved Lifetime Budget</b>	\$10,150,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	6,126	1,144	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	10,150	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** KZ - FY2024 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2025

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$10,451,700
<b>Current Approved Lifetime Budget</b>	\$10,451,700
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	6,571	1,197	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	10,452	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** LI - FY2025 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2025
<b>Completion:</b>	FY 2026

**Project Description:**  
 This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**  
 This project will have no material impact in the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$10,780,000
<b>Current Approved Lifetime Budget</b>	\$10,780,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	6,772	1,194	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	10,780	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** L2 - FY2026 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2026
<b>Completion:</b>	FY 2027

**Project Description:**

This project is for the annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will have no material impact on the operating budget. But, the project makes a moderate impact on risk reduction as timely repair of breaks prevents further complications.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$11,890,000
<b>Current Approved Lifetime Budget</b>	\$11,890,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	8,041	872	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	0	0	11,890	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** On-Going  
**Project ID/Project Title:** L6 - FY2027 - DWS Water Projects  
**Managing Department:** Water Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2027
<b>Completion:</b>	FY 2028

**Project Description:**

This project is for the FY2027 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

**Impact on Operations:**

This project will result in cost avoidance to future O & M budgets and improved customer service.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>NEW</b>
Previous Approved Lifetime Budget	\$0
Current Approved Lifetime Budget	\$12,250,000
Lifetime Budget Increase/Decrease	\$12,250,000
Allocated Labor as of FY 2017	\$0

	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	8,419	821
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	0	12,250	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** HA - DWS Water Pumping Project  
**Managing Department:** Water Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2019

**Project Description:**

This project will support the Department of Water Services Pumping Department maintenance program. Large, expensive, and long lived equipment needs to be periodically replaced due to wear or premature failure. Major pumps, motors, valves and related equipment will be replaced in each of the department's four pump stations as needed

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

	<b>CLOSED</b>
Previous Approved Lifetime Budget	\$1,460,000
Current Approved Lifetime Budget	\$1,462,976
Total DC Water Allocated Labor	\$5,984
<b>Total Project Cost</b>	<b>\$984,495</b>

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	979	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,463	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** AY - Upgrades to Ft. Reno Pumping Station  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<u>Project Dates</u>	
<b>Start:</b>	FY 2002
<b>Completion:</b>	FY 2020

**Project Description:**

This project includes the replacement of pump controls, three existing Variable Frequency Drives, electrical switchgear and motor control centers, along with upgrades to the SCADA system at Fort Reno Pumping Station. The improvements also include the installation of: a surge suppression system at the Fort Reno Pumping Station; an altitude valve on Fort Reno Tank No. 2; installation of redundant instrumentation; security system upgrades; and 28 remote pressure monitoring stations at critical locations in the system to allow operators to monitor pressures in the distribution system. The main benefit of this project is increased pressures and improved system reliability supplying water to the 4th High Service Area west of Rock Creek Park.

**Impact on Operations:**

This project will have no material impact on the operating budget, but will improve system reliability and customer service.

**Effective Funding by User (percent):**

DC -	77.51%
EPA/Fed -	22.49%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$13,549,267
<b>Current Approved Lifetime Budget</b>	\$13,978,449
<b>Lifetime Budget Increase/Decrease</b>	\$429,182
<b>Allocated Labor as of FY 2017</b>	\$1,451,661

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	12,256	487	226	68	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	13,100	879	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** F8 - 16th & Alaska Ave Pump Sta Upgrades  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2019

**Project Description:**

This project provides upgrades to the 16th Street and Alaska Avenue Pumping Station to increase reliability and serviceability. Upgrades include: installation of a second suction and discharge headers; new Variable Frequency Drive (VFD) on the existing fourth constant speed pump; replacement of existing VFDs with new solid state equipment; replacement of existing instrumentation and controls with PLC based soft logic controls; installation of redundant instrumentation; security system upgrades; improvements to ventilation system for cooling of the station; and the provision of a second electric feeder to the pumping station.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	77.23%
EPA/Fed -	22.77%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$4,879,186
<b>Current Approved Lifetime Budget</b>	\$4,989,934
<b>Lifetime Budget Increase/Decrease</b>	\$110,748
<b>Allocated Labor as of FY 2017</b>	\$418,418

