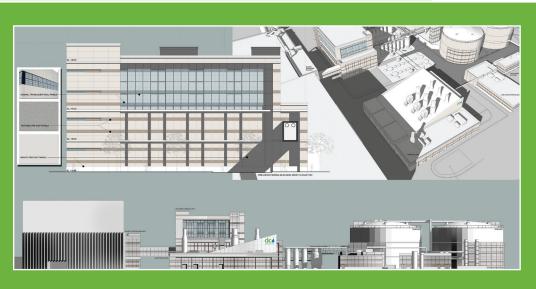


stewardship: **ENVIRONMENT**, **RESOURCES** and **WORKFORCE**







DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2010-2019

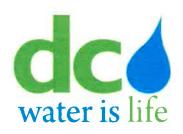
William M. Walker, Chairman of the Board

George S. Hawkins, General Manager

Olu Adebo, Chief Financial Officer

ADOPTED FEBRUARY 03, 2011

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(As of February 3, 2011)

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ACKNOWLEDGEMENTS

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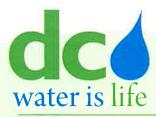
The Finance and Budget Department would like to extend its appreciation to all the departmental staff members whose hard work and dedication helped make this document possible.

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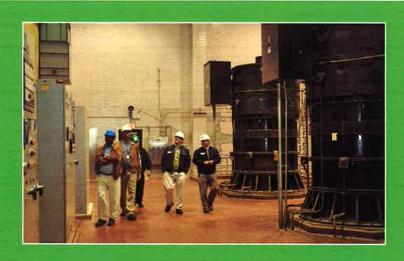
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DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2010-2019







SECTION I

CIP Letter of Transmittal

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FY 2010 - FY 2019 CAPITAL IMPROVEMENT PROGRAM LETTER OF TRANSMITTAL

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY I 5000 OVERLOOK AVENUE, SW I WASHINGTON, DC 20032

February 3, 2011

Mr. William Walker, Chairman, Members of the Board of Directors and Mr. George Hawkins, General Manager District of Columbia Water and Sewer Authority

We are pleased to transmit the District of Columbia Water and Sewer Authority's (DC Water) Capital Improvement Program (CIP) budget book as adopted by the DC Water Board of Directors at its regular meeting of February 3, 2011. These budgets are intended to meet the mandate provided for in District of Columbia Law 11-111, which specifies that "...the Board shall annually develop, adopt and submit to the Mayor, a multi-year financial plan for Capital and Operating expenses ..."

This book serves as a supplement to data contained in Section V of the Operating Book and provides more specific detail regarding each Service Area, including the specific projects that comprise each Program Area. We also provide Lifetime Budgets and annual disbursement estimates for the current planning period. We hope that this project specific information will help the reader understand the priority of each capital investment planned and the benefit to be shared by all of our customers.

As described in Sections I (Budget in Brief) and V of the Operating Book, the capital budgets include: a ten-year (FY 2010-2019) CIP disbursement budget, a Lifetime budget and a Capital Authority request. The CIP allocates billions of dollars in resources for important environmental and regulatory initiatives that will help improve the health of our surrounding waterways and reduce the carbon footprint of DC Water within the region. Many of our ongoing capital investments have already resulted in reduced energy use at the Blue Plains Wastewater Treatment Plant. In addition, we have achieved nitrogen reduction output levels below the requirements of the Chesapeake Bay Agreement and nearly 40 percent reductions in combined sewer overflows.

As shown in the table below, this approved budget includes: \$3.8 billion for our FY 2010 – FY 2019 CIP (10-year disbursement budget); \$7.9 billion for lifetime budget; and \$752.5 million in new Capital Authority request. This year's CIP generally continues

down the path established by the Board with the approval of last year's program. The ten-year disbursements remained flat at approximately \$3.8 billion, while the lifetime budget increased by \$402.1 million. Over 80 percent of the increase in the Lifetime budget is attributable to the Water and Sanitary Sewer Service Areas to continue the ramp-up approved in last year's budget supported by the 2009 Water and Sewer Facility Plans that identified critical needs in these areas.

Capital Improvement Program (CIP) Budget						
(\$ 000's)						
Program Area	10-Year Disbursement	Lifetime Budget	Capital Authority Request			
Wastewater Treatment	1,402,604	2,644,081	72,035			
Sanitary Sewer	436,655	835,165	56,798			
Combined Sewer Overflow	1,125,047	2,671,963	513,853			
Stormwater	21,839	61,958	1,343			
Water System	612,873	1,400,215	78,279			
Washington Aqueduct (DCWater share)	110,816	203,138	17,672			
Capital Equipment	103,906	103,906	12,500			
Total	3,813,740	7,920,426	752,480			

We face a monumental task in managing a large and complex CIP. As we continue to meet the challenge of replacing an aging infrastructure, environmental mandates place additional demands on scarce resources; requiring continuous process improvement and technological advances. Team Blue staff members at DC Water continue to prove they are up to the challenges. The Clean Rivers Project (also known as the CSO Long Term Control Plan) is well on its way to reducing combined sewer overflows by 96 percent through an aggressive tunneling project along the Anacostia and Potomac rivers. Progress on other key projects continues, with contract procurement and site preparation work ongoing on the Enhanced Nitrogen Removal Facilities (ENRF) – BTN, and the biosolids (digester) projects. As noted in the operating budget book, the next generation of nitrogen removal projects under ENRF will break ground in 2011 after many years of planning. This project will allow Blue Plains to meet the newest federal permit requirements that go into effect in July 2014 for nitrogen as it already does for phosphorus. ENRF will operate in conjunction with the Clean Rivers Project, providing overall savings in capital investments. And the addition of anaerobic digestion and thermal hydrolysis for biosolids management will have the multiple

effect of create a better class of biosolids – Class A – reducing the amount of solid material to be hauled away each day by 50 percent (or about 30 fewer trucks on the road per day). Finally, this will generate clean, green renewable power that will generate about one third of the energy needs for DC Water each year!

Acknowledgements

Finally, we would like to thank our General Manager, George S. Hawkins, the Chairman of the Board, William H. Walker, and all DC Water Board members for their vision and tireless leadership as we worked on the development and adoption of a new ten-year capital plan. Our CIP represents a large investment for the Washington metropolitan region and we appreciate the diligence and support given by these leaders and the full Board of Directors as DC Water takes the steps necessary to address an aging infrastructure. We would also like to acknowledge all of the support from the hard working and dedicated professionals of the DC Water staff for the thoroughness and long hours required to gather all of the technical data, prioritize among very important requirements and propose a concise capital plan for Board presentation, review and adoption. With this blueprint forward, we will continue to support the delivery of clean water and sanitation through strategic capital investments while continuing our mantra of customer service excellence.