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,065	101	3	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,102	888	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** FD - Water Fac Security System Upgrades  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2021

**Project Description:**

This project is to upgrade security systems at the following facilities: Bryant Street Pumping Station, Soldiers Home Reservoir, Brentwood Reservoir, Anacostia Tank No. 1 (Boulevard Tank), Anacostia Tank No. 2 (Good Hope Tank) and Fort Stanton Reservoirs Site and Fort Reno Site.

**Impact on Operations:**

This project will have no material impact on the operating budget, however minor O & M costs for maintenance and monitoring of security cameras will occur in future budget years.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$2,067,179
<b>Current Approved Lifetime Budget</b>	\$2,099,653
<b>Lifetime Budget Increase/Decrease</b>	\$32,474
<b>Allocated Labor as of FY 2017</b>	\$38,169

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,077	53	62	38	25	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	2,100	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** FH - Discharge Piping Bryant St. Pump Sta  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<b>Project Dates</b>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2018

**Project Description:**

This project provides for the replacement of six discharge pipes from the Bryant Street Pumping Station that are highly corroded. The discharge piping will be replaced from the cone valves inside the station to a point on Bryant Street away from the station site, to reduce the probability of a catastrophic pipe break next to the station wall and foundation.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	37.03%
EPA/Fed -	62.97%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$14,279,349
<b>Current Approved Lifetime Budget</b>	\$14,481,758
<b>Lifetime Budget Increase/Decrease</b>	\$202,409
<b>Allocated Labor as of FY 2017</b>	\$1,043,595

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	13,631	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	14,482	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** HI - Bryant Street Pump Station Phase III  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2024

**Project Description:**

This project provides for miscellaneous improvements and upgrades at the Bryant Street Pump Station. The proposed work includes, but is not limited to the following: pump control board upgrades; HVAC improvements, and replacement of roll-up doors and windows in the Pump Room; replacement of incandescent lights throughout the building with CFD/Halogen lighting systems; and floor drain improvements in the discharge piping area.

**Impact on Operations:**

This project will have no material impact in the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$5,920,000
<b>Current Approved Lifetime Budget</b>	\$5,920,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	42	86	215	987	2,533	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	220	0	560	5,140	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** HR - Anacostia Pump Station Improvements Phase II  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** High Profile, Good Neighbor Policy

<u>Project Dates</u>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2025

**Project Description:**

This project provides for electrical, mechanical and instrumentation improvements at the Anacostia Pump Station. It also includes other miscellaneous improvements and repairs for the gratings, stairs and roof, and addresses the problem of rainwater infiltration at the lower level.

**Impact on Operations:**

This project will have no material impact in the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$4,700,000
<b>Current Approved Lifetime Budget</b>	\$4,700,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	42	165	303	2,206	389	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	180	390	4,130	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** HV - Bryant St Pump Station - Spill Header Flow Control  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2021

**Project Description:**

This project is to install seven actuated spillover Pressure Reducing Valves (PRVs) with flowmeter capabilities to replace existing manually operated PRVs that control spillover flow into the low service area, and to replace 24 globe valves with motor operated butterfly valves to allow full automation and remote control of the spillage header. The metering capability will allow operation to control flow being spilled into the 1st High, 2nd High and/or the low zones area more effectively.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, the new flow meters will require regular maintenance causing some increase in the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$6,501,661
<b>Current Approved Lifetime Budget</b>	\$6,641,318
<b>Lifetime Budget Increase/Decrease</b>	\$139,657
<b>Allocated Labor as of FY 2017</b>	\$208,210

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	765	25	838	2,081	371	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	902	94	5,645	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** JB - Bryant Street PS Improvements - Phase II  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2012
<b>Completion:</b>	FY 2022

**Project Description:**

This project provides for improvements to HVAC systems at the Bryant Street Pumping Station and the Warehouse and Meter Shop Buildings to address system deficiencies and improve working conditions for the staff residing within these buildings. The HVAC improvements include some structural and controls modifications to the office space in the Warehouse and Meter Shop building. This project also provides for: replacement of the parking deck wearing surface and roof membrane and removal and reconstruction of top portions of the walls at the Warehouse and Shops building, and repair or replacement of select structural roof members, windows, gutters, flashing, sealant, roofing slate and masonry façade at the Bryant Street PS building.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

<b>DC -</b>	100.00%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	0.00%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

<b>Previous Approved Lifetime Budget</b>	\$11,735,749
<b>Current Approved Lifetime Budget</b>	\$12,297,723
<b>Lifetime Budget Increase/Decrease</b>	\$561,974
<b>Allocated Labor as of FY 2017</b>	\$264,544

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	1,430	2,223	475	254	1,295	2,905	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
<b>Budget</b>	4,437	785	556	0	6,520	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** LT - Water System SCADA  
**Managing Department:** Water Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2014
<b>Completion:</b>	FY 2022

**Project Description:**

This project implements recommendations of the 2013 SCADA Master Plan. It is to add additional sites and also optimize the existing Water SCADA System. The initial focus will be to develop standards, implement changes needed for existing SCADA sites to conform to the standards, and perform system-wide testing to promote reliable monitoring and control of water system SCADA sites. New sites will be added such as: tanks, reservoirs, zone pressure monitoring, distribution valve monitoring, and water quality monitoring. In the future a fully optimized SCADA will move water operations from an operator-based automation system to a centralized computer decision system that forecasts demand and continuously calculates optimal system settings within established operating constraints. This is the direction envisioned in the SCADA Master Plan.

**Impact on Operations:**

The primary purpose of the SCADA System is to monitor the health of the distribution system and control water system equipment in order to meet water quality requirements and customer needs. Water and sewer operators need to understand alarms and see discrepancies between known field conditions and SCADA System displays. This affects operations ability to make effective operating decisions and respond appropriately to unexpected changes in system operation.

**Effective Funding by User (percent):**

<b>DC -</b>	100.00%
<b>EPA/Fed -</b>	0.00%
<b>WSSC -</b>	0.00%
<b>Fairfax -</b>	0.00%
<b>Loudoun/PI -</b>	0.00%

<b>Previous Approved Lifetime Budget</b>	\$8,137,036
<b>Current Approved Lifetime Budget</b>	\$8,296,345
<b>Lifetime Budget Increase/Decrease</b>	\$159,309
<b>Allocated Labor as of FY 2017</b>	\$3,708

<b>Disbursements</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	837	356	179	1,690	1,951	595	0	0	0	0	0	0
<b>Commitments</b>	<b>Pre FY 2018</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Post FY 2027</b>
<b>Budget</b>	1,659	1	6,136	500	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** LU - Water Facilities Security System Upgrades 2  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2016
<b>Completion:</b>	FY 2026

**Project Description:**

This project is to upgrade security systems at water pumping stations, water storage reservoirs and elevated tanks, and other water distribution system structures and sites. Work consists of installing CCTV cameras, access card readers, intrusion sensors, fencing, network and communications, and other control surveillance devices and systems to protect the water facilities and infrastructure against vandalism, criminal activity, and possible future terrorism; as well as to protect DC Water personnel in accordance with the recommendations of the Vulnerability Assessment (VA) Study.