Sincerely,

Olu Adebo

Chief Financial Officer

Leonard Benson Chief Engineer



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM APPROVED FY 2010-2019



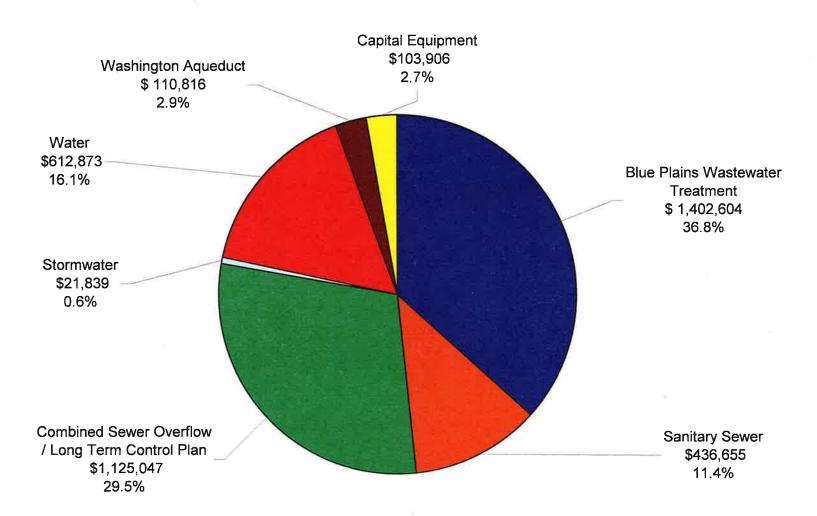




Capital Improvement
Projects Overview

dcwater.com

FY 2010 - FY 2019 Capital Improvement Program (\$ in 000's)



Total \$3.8 billion (Cash Disbursements)

FY 2010 – FY 2019 CAPITAL IMPROVEMENT PROGRAM OVERVIEW

District of Columbia Water and Sewer Authority's ("DC Water") ten-year capital improvement program (CIP) totals \$3.8 billion (cash disbursements basis), approximately the same amount as last year's plan. As mentioned in Section I and discussed in more detail later throughout this document, although the total disbursements for the plan stayed the same, there has been a shift among the Service Areas. The Wastewater Treatment Area disbursements decreased by \$170.1 million over the ten year period as a result of the completion of major projects in the out-years of the plan such as the Enhanced Nitrogen Removal Facilities (formerly BTN - Total Nitrogen Facilities) and digesters. This decrease was offset by increases in the Water, Sanitary Sewer, CSO and the Washington Aqueduct. The increases in the Water and Sanitary Sewer Areas (combined total of approximately \$99 million) were the result of the continuation of the ramp-up through 2015 of the service life restoration programs in these areas. The increase in the CSO/Clean Rivers Project (aka CSO/LTCP) of \$45 million is primarily the result of the addition of FY 2019 and the dropping of FY 2009 within the ten year plan. An \$18 million increase for the Washington Aqueduct represents the funding needed for infrastructure improvements at their facilities over the next ten years.

The following sections summarize major projects and changes in each service area, with additional details for each project included in each service area section. Please note that all dollar amounts are presented on a project lifetime basis, except where noted otherwise.

WASTEWATER TREATMENT

The lifetime budget for the Wastewater Treatment Service Area is \$2.7 billion, an increase of \$69.2 million from last year's budget. This increase results primarily from the inclusion of the Raw Wastewater Pump Station 2 (\$27.5 million) and the increase funding for the Enhanced Nitrogen Removal-North (\$29.4 million) formerly named Plantwide Fine Bubble Aeration System. The Raw Wastewater Pump Station Upgrade is necessary to replace equipment that is beyond its useful life and to relocate sensitive equipment to a less corrosive environment to maintain the investment in the remaining equipment. The Enhanced Nitrogen Removal-North replaces the existing coarse bubble diffusers in the Secondary Treatment process with fine bubble diffusers. Conversion to a fine bubble aeration system provides the capability to transfer more oxygen to the process while saving overall energy consumption.

As previously indicated, the decrease in the ten year disbursements in this service area is primarily due to the completion of major projects in the out-years of the plan.

Also, this Area continues to reflect the implementation of the Biosolids Management Plan including the costs of construction of the Combined Heating and Power Plant (CHP) and Digesters with estimated completion in FY 2014. The benefits of this plan include producing a Class A biosolids product which can be more widely disposed of at reduced costs; reduction in the carbon footprint of the existing lime stabilization process; and, the on-site production of an estimated 10MW of power that can be utilized at Blue Plains. An

interim method of financing this project has been used in the Financial Plan to mitigate the impact on customers' rates and to better match the financing costs with the benefits that will be received over the life of these facilities

Other long-term upgrade projects now under construction include:

- Nitrification-Denitrification Facilities Upgrade to upgrade the process and/or replace equipment that is at the end of its useful life.
- Raw Wastewater Pump Station 1 Upgrade to the Raw Wastewater Pump Station to replace equipment that is at the end of its useful life, and improve reliability.
- Process Control System will provide automated monitoring and control for the nitrification-denitrification process that will improve treatment, control and optimize chemical and power costs, and increase reliability of the facilities.
- Biological Sludge Thickening Facilities- will upgrade the existing dissolved air floatation thickening units to restore integrity to this system and reduce sludge processing and chemical costs through improved efficiency.

COMBINED SEWER OVERLFOW

The lifetime budget for the Combined Sewer Service Overflow (CSO) Service Area is \$2.7 billion, which includes the twenty-year Clean Rivers Project (aka CSO/LTCP). The benefits of this plan are significant. When fully implemented, combined sewer overflows will be reduced by a projected 96 percent (98 percent on the Anacostia River), resulting in improved water quality. There was a net decrease of about \$23 million in this service area resulting from a transfer of funds to a variety of Land-use Projects offset by the addition of necessary combined sewer projects scheduled to begin in FY 2018 as part of the continued ramp-up of the Sewer Facility Rehabilitation Plan. The disbursements, however, increased primarily as a result of the addition of FY 2019 (\$83.5 million) and the dropping of FY 2009 (\$30.9 million) within the ten year plan.

As was noted last year there are additional risks and contingencies associated with the 20-year LTCP program that exist and need to be evaluated over time. Given the long time frame of this project and the uncertainties associated with tunneling projects, we are continually monitoring the costs and risks with the expectation of updating the budget projections when certain milestones have been reached. One major milestone will occur in the spring of FY 2011 with the awarding of the first construction contract for the Blue Plains Tunnel Project. As a result, we are elevating the Congressional Authority Request to mitigate any unknown risks on this project -neither the Lifetime Budget nor the Disbursements have been adjusted at this time.

STORMWATER

The lifetime budget for the Stormwater Service Area is \$62 million, an increase of \$3.2 million from last year primarily due to the funding of FY 2019 in the current ten year plan. Over the past few years, extensive dialogue among stormwater task force members resulted in a better definition of roles, responsibilities and funding sources for the activities required to enhance DC stormwater management. The DC Department of the Environment (DDOE) entered into agreements with various offices to provide services in support of the District's MS4 permit in accordance with funding availability from the Enterprise Fund. DC Water provides for the

maintenance and replacement of certain public facilities that convey stormwater runoff to the Anacostia and Potomac Rivers, Rock Creek, and other receiving streams within certain areas of the District of Columbia, specifically the areas of the District served by combined sewers. Various other agencies have responsibility for a variety of other stormwater activities. Discussion of other matters, such as the turnover of stormwater pumping facility maintenance and planned capital replacement of infrastructure in areas managed by the District under the MS4 permit continues. DDOE maintains the central responsibility for managing stormwater activities under the MS4 permit and has worked to coordinate with all agencies, the activities and funding mechanisms necessary to ensure full compliance.