**Impact on Operations:**

This project will have no material impact on the operating budget, however minor O & M costs for maintenance and monitoring of security cameras will occur in future budget years.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$2,000,000
<b>Current Approved Lifetime Budget</b>	\$2,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$2,743

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	50	0	0	0	0	88	287	465	309	211	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	50	0	0	0	1,950	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** M7 - Replacement of Anacostia PS  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** High Profile, Good Neighbor Policy

<b>Project Dates</b>	
<b>Start:</b>	FY 2002
<b>Completion:</b>	FY 2019

**Project Description:**

This project is to replace the 85 year old Anacostia Pumping Station to meet code requirements, add pumps for the new Anacostia First High South Service Area and maintain the reliability of the Anacostia 1st and 2nd High Service Area distribution system. It includes the installation of 3,000 feet of 30-inch water main to link the Anacostia Pumping Station to the Anacostia 1st High South Service Area. The new Pumping Station will have a capacity of 60 MGD and will be constructed on the same site as the original Pumping Station, which will remain in service until the new facility is completed and operational.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	47.40%
EPA/Fed -	52.60%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$33,433,974
<b>Current Approved Lifetime Budget</b>	\$33,461,150
<b>Lifetime Budget Increase/Decrease</b>	\$27,176
<b>Allocated Labor as of FY 2017</b>	\$1,112,269

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	32,864	40	7	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	33,035	426	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** OR - Fort Reno Pump Station Improvements Phase II  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Potential Failure / Ability to continue meeting permit requirement

<u>Project Dates</u>	
<b>Start:</b>	FY 2021
<b>Completion:</b>	FY 2025

**Project Description:**

This project provides for the replacement of pumps, motors, and VFD equipment at the Fort Reno Pump Station, along with other mechanical and electrical improvements.

**Impact on Operations:**

This project will have no material impact in the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$6,430,000
<b>Current Approved Lifetime Budget</b>	\$6,430,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	49	181	263	2,820	969	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	240	530	5,660	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** PS - Existing Water Facilities Building Optimization  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2022

**Project Description:**

To meet EPA guidelines for energy efficiency, water efficiency, sustainable buildings, renewable energy, safety requirements, and environmental management systems. All DC Water buildings, supporting water distribution should be upgraded to an integrated electronic Building Automation System for proper performance and remote control monitoring related with HVAC, Plumbing Elevators, and Life Safety Equipment. Water Distribution Buildings requiring upgrades are: Bryant Street Pumping Station, Anacostia Pumping Station and Fort Reno Pumping Station.

**Impact on Operations:**

This project will have no material impact in the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$695,000
<b>Current Approved Lifetime Budget</b>	\$695,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	145	217	44	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	695	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Pumping Facilities  
**Project ID/Project Title:** S6 - West Venturi Meter - Bryant St Pumping Station  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2019
<b>Completion:</b>	FY 2021

**Project Description:**  
 The project scope consists of replacing the existing west Venturi meter and constructing a new meter vault at BSPS facility.

**Impact on Operations:**  
 Due to the accuracy of new Venturi meter, operational activity, billing accuracy and system reliability is expected to improve. By providing redundancy, DDCS/DWS staff can perform effective system maintenance activities.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$940,000
<b>Current Approved Lifetime Budget</b>	\$940,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	67	242	212	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	120	820	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** B0 - FY2010 - DDOT Water Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2010
<b>Completion:</b>	FY 2019

**Project Description:**

This project is the annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by DDOT. This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$17,171,132
<b>Current Approved Lifetime Budget</b>	\$17,171,132
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$251,444

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	13,991	27	5	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	16,521	650	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** BN - FY2011 - DDOT Water Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2011
<b>Completion:</b>	FY 2020

**Project Description:**

This project is for the annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$8,738,342
<b>Current Approved Lifetime Budget</b>	\$8,738,342
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$898,472

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	3,533	551	343	113	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	8,074	664	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** CJ - FY2012 - DDOT Water Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2011
<b>Completion:</b>	FY 2022

**Project Description:**

This project is for the annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$6,473,738
<b>Current Approved Lifetime Budget</b>	\$6,473,738
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$58,341

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,964	127	90	83	2	2	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,165	2,286	0	23	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** DDOT  
**Project ID/Project Title:** CM - FY2013 - DDOT Water Projects  
**Managing Department:** DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2020

**Project Description:**

This project is for the annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$1,549,299
<b>Current Approved Lifetime Budget</b>	\$1,549,299
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$22,580

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	269	199	48	12	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	796	708	0	45	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Storage Facilities  
**Project ID/Project Title:** FA - Water Storage Facility Upgrades  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Health Safety

<u>Project Dates</u>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2022

**Project Description:**

This project consists of replacing the expansion joint material, concrete floor slab and wall repairs within the Fort Stanton Reservoir No.2 to minimize the current leakage and repair the damage caused by an embankment failure. This project also includes electrical, instrumentation upgrades / improvements, venting modifications and reconfiguration of the drain / overflow piping and installation of impermeable membranes over three underground water storage reservoirs as required by EPA. Future upgrades / improvements to the storage facilities based upon planned inspection / assessments conducted every three years are also covered under this project.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, a portion of this project (Job FA01) will reduce water loss, thus slowing the growth in water purchase costs.

**Effective Funding by User (percent):**

<b>DC -</b>	88.85%	<b>Previous Approved Lifetime Budget</b>	\$36,137,120
<b>EPA/Fed -</b>	11.15%	<b>Current Approved Lifetime Budget</b>	\$36,481,317
<b>WSSC -</b>	0.00%	<b>Lifetime Budget Increase/Decrease</b>	\$344,197
<b>Fairfax -</b>	0.00%	<b>Allocated Labor as of FY 2017</b>	\$1,697,989
<b>Loudoun/PI -</b>	0.00%		

Disbursements	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Budget</b>	19.605	1.992	1.971	3.527	1.328	450	0	0	0	0	0	0
Commitments	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
<b>Budget</b>	24.711	474	6.812	2.889	1.595	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Storage Facilities  
**Project ID/Project Title:** HW - Rehabilitation of Elevated Water Tanks  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<u>Project Dates</u>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2025

**Project Description:**

This project consists of rehabilitation of the coating systems for: Anacostia Tank No. 1 (Boulevard Tank), Anacostia Tank No. 2 (Good Hope Tank), and Fort Reno Tank 2.

**Impact on Operations:**

This project will have no material impact on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

Previous Approved Lifetime Budget	\$7,000,000
Current Approved Lifetime Budget	\$7,000,000
Lifetime Budget Increase/Decrease	\$0
Allocated Labor as of FY 2017	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	105	304	741	2,070	1,289	538	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	580	6,420	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Storage Facilities  
**Project ID/Project Title:** MA - St. Elizabeth Water Tank  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** High Profile, Good Neighbor Policy

<b>Project Dates</b>	
<b>Start:</b>	FY 2002
<b>Completion:</b>	FY 2021

**Project Description:**

The project includes the construction of a 2.0 million gallon elevated water storage tank. The new storage tank will provide additional potable water storage for the Anacostia 1st High South Service Area, increasing pressures to the higher elevation areas and improving fire protection in the distribution system served by this storage tank. St. Elizabeth's Hospital has agreed to allow the tank to be located on the Hospital complex as this new facility will improve the reliability of the Hospital's water supply system.

**Impact on Operations:**

New tank will require periodic (10 to 15 years) maintenance involving painting.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$36,883,372
<b>Current Approved Lifetime Budget</b>	\$37,291,191
<b>Lifetime Budget Increase/Decrease</b>	\$407,819
<b>Allocated Labor as of FY 2017</b>	\$1,132,722

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	13,863	5,377	2,826	3,617	1,079	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	29,902	1,911	478	5,000	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Storage Facilities  
**Project ID/Project Title:** MQ - 2MG 4th High Storage Tank  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<b>Project Dates</b>	
<b>Start:</b>	FY 2004
<b>Completion:</b>	FY 2024

**Project Description:**

This project includes the siting and feasibility study, design and construction for the future construction of a 2.0 million gallon storage tank to supply the 4th High Service Area on the west side of Rock Creek Park. This area does not have any usable storage and all water supply comes from the Fort Reno Pumping Station. The objective of the storage tank is to provide a source of supply should there be a failure of the pumping station, and provide storage capacity to improve the reliability of the water supply to this portion of the 4th High Service Area.