While DC Water has the Clean Rivers Project to address these issues within the combined sewer areas, DC Water's staff continues to participate in the MS4 task force and to monitor the impact of other MS4 NPDES requirements on DC Water and its ratepayers. Significant progress has been made throughout the District. Since 2001, DC Water collected the MS4 stormwater fees on behalf of the District, and acted as the Stormwater Administrator until the creation of DDOE and the transfer of duties in early 2007. DC Water continues to collect those fees on behalf of the District and transfer them to DDOE quarterly. In FY 2009, we worked closely with DDOE to share our impervious surface area database. Along with DC Water, DDOE believes that this new rate structure can help to equitably allocate costs of services provided to the cost causers and influence future behavior through education.

SANITARY SEWER

A majority of the sewers in the DC Water system were constructed more than one hundred years ago and are still in operation. Aging infrastructure is a national issue and can impact the condition and performance of the system. DC Water is responsible for wastewater collection and transmission in the District of Columbia, including operation and maintenance of the sanitary sewer system. DC Water's sanitary sewer system includes approximately 600 miles of large interceptor sewers and smaller gravity collection sewers. DC Water is also responsible for sewer lateral connections from the sewer mains to the property lines of residential, government, and commercial properties. In addition, DC Water is responsible for the 50 mile long Potomac Interceptor System under an agreement with the participating jurisdictions. This provides conveyance of wastewater from areas in Virginia and Maryland to Blue Plains. The existing sanitary sewer system in the District of Columbia dates back to 1810, 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.

During FY 2009, DC Water completed a Sewer System Assessment and the Water Facility Plan ("Study"). This document culminated a five year effort involving sewer inspection and condition assessment, development of a sewer GIS and database, hydraulic monitoring and modeling to assess system capacity and the development of prioritized activities for system improvement. This Study identified a significant increase in funding needed for specific sewer infrastructure improvements. As recommended by the Study, the current CIP includes funds for an ongoing, annual sewer inspection program, which may identify the need for additional work.

Key Findings of the 2009 Sewer Facilities Plan:

- Generally speaking, major sewer pipe infrastructure can meet current and future population needs; however, continued investment in upgrades to major infrastructure elements is needed.
- 88% of the sewers inspected had some defects, 60% of which could be addressed using localized repair and the remaining require, mainly, lining.
- 94% of the manholes inspected were found to have one or more defects
- The number and severity of pipe defects indicates an expected increase in problems in pipes greater than 75 years old. Older pipes can be in good condition (and younger ones can be in poor condition), but at the 75 year mark, DC Water can assume that more extensive and frequent inspection is needed.
- There are approximately 210 miles of sewers in stream valleys and about 12.3 miles of these sewers were found to need some type of repair.
- There are about 316,000 linear feet of sewers with some portion under buildings; of those inspected, a preliminary list has been developed, and approximately 7,000 linear feet of sewers have been found to have multiple and/or significant defects, warranting rehabilitation or replacement.

Key Recommendation of 2009 Sewer Facilities Plan- continue a two-pronged, parallel approach to the CIP program:

- Implement identified projects resulting from ongoing system condition and needs assessment, and an increase in the continued annual sewer pipe renewal program.
- Based on a 20-year planning outlook, this will require a \$1.2 billion increase (2008 dollars) in capital spending to address currently identified projects (\$536 million) and a sewer pipe renewal program (\$664 million).

The lifetime budget in this area has increased by \$134.8 million from last years estimate and the proposed 10-year CIP has been increased by just over \$40 million. Both of these amounts are expected to continue to increase in future years to reflect the ramping-up of this program through FY 2015 as recommended in the facility plan. There is approximately \$232 million related to above referenced -- and already identified -- projects in the lifetime budget for this service area. The remaining amounts (about \$300 million) will be included in future requests as they are analyzed and prioritized with all other funding needed for all service areas.

WATER

The lifetime budget for the Water Service Area (including Meter Replacement / AMR installation) is \$1.4 billion, an increase of \$197.3 million from last year's CIP. This is primarily driven by the continuing ramping-up through FY 2015 of the Water Facility Plan that was completed in FY 2009 to achieve the replacement of one percent of the small diameter water main infrastructure per year.

Major water projects include construction of new storage facilities; water main replacements, rehabilitations and extensions; lead service replacements; fire hydrant replacements; and valve replacements.

Projects in the Water Service Area are designed to maintain an adequate and reliable potable water supply to customers, and fire protection. Categories of projects include the rehabilitation and replacement of water mains, storage facilities, and pumping stations. This area also includes water service line and meter replacement.

WASHINGTON AQUEDUCT

The Washington Aqueduct (Aqueduct), managed by the U.S. Army Corps of Engineers, provides water, in wholesale, to DC Water and its partners in Northern Virginia, Arlington County and Falls Church. DC Water purchases approximately 75 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan treatment plants, and thus is responsible for nearly 75 percent of the Aqueduct's operating and capital costs. Under federal legislation and a memorandum of understanding enacted in 1997, DC Water and its Northern Virginia partners have a much greater role in oversight of the Aqueduct's operations and its capital improvement program.

The proposed lifetime budget for DC Water's share of Washington Aqueduct projects totals \$203.1 million or \$16.5 million more than last year's 10-year plan of \$186.6 million. This increase reflects the prioritized need for increased funding for infrastructure improvements over the next ten years.

CAPITAL EQUIPMENT

DC Water's Capital Equipment budget totals approximately \$103.9 million for FY 2010 – FY 2019 plan, an increase of approximately \$5.3 million compared to the last ten-year plan. Approximately sixty percent of spending in the capital equipment area is on major information technology projects, including the document management system (budget of \$4 million) and the asset management system (budget of \$7 million). DC Water continues its commitment to scheduled replacement of its vehicle fleet with a ten year budget of \$11.9 million, representing more than ten percent of the ten-year plan. Finally, maintenance of large equipment totals \$9.4 million, or nine percent of the ten-year plan. Other equipment including pumps, valves, meters and hydrants necessary for maintenance (including that of the District's public fire system) totals \$11.1 million.

The revised FY 2011 budget at \$17.5 million is \$4.2 million more than the currently approved budget. This variance is primarily attributable to increases in budgets for Information Technology projects.

CIP DEVELOPMENT AND APPROVAL PROCESS

DC Water's capital budget review process begins each year in the spring, as part of both our capital and operating budget review process. This process includes a review of major accomplishments, priorities, status of major projects and emerging regulatory and related issues impacting the capital program. Projections of changes in project lifetime budgets are also included. The review process involves the DC Water departments with responsibility for managing the operations of DC Water Services, the capital projects as well as finance and budget staff and executive management. The CIP is integrated into DC Water's ten-year financial plan; because of its size, it is the primary driver of DC Water's projected rate increases over the current 10 year planning period.

This review process lasts over several months and culminates with the presentation of the updated CIP to DC Water's Board of Directors' Water Quality & Water Services, Retail Services Finance & Budget and Retail Rates Committees in October. The Committees complete their review from October through December. The operating budgets, capital improvement program, and tenyear financial plan are then forwarded to the full Board for its consideration in late winter; usually January. This year, the Board delayed final review and adoption of a new budget until February due to the extraordinary regional economic challenges and rigorous re-investment requirements necessary to maintain safe, reliable services.

After adoption by the Board of Directors, DC Water is required to submit its annual operating and capital budgets to the Mayor and the District of Columbia Council for its review and comment; however, neither has power to change DC Water's annual budgets. Final operating and capital budget numbers, along with the capital authority request will be forwarded to the District for inclusion in the District of Columbia's budget submission to Congress. DC Water's request for capital authority is ultimately made to and approved by the U.S. Congress.

DISBURSEMENTS AND PROJECT LIFETIME BUDGETS

As in the past, we have presented the CIP on both a project lifetime basis and cash disbursement basis. During the CIP review process, we perform an extensive review of the total project, or "lifetime" budgets, which also reflect historical spending prior to the current ten-year period, projected spending beyond the current ten-year period and project contingencies. Project lifetime budgets are our primary area of focus in budget development and day-to-day monitoring. In addition to lifetime budgets, we also develop cash disbursements forecast. Actual cash disbursements are critical to forecasting the anticipated level of rate increases and the amount and timing of capital financings. While cash disbursements are a function of project lifetime budgets, they reflect a more realistic projection of actual "cash out the door" excluding contingencies and taking into account historical and projected completion rates.

As in prior years, the budget document includes a comparison of this year's vs. last year's lifetime project budgets by program area for the Board's review. Changes have been made to some of the project lifetime budgets approved from last year due to a change in project scope, engineering cost estimates, site changes and other related issues. In addition, some projects are either closed or dropped from the CIP. Projects for which all activities have been completed during a given fiscal year are listed as 'Closed' during that fiscal year; these same projects are, then, listed as 'Dropped' in the immediately following fiscal year.

CAPITAL AUTHORITY

As part of DC Water's enabling legislation, Congressional appropriation authority is required before any capital design or construction contract can be entered into. The FY 2012 request totals \$752.5 million, and reflects the following:

- Remaining authority from prior years' appropriations;
- Projected commitments in FY 2011 and FY 2012;

- Planned FY 2013 and FY 2014 commitments, to ensure adequate authority exists, in the event that any projects are accelerated.
- Risk allowance associated with the start of construction for the Blue Plains Tunnel

Due to the timing of the Congressional appropriations process, authority requests must be made well in advance of commitment execution. Including projected FY 2013 and FY 2014 commitments (a 24-month 'look ahead') allows us adequate flexibility to continue with contract commitments in the event that the U.S Congress delays budget approval and allows us to quickly accelerate or reprioritize projects into earlier years as approved by the Board. While this gives us flexibility to reprioritize projects, it should be noted that such changes and execution of any contract still require General Manager's approval, with major projects and contracts requiring Board approval.

MAJOR ASSUMPTIONS

Inflation: All project costs are typically inflated at three percent annually to the mid-point of construction.

Contingency: DC Water capital projects include project contingencies ranging from five to fifteen percent, based on the size of the project.

PROJECT PAGES

This document contains individual sections for each of DC Water's seven service areas. Each service area is made up of specific projects. Within each service area section in this document, there are individual project sheets for each current capital project in that section. The capital project sheets contain general information for each project. The following information is included:

Service Area Title – currently, there are seven defined project service areas in DC Water's CIP. The seven areas are: Wastewater Treatment, Combined Sewer Overflow / LTCP, Stormwater, Sanitary Sewer, Water, Washington Aqueduct and Capital Equipment. The service area categorization groups together similar projects based on facility location and type of work being done in the project. Congressional capital authority is requested at this level.

Program Title – is a further categorization within the Service Area and groups projects by type of process. For example, in the Wastewater Treatment Service Area, there are four programs: Liquid Processing, Plantwide projects, Solids Processing and Total Nitrogen Removal.

Activity Group/Project Title – The activity group is the level at which DC Water manages and monitors projects, including in the financial system and project management system. The project title reflects the descriptive name given to the project.

Service Area Manager – lists which department or organization manages the project. The majority of the projects in DC Water's CIP are managed by an internal DC Water operating department. DC Water's CIP also includes some projects which are managed by outside organizations. It is advantageous for DC Water to coordinate some of its capital work on the water and sewer infrastructure with the District's Department of Transportation (DDOT). The funding required for DC Water's work is included in the CIP, but those projects are managed by DDOT. Approximately 75 percent of the Washington Aqueduct's capital program is funded by DC Water, but the U.S. Army Corps of Engineers actually manages those projects.

Priority – DC Water engages in and prioritizes capital projects based on specific criteria. A project comprises of one or more jobs which, in turn, have individual priorities. The Priority mentioned on the capital project-sheets (listed in different sections of this book) is the one that has the largest budgeted dollars associated with it. The following is a list of definitions of the priorities shown on the individual project sheets:

1A. Court Ordered, Stipulated Agreements, Etc.

These are the projects that are undertaken to comply with court orders, stipulated agreements, regulatory issues, and the National Pollutant Discharge Elimination Permit (NPDES).

2A. Health Safety

These are projects that are required to eliminate or mitigate impact on public health or safety. These projects are also required to ensure that there is no failure to comply with DC Water's NPDES permit requirements.

2B. Board Policy, DC Water's commitment to outside agencies

These are projects that are undertaken to comply with a policy that the Board may adopt as a result of its commitment to outside Agencies.

2C. Potential Failure/Ability to continue meeting permit requirement

These are projects that are undertaken to construct or rehabilitate Facilities or Equipment that is in danger of failing, and that such failure may potentially endanger DC Water's ability to continue meeting permit requirements.

2D. High Profile, Good Neighbor Policy

These are projects that are undertaken to remediate concerns expressed by Citizens or Public Officials.

3A. Good Engineering, High pay back, Mission / Function

This category includes projects that are needed for rehabilitation and upgrading of facilities and infrastructure required for DC Water to fulfill its mission and function, as well as projects needed to resolve operational issues and inefficiencies. This category also recognizes cost savings in operation and maintenance.

3B. Good Engineering, Low, M&F over long term

This category includes projects that are needed for rehabilitation and upgrading of facilities and infrastructure, but have a lower priority than projects in 3A above, yet help DC Water to fulfill its mission over the long term.

Project Description – general description of the work to be done within the project.

Impact on Operations – describes the anticipated impact on DC Water's operations when the project is completed.

Design / Construction / Project Completion Dates— anticipated dates are shown.

Effective Funding by User – lists the anticipated project funding, by source and is based on the current Intermunicipal Agreement (IMA) and anticipates EPA funding where grants have been previously approved or in anticipation of that approval. Actual allocations may vary and are reconciled in accordance with applicable funding requirements.

Life Budget – the full project budget is approved and reviewed each year by DC Water's Board of Directors. Proposed increases or decreases to the total project life budget are shown, if applicable. Lifetime budgets for program management have been reduced, and project budgets increased, to reflect the allocation of costs for program management services at the conclusion of the prior fiscal year.

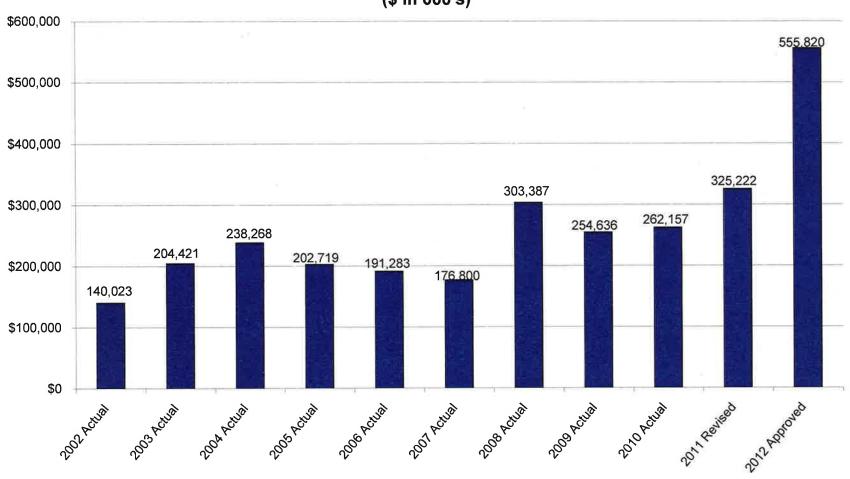
Disbursements / Commitments Budgets – projected disbursements and commitments for various projects are shown by fiscal year in which they are anticipated. Commitments budgets are based on total project budgets, which reflect the fully loaded, anticipated costs of a project, including project contingencies. Contingencies are not included when calculating disbursement budgets.

CAPITALIZATION POLICY

DC Water's capitalization policy determines how expenditures will be recognized and accounted for. Because we also match the financing to the projected useful life of the item, it also determines how projects will be financed. The following guidelines are used to categorize items as capital, capital equipment or operating (maintenance):

- Maintenance related items are routine, cost under \$5,000, and do not extend the life of the item more than 3 years.
- Capital Equipment has a life of at least 3 years, a cost exceeding \$5,000 and is financed with short-term debt or cash.
- Capital Project has a long life (average of 30 years), a minimum cost of \$500,000, and is financed with 30 year bonds.

Historical and Projected Capital Spending FY 2002 - FY 2012 (\$ in 000's)



FY 2010 - FY 2019 PROJECTED CAPITAL IMPROVEMENT PLAN (CIP) - DISBURSEMENTS BASIS (\$ in 000's)

	FY 2010	FY 2011	FY 2012								Total
	Actuals	Revised	Approved	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY '10 -'19
Wastewater Treatment					-112017		-112010		112010	11 2013	
Liquid Processing Projects	\$24,815	\$12,660	\$37,447	\$21,959	\$10,032	\$3.720	\$5,429	\$11,932	\$6,398	\$5,356	\$139,748
Plantwide Projects	16,540	22,894	19,478	11.882	6,458	4,277	3,901	3,823	12,924	6,982	109,160
Solids Processing Projects	35,420	45,849	152,259	142,664	40,388	6,917	7,224	1,271	67	-	432,061
Enhanced Nitrogen Removal Facilities											,
(formerly BTN - Total Nitrogen Program)	25.789	51,725	126,810	149,198	117,548	75,240	112,442	55,534	5,425	1,923	721,635
Sub-total	102,564	133,129	335,993	325,703	174,426	90,154	128,997	72,561	24,815	14,260	\$1,402,604
Out-total	102,004	100,120	000,000	020,700	174,420	30,134	120,337	72,301	24,013	14,200	\$1,402,004
Sanitary Sewer											
Sanitary Collection Sewers	367	1,293	3,534	6,949	12,070	5,249	4,144	6,027	7,675	8,205	55,513
Sanitary On-Going Projects	9,521	10,281	12,902	8,257	7,657	7,809	8,037	8,267	8,530	9,007	90,267
Sanitary Pumping Facilities	1,143	681	557	684	711	39		(•€			3,814
Sanitary Sewer Projects Program Management	4,020	7,328	4,326	3,927	6,657	6,774	6,347	6,594	6,556	6, 4 91	59,018
Sanitary Interceptor/Trunk Force Sewers	4,343	14,413	23,081	20,520	33,721	30,515	22,386	22,086	34,427	22,551	228,043
Sub-total	19,394	33,996	44,400	40,336	60,815	50,386	40,914	42,974	57,188	46,253	436,655
Combined Sewer Overflow / Long Term Control Plan											
CSO Program Management	1,272	3.481	1.883	1,905	2.307	1.851	1,562	1,680	2,294	2,783	21.018
Combined Sewer Projects:Nine Minimum Controls	33,452	24,847	5,775	2,165	291	7	1,002	1,000	2,257	2,700	66,537
Combined Sewer Projects:Others	938	3.822	4,915	10,067	14,838	13,661	19,782	15,448	13,405	10,467	107,343
Clean Rivers Project (aka Long-Term Control Plan)	000	0,022	1,010	10,007	. 1,000	10,001	10,702	10,440	10,400	10,107	101,040
Anacostia Tunnel	18,930	42,752	79,578	116,188	100,501	127,541	148,478	143,022	56,722	56,071	889,783
Potomac Tunnel	367	753	547	949	341	1,618	5,385	5,500	9,207	12,711	36,088
Rock Creek Tunnel	154	430	316	A.E.	: <u>*</u> :	2. 0 2	243	811	838	1,486	4,278
Sub-total Sub-total	55,113	76,085	93,014	130,325	117,937	144,678	175,450	166,462	82,465	83,518	1,125,047
Stormwater						,	,		,	,	.,,.
Stormwater Local Drainage	2	11	92	47	42	63	82	92	95	98	623
Stormwater On-Going Program	1,193	841	686	485	493	494	575	523	542	562	6,393
Stormwater Pumping Facilities	₩.	2		¥	-	-	_	-	-	-	999
DDOT Stormwater Program	3	35	8	9	9	19	17	9	10	10	127
Stormwater Research and Program Management	380	1,157	266	201	243	195	165	172	234	285	3,298
Stormwater Trunk/Force Sewers	1,341	1,446	2,974	3,603	1,987	47				<u> </u>	11,398
Sub-total	2,914	3,491	4,027	4,345	2,775	818	839	796	880	955	21,839
Water											
Water Distribution Systems	29,606	26,301	24,172	31,041	32,964	31,058	33,214	40,712	38,244	36,896	324,207
Water On-Going Projects	8,608	6,260	8,273	6,238	6,398	6,530	6,760	8,437	7,269	7,668	72,441
Water Pumping Facilities	1,742	3,270	8,748	7,141	2,936	752	1,188	3,401	7,464	0.000	36,642
DDOT Water Projects	10,402	2,298	2,412	7,110	6,033	4,871	5,149	5,388	6,006	6,090	55,758
Water Storage Facilities	1,119	2,577	1,250	4,815	10,534	9,224	1,838	2,680	4,335	3,359	41,731
Water Projects Program Management Water Lead Program	3,981 4,540	3,963 3,323	3,779 2,320	3,170 2,593	3,187 2,902	3,890 2,926	3,854 2,906	3,856 2,816	3,905 3,006	3,930 21	37,516 27,354
Meter Replacement /AMR Installation	1,063	2,619	2,320	1,366	1,395	1,419	1,443	1,676	1,708	1,732	27,35 4 17,223
Sub-total	61,061	50,610	53,755	63,474	66,349	60,671	56,351	68,967	71,938	59,697	612,873
	,•• 1	-3,010		, *	-5,010	-3,0.1	-3,001		,000	-3,001	2.2,0.0
Washington Aqueduct	12,110	10,449	10,470	10,654	10,801	11,076	11,340	11,649	11,244	11,023	110,816
Capital Equipment	9,001	17,462	14,160	14,949	9,019	8,199	7,640	7,568	8,509	7,399	103,906
Total FY 2012 DC Water CIP	\$262,157	\$325,222	\$555,820	\$589,786	\$442,122	\$365,982	\$421,531	\$370,976	\$257,039	\$223,104	\$3,813,740

	FY 2011 Approved	FY 2011 Revised / FY 2012 Approved	Variance
Wastewater Treatment			
Liquid Processing Projects	588,541	612,749	24,208
Plantwide Projects	339,356	337,671	(1,685)
Solids Processing Projects	689,665	688,806	(859)
Blue Plains Total Nitrogen Removal (BTN)	977,333	1,024,855	47,522
Sub-total	2,594,895	2,664,081	69,186
Sanitary Sewer			
Sanitary Collection Sewers	115,686	133,906	18,220
Sanitary On-Going Projects	129,867	142,067	12,200
Sanitary Pumping Facilities	25,898	25,898	2.33
Sanitary Sewer Projects Program Management	100,235	103,150	2,915
Sanitary Interceptor/Trunk Force Sewers	328,671	430,144	101,473
Sub-total	700,357	835,165	134,808
Combined Sewer Overflow			
CSO Program Management	55,239	55,239	1 1
Combined Sewer Projects: Nine Minimum Controls	215,387	215,387	\\\\\
Combined Sewer Projects: Others Long-Term Control Plan- Total	263,276	240,013	(23,263)
Anacostia Tunnel	1,673,325	1,672,282	(1,043)
Potomac Tunnel	418,700	418,700	¥:
Rock Creek Tunnel	70,342	70,342	19
Sub-total Sub-total	2,696,269	2,671,963	(24,306)
Stormwater			
Stormwater Extensions/Local Drainage	15,799	17,999	2,200
Stormwater On-Going Program	8,863	9,658	795
Stormwater Pumping Facilities	0	0	-
DDOT Stormwater Program	4,846	5,066	220
Stormwater Projects Program Management	10,630	10,630	*
Stormwater Trunk/Force Sewers	18,605	18,605	
Sub-total	58,743	61,958	3,215

	FY 2011			
	FY 2011	Revised / FY 2012		
	Approved	Approved	Variance	
Water				
Water Distribution Systems	618,425	666,933	48,508	
Water Lead Program	200,000	191,000	(9,000)	
Water On-Going Projects	68,432	112,121	43,689	
Water Pumping Facilities	133,342	150,149	16,807	
DDOT Water Projects	39,222	95,892	56,670	
Water Storage Facilities	49,562	71,862	22,300	
Water Projects Program Management	51,107	51,107		
Meter Replacement /AMR Installation	42,833	61,151	18,318	
Sub-total	1,202,923	1,400,215	197,292	
Washington Aqueduct	186,634	203,138	16,504	
Capital Equipment	98,546	103,906	5,360	
Total WASA CIP Lifetime (see notes)	7,538,367	7,940,426	402,059	

Notes:

¹ Lifetime budgets shown here represent total budgets for projects that are active during the current 10-year CIP. Lifetime budgets include historical spending prior to the beginning of the current 10-year plan, spending during the 10-year plan, and projected spending beyond the current 10-year plan. Projects completed in FY 2010 will be dropped from the CIP next year.

² These budgets do not include inhouse labor costs, estimated to be in the \$8 to \$9 million range, annually, and are applicable to, primarily, the time charged to capital projects by employees in the Departments of Engineering and Technical Services, Sewer Services, and Water Services.

Fiscal Year 2012 Capital Authority Request (\$ 000's)

Fiscal Year 2012 *Capital Authority Request

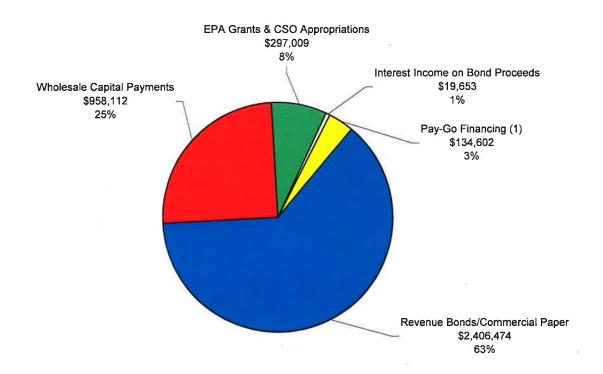
Service Areas

Blue Plains Wastewater Treatment	1	\$72,035
Sanitary Sewer System		56,798
Combined Sewer Overflow	1	513,853
Stormwater		1,343
Water System		78,279
Washington Aqueduct (DC Water share)		17,672
Capital Equipment		<u>12,500</u>
Total		\$ <u>752,480</u>

The authority request includes a 24 month look-ahead, i.e., it also takes into account projected commitments for FY 2013 and FY 2014.

¹ Includes Special Risk Allowance of \$20 million, and \$122 million for Total Nitrogen (BTN) and Long Term Control Plan (LTCP) projects, respectively, although not part of their Lifetime budgets.

FY 2010 - 2019 CAPITAL IMPROVEMENT PROGRAM Sources of Funds (In \$000's)



⁽¹⁾ Pay-go financing is any funds available after funding the greater of 120 day or 125.5million operating and maintenance reserve, approximately \$125.5million in FY 2011. These transfers reduce the amount of new debt issuance.

			Cost at
Activity Group	Project Title	Service Area	Completion
Closed Project	l s		
A3	16 inch Tie-in to McMilliam Plant	Water	\$2,745,275
E3	FY 2003 - DWS Water Projects	Water	7,447,102
R1	FY2000 - DDOT Water Projects	Water	1,259,221
R2	FY2001 - DDOT Water Projects	Water	1,078,874
R3	FY2002 - DDOT Water Projects	Water	2,550,092
R4	FY2003 - DDOT Water Projects	Water	4,241,277
R5	FY2004 - DDOT Water Projects	Water	653,266
R6	FY2005 - DDOT Water Projects	Water	452,844
R7	FY2006 - DDOT Water Projects	Water	38,532
R8	FY2007 - DDOT Water Projects	Water	4,214,954
R9	FY2008 - DDOT Water Projects	Water	265,061
DB	Sewer Services Field Facility & Relocation	Sanitary Sewer	446,197
	·	-	\$25,392,695
Dropped Proje	cts	-	
Q2	FY2002 - DSS Sanitary Sewer Project	Sanitary Sewer	\$87,074
Q5	FY2005 - DSS Sanitary Sewer Project	Sanitary Sewer	4,308,648
Q6	FY2006 - DSS Sanitary Sewer Project	Sanitary Sewer	5,426,944
K0	Replacement of CSO Fabridam	Combined Sewer Overflow	10,031,175
E6	FY2006 - DWS Water Projects	Water	5,293,644
LU	Land Facility for Water Pumping	Water	0
MJ	20" Anacostia 1st High Watermain Replacements	Water	3,742,408
ML	Elimination of Dead Ends (Contract 2)	Water	4,040,154
NO	Good Hope Elevated Tank - Phase I	Water	769,137
QP	4" CI Watermain Replacements	Water	2,268,184
DC	Fire Hydrant Replacement Program	Water	4,272,750
1		<u>.</u>	\$40,240,118
		α -	



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2010-2019







SECTION III

Wastewater Treatment
Service Area

dcwater.com

WASTEWATER TREATMENT

DC Water operates the Blue Plains Advanced Wastewater Treatment Plant, the world's largest advanced wastewater treatment facility. At Blue Plains, DC Water provides wastewater treatment services to over 2.1 million people in its service area, which includes residents of the District of Columbia and significant portions of Montgomery and Prince Georges Counties in Maryland, and Fairfax and Loudoun Counties in Virginia. Wastewater treatment includes liquid process facilities that provide treatment for both sanitary wastewater flows and peak storm flows originating in the sanitary and combined sewer systems respectively, along with solids processing facilities that treat the residual solids removed by the liquid processing facilities. Blue Plains is rated for an average flow of 370 million gallons per day (MGD). DC Water's current National Pollutant Discharge Elimination System (NPDES) permit is effective from September 30, 2010 through September 30, 2015 and requires wastewater treatment to a level that meets one of the most stringent NPDES discharge permits in the United States. Of all wastewater treatment plants in the Chesapeake Bay watershed, Blue Plains removes the largest quantity of nitrogen from its influent nitrogen load and has been well below voluntary nitrogen load limits for over 10 years.

DC Water's Biosolids Management Plan includes construction of four Cambi thermal hydrolysis trains, four digesters, new dewatering equipment and a combined heat and power plant. An interim method of financing this project has been used in the Financial plan to mitigate the impact on customers' rates and to better match the financing costs with the benefits that will be received over the life of these facilities.

Overview of the Wastewater Treatment Process

The first wastewater treatment phase begins as debris and grit are removed by screens and grit chambers and trucked to a landfill. The sewage then flows into primary sedimentation tanks that separate more than half of the suspended solids from the liquid. The liquid flows to the secondary treatment process where oxygen is provided to allow bacteria to break down the organic matter. In the next stages of treatment, bacteria convert ammonia into other forms of nitrogen and then into harmless nitrogen gas. Residual solids are settled out in each biological process. The water is percolated down through dual-media effluent filters, removing most of the remaining suspended solids. The water is disinfected and then treated to remove residual chlorine and discharged into the Potomac River. The solids from primary sedimentation tanks go to gravity thickening process units where the dense sludge settles to the bottom and thickens. Biological solids from the secondary and nitrification processes are thickened separately using flotation thickeners. All thickened sludge is dewatered, lime is added to reduce pathogens, and the organic biosolids are beneficially reused through application to agricultural land in Maryland and Virginia.

The lifetime budget for the Wastewater Treatment Service Area is \$2.7 billion dollars, an increase of \$69.2 million from last year's budget. As described in more detail below, 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 NPDES permit requirements and produce a consistent, high-quality dewatered solids product for land application. A significant portion of the lifetime budget is comprised of projects in the Blue Plains Enhanced Nitrogen Removal Facilities (formerly BTN – Total Nitrogen Program), which provides for

projects necessary to meet the stringent total nitrogen discharge limit in the NPDES permit. The permit stipulates that improvements to the existing nitrogen removal facilities be placed in operation no later than July 14, 2014.

Five liquid treatment processes (preliminary, primary, secondary, nitrification-denitrification, and filtration) comprise the liquid treatment processes at Blue Plains. The first phases of upgrades to four (of the five) liquid treatment processes are now in service. In tandem with the placing of these facilities in service, the process control system has also been implemented to enable monitoring and control of the upgraded equipment and systems, thus allowing DC Water to achieve greater process control and treatment efficiency and also yielding operating cost control. Wastewater treatment service area projects currently under construction include nitrification-denitrification facilities upgrade and new Area Substation No. 6 and miscellaneous Switchgear upgrades.

Projects Currently Under Construction

- Nitrification-Denitrification Facilities Upgrade (TK and TQ) Upgrade the existing nitrification-denitrification facilities to improve the process and to replace equipment that is at the end of its useful life. The construction of these facilities is anticipated to be complete in FY2011.
- Area Substation No. 6 and Miscellaneous Switchgear Upgrades (Projects EV) This project involves construction of a new electrical substation, Area Substation No. 6, for the Enhanced Nitrogen Removal Facilities and the Digester Project as well as upgrades to existing electrical switchgear which are past their useful life. The construction contract is underway.
- Biological Sludge Thickening Facilities- will upgrade the existing dissolved air floatation thickening units to restore integrity to this system, and reduce sludge processing and chemical costs through improved efficiency.

Liquid Processing Program – \$612.7 million

(project pages III-9 to III-25)

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 to ultimate discharge of the treated effluent into the Potomac River. Liquid treatment systems include headworks facilities that screen and pump the wastewater flows, grit facilities that remove sand and grit particles, primary treatment facilities that remove solids by sedimentation, secondary treatment facilities that remove organic pollutants using a biological process, nitrification/denitrification facilities that remove nitrogen using a biological process, and effluent filtration, disinfection, and dechlorination facilities.

Major projects under this program that are substantially complete include:

• Grit Chamber Facilities Upgrade (<u>Project TF</u>) \$70.1 million – This project is for the construction of an automated, continuous grit removal system consisting of sixteen chambers in all. Impact on operations include the elimination of current manual cleaning of each grit tank and lowered maintenance costs of tanks and pumps due to reduced grit load into downstream processes. While all of the grit collection bridges and grit conveyance systems are in operation, a new heating system for Grit Chamber Building No.1, that meets the current low emissions regulations, will be constructed.

- Influent Screen Facility (<u>Project TM</u>) \$39.0 million This project has provided for the installation of fine screens as a preliminary treatment step in the wastewater process. The fine screening removes rags and other debris from the wastewater and thereby improves treatment processes and protects equipment.
- Primary Treatment Facility (<u>Project TN</u>) \$39.0 million This project entails replacing the clarifier mechanism in the primary sedimentation tanks. As a result, the primary treatment process has been removing additional suspended solids from the wastewater.
- Secondary Treatment Facility (<u>Project TO</u>) \$70.6 million This project entailed replacing sludge and scum collection equipment and rebuilding deteriorated portions of the concrete sedimentation basins in the East and West Secondary Treatment Process.
- Raw Wastewater Pumping Station 1 Upgrade (<u>Project UD</u>) \$15.2 million This project will rehabilitate pumping equipment and appurtenances in one of the two stations that pump incoming wastewater into the plant.
- Biological Nutrient Removal (<u>Project TK & TQ</u>) \$142.8 million Project TK is combined with Project TQ in a single construction contract to demonstrate and implement Biological Nitrogen Removal capability in order to meet the goals of the Chesapeake Bay Agreement; that is, to meet a total nitrogen discharge goal of 7.5 mg/l. This upgrade will provide for better flow distribution to the reactors and better process control within the reactors, methanol feed control, and rehabilitation and upgrade of nitrification sedimentation basins. While this project alone will not enable DC Water to meet its new total nitrogen limit of 4.2 mg/l, it will continue to remove a significant portion of nitrogen from the wastewater, provide better process control and optimize methanol feed.
- Filtration and Disinfection Facilities Upgrade (Project UC) \$70.7 million Replacement of existing filter media and the addition of an air/water backwash system and improvements to pump operation will result in reduced power usage and treatment costs due to reduced backwash water usage. A portion of the work was designed and bid ahead of the rest of the project to expedite the full rehabilitation of the facility, which had experienced filter failures. The first contract, completed in FY 2007, restored all the filters to operability with new filter underdrains and media. The second contract, which is substantially complete, provided a new air-water wash system and improved backwashing controls and instrumentation.

Major projects under this program that are now underway include:

- Nitrification/Denitrification Facilities Upgrade (<u>Project BR</u>) \$59.5 million This project includes major electrical rehabilitation of the entire facility, major HVAC and plumbing upgrade for all buildings and galleries, and architectural rehabilitation of the Nitrification Blower Building, Control Buildings, and Electrical Buildings. Benefits of this project include lower maintenance and energy costs due to improved efficiency. Design is currently underway and is scheduled to be advertised for construction in FY 2011. Also, included in this project is rehabilitation of the nitrification return sludge line. An investigation was completed in FY 2009 that determined the extent of further rehabilitation required.
- Filtration/Disinfection Facility Phase II (<u>Project BT</u>) \$18.1 million Design began in FY 2009 on an upgrade to major electrical equipment serving the Filtration/ Disinfection Facility. This project is scheduled to be advertised for construction in FY 2011.

Other Liquid Processing Program projects included in the CIP but not scheduled to start until later, include:

- Primary Treatment Facilities Phase II (<u>Project BQ</u>) \$14.6 million Design is scheduled to begin in FY 2015 for structural repairs to the primary sedimentation tanks.
- Grit Chamber Facilities Phase II (<u>Project BP</u>) \$5.4 million Design is scheduled to begin in FY 2015 for upgrades to the grit chamber building structures and facilities. These upgrades include structural, architectural and building system renovation of office and storage spaces in each building.
- Dual Purpose Sedimentation Basin Rehabilitation (<u>Project BG</u>) \$20.9 million This relates to the replacement of sludge collection equipment, sludge and scum pumps, and support process equipment. Concept design studies have been initiated on this project.
- Raw Wastewater Pump Station 2 (<u>Project BV</u>) \$27.5 million Upgrade to the Raw Wastewater Pump Station to replace equipment that is at the end of its useful life, and improve reliability. This project is scheduled to begin in FY 2013.

Plantwide Facilities Program – \$337.7 million

(project pages III-26 to III-50)

This program provides for upgrading, rehabilitating, or installing support systems and facilities that are required for both the liquid processing and solids processing programs. Systems include a Process Control System (PCS) for monitoring and control of all processes and facilities, upgrades to city and plant water systems, chemical systems, electrical power and distribution systems upgrade, telephone service, and data highway infrastructure for process, safety, security and information needs. Facilities comprise chemical receiving, storage, transmission and feed systems for chemicals used throughout the liquid and solids processes, including metal salts, polymers, sodium hypochlorite, and sodium bisulfite. Support facilities projects include the rehabilitation of the Central Operations Facility and the Central Maintenance Facility.

Major projects under this program that are substantially complete include:

- * Process Control and Computer System Phases 1, 2 and 3 (<u>Project TA</u>) \$61.4 million This system allows for automation of a significant number of plant processes at Blue Plains, and better management of processes that are currently manually monitored. Operating savings have been realized from lowered chemical usage and electricity consumption, by minimizing peak demand, as well as lower staffing levels. This project is critical to achieving the goals presented in the Blue Plains Internal Improvement Plan. The new system is being implemented in three phases Phase I which began with the screens, grit chambers, primary and secondary treatment facilities, and dewatering processes, is substantially complete. Phase II will include nitrification, filtration, and disinfection facilities, and Phase III will add the solids processing facilities. Construction on the project began in August 2002 and is almost 70 percent complete.
- * Additional Chemical Systems (<u>Project TC</u>) \$74.1 million This project provided centralized chemical storage and feed facilities at Blue Plains.

Major projects under this program that are now underway include:

Instrumentation and Control Engineering Program Management (<u>Project GP</u>) \$19.2 million - This project would ensure that new projects, from design through construction, are properly coordinated with DC Water standards for I&C and Electrical and properly interfaced into the plant control system. The project includes programming of the plant control system as well as reviewing design documents and coordinating control strategies between designers and operations.

Solids Processing Program – \$688.8 million

(project pages III-51 to III-60)

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, floatation thickening of the biological waste sludges produced by the secondary and nitrification/denitrification processes, dewatering by centrifuge and lime stabilization. Dewatered-stabilized biosolids are conveyed to the Dewatered Sludge Loading Facility, from which the biosolids are loaded into tractor-trailers and hauled offsite for beneficial reuse. Examples of beneficial reuse are land application, silviculture, and land reclamation. Solids processing facilities are required to produce a biosolids product that can be reused or disposed of in an economical and environmentally acceptable manner.

We are continuing implementation of our Biosolids Management Plan (BMP), originally adopted by the Board in 1999. This plan, which included input from our neighbors, environmental groups, and other stakeholders, evaluated a number of options for long-term biosolids processing and disposal, and identified full biosolids digestion as a common element of all long-term approaches and recommended continuing land application as long as financially advantageous. DC Water has performed an extensive analysis of alternatives to identify a cost-effective, long-term and sustainable biosolids management project for the Blue Plains Advanced Wastewater Treatment Plant that can produce a diverse Class A biosolids product, significantly reduce lime use and enhance land application.

The updated BMP includes construction of four Cambi thermal hydrolysis trains, four digesters, new dewatering equipment and a combined heat and power plant. This plan has the potential to significantly manage biosolids operating costs when it is placed in operation as it produces power from digester gas to meet over one third of DC Water's electric demand at Blue Plains. The digestion process will eliminate nearly one half of the biosolids, which will result in lower reuse costs

DC Water's award-winning Biosolids Management Program has been recognized by the U.S. Environmental Protection Agency for its outstanding operations, technological advances, and promotion of the beneficial uses of municipal wastewater biosolids.

Major projects under this program that are substantially complete include:

Gravity Thickeners (<u>Project TP</u>) \$20.0 million – This project has rehabilitated gravity thickeners 1-4.

Additional Dewatering Facilities (<u>Project XC</u>) \$81.7 million – This project provides new centrifuges to expand the dewatering capacity and efficiency of solids processing at Blue Plains.

Major projects underway in this program include:

- New Digestion Facilities (Project XA) \$441.3 million This project includes four Cambi thermal hydrolysis trains, four digesters, new dewatering equipment and a combined heat and power plant. Four contracts, design of final dewatering facilities, design-build for the heat and power plant, construction for site preparation and a design-build contract for the main process train are scheduled to be awarded in FY 2011.
- Biological Sludge Thickening Facilities (<u>Project XB</u>) \$47.9 million This project will upgrade the existing dissolved air floatation thickening units. Improvements are expected to reduce sludge processing and chemical costs through improved efficiency. The construction contract for this project began in FY 2009 and construction is underway.
- Gravity Thickening Upgrade (<u>Project BX</u>) \$15.5 million This project will demolish Thickener Units 5 and 6 and provide a major upgrade to Thickener Units 7 to 10, including collector mechanisms, thickened sludge pumps, and scum pumps. A contract for a project design engineer is anticipated to be executed in FY 2011.

Enhanced Nitrogen Removal Facilities (formerly BTN- Total Nitrogen Program) – \$1024.9 million

(project pages III-61 to III-69)

This program provides for new facilities