**Impact on Operations:**

New elevated water storage tank will require periodic (10 to 15 years) maintenance causing an increase on the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$9,579,755
<b>Current Approved Lifetime Budget</b>	\$9,716,424
<b>Lifetime Budget Increase/Decrease</b>	\$136,669
<b>Allocated Labor as of FY 2017</b>	\$44,188

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	813	191	55	322	418	491	1,637	1,925	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,574	312	780	1,000	1,060	0	4,990	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Storage Facilities  
**Project ID/Project Title:** MR - 2nd High Water Storage  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

<u>Project Dates</u>	
<b>Start:</b>	FY 2009
<b>Completion:</b>	FY 2025

**Project Description:**

This project includes the siting and feasibility study, design and construction of a water storage reservoir in the 2nd High Service Area east of Rock Creek Park. The reservoir will address storage deficiency and improve system reliability within the 2nd High service area located in northwest and northeast sections north of Florida Ave and Rhode Island Ave and south of Missouri Ave. The existing Van Ness reservoir (Washington Aqueduct facility) has capacity to supply 65% of the average daily usage in the 2nd High Service Area. The additional storage will provide flexibility to undertake routine maintenance of the existing and proposed reservoirs. In addition, a second reservoir in the area will allow taking one of the reservoirs out of service without having to pump into a closed system.

**Impact on Operations:**

New potable water reservoir will require periodic maintenance causing some increase in the operating budget.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$16,764,206
<b>Current Approved Lifetime Budget</b>	\$17,030,873
<b>Lifetime Budget Increase/Decrease</b>	\$266,667
<b>Allocated Labor as of FY 2017</b>	\$24,302

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,391	0	115	517	358	416	1,399	6,157	1,805	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	1,721	0	1,605	0	0	1,060	12,645	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Program Management  
**Project ID/Project Title:** KV - Water Program Mgt. Services 2F  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2020
<b>Completion:</b>	FY 2024

**Project Description:**

This project is to provide engineering program management services for the water system capital improvements program (CIP), to develop a comprehensive water distribution system hydraulic model and run model simulations for evaluation of capital improvement alternatives; to perform pipe condition assessments of pipelines; to assess the potable water storage and pumping needs; to investigate alternatives to eliminate low water pressures; improve water quality in the distribution system; provide reliable and adequate fire protection; to perform conceptual design of proposed capital projects; and to develop a comprehensive facilities plan for incorporation into the capital improvements program. It also includes developing scopes of work, preparing cost estimates, negotiating task orders and reviewing design submittals for the implementation of the capital improvement program.

**Impact on Operations:**

Program Management has no direct impact on operations; however, the impact of each project on operations is identified on individual project sheets.

**Effective Funding by User (percent):**

DC -	100.00%	<b>Previous Approved Lifetime Budget</b>	\$30,610,000
EPA/Fed -	0.00%	<b>Current Approved Lifetime Budget</b>	\$30,610,000
WSSC -	0.00%	<b>Lifetime Budget Increase/Decrease</b>	\$0
Fairfax -	0.00%	<b>Allocated Labor as of FY 2017</b>	\$0
Loudoun/PI -	0.00%		

Disbursements Budget	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
Budget	0	0	0	3.809	5.013	6.150	5.035	3.915	0	0	0	0
Commitments Budget	<u>Pre FY 2018</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Post FY 2027</u>
Budget	0	0	0	30.610	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Program Management  
**Project ID/Project Title:** LB - Water Program Mgt. Services 2G  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2024
<b>Completion:</b>	FY 2029

**Project Description:**

This project is to provide engineering program management services for the water system CIP, to develop a comprehensive water distribution system hydraulic model and run model simulations for evaluation of capital improvement alternatives; to perform Pipe Condition Assessments of pipelines; to assess the potable water storage and pumping needs; to investigate alternatives to eliminate low water pressures; improve water quality in the distribution system; provide reliable and adequate fire protection; to perform conceptual design of proposed capital projects; and to develop a comprehensive facilities plan for incorporation into the CIP. It also includes developing scopes of work, preparing cost estimates, negotiating task orders and reviewing design submittals for the implementation of the CIP.

**Impact on Operations:**

Program Management has no direct impact on operations; however, the impact of each project on operations is identified on individual project sheets.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$35,480,000
<b>Current Approved Lifetime Budget</b>	\$35,480,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$0

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	1,897	4,551	6,966	7,312	6,759
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	0	0	0	0	0	0	0	35,480	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)



FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Program Management  
**Project ID/Project Title:** LQ - Water Service Area Asset Management <sup>4</sup>  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 2013
<b>Completion:</b>	FY 2019

**Project Description:**

This project is to implement a comprehensive Asset Management program for Water Services and WSPM. The program consists of a variety of elements, including but not limited to technology and data, maintenance and work management, reliability and condition assessment and asset life cycle management activities. Asset Management implementation is expected to take place over a five year period.

**Impact on Operations:**

Additional operating/maintenance costs will be required, but greater savings through improved asset life cycle costing is anticipated.

**Effective Funding by User (percent):**

DC -	77.25%
EPA/Fed -	0.00%
WSSC -	17.45%
Fairfax -	3.47%
Loudoun/PI -	0.32%

<b>Previous Approved Lifetime Budget</b>	\$5,000,000
<b>Current Approved Lifetime Budget</b>	\$5,000,000
<b>Lifetime Budget Increase/Decrease</b>	\$0
<b>Allocated Labor as of FY 2017</b>	\$164,028

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	4,056	408	56	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	5,000	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)

<sup>4</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted was or will be derived and adopted in accordance with Blue Plains IMA Agreement of 2012 section 5.B 'Determination of Multi Jurisdictional Facilities (MJUFs)'.

FY 2018 - FY 2027

**Service Area Title:** Water Service Area  
**Program Title:** Program Management  
**Project ID/Project Title:** ME - Water System Program Management Services  
**Managing Department:** Engineering and Technical Services  
**EPMC:** Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Project Dates</b>	
<b>Start:</b>	FY 1999
<b>Completion:</b>	FY 2022

**Project Description:**

This project is to provide engineering program management services for the water system CIP, to develop a comprehensive water distribution system hydraulic model and run model simulations for evaluation of capital improvement alternatives; to perform pipe condition assessments of pipelines; to assess the potable water storage and pumping needs; to investigate alternatives to eliminate low water pressures; improve water quality in the distribution system; provide reliable and adequate fire protection; to perform conceptual design of proposed capital projects; and to develop a comprehensive facilities plan for incorporation into the CIP. It also includes developing scopes of work, preparing cost estimates, negotiating task orders and reviewing design submittals for the implementation of the CIP.

**Impact on Operations:**

Program Management has no direct impact on operations; however, the impact of each project on operations is identified on individual project sheets.

**Effective Funding by User (percent):**

DC -	100.00%
EPA/Fed -	0.00%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%

<b>Previous Approved Lifetime Budget</b>	\$30,112,581
<b>Current Approved Lifetime Budget</b>	\$19,854,167
<b>Lifetime Budget Increase/Decrease</b>	(\$10,258,414)
<b>Allocated Labor as of FY 2017</b>	\$422,804

Disbursements	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	7,416	3,032	2,925	2,755	2,238	1,289	0	0	0	0	0	0
Commitments	Pre FY 2018	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Post FY 2027
Budget	19,554	300	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies; commitments budget does not include labor)

(\$ in thousands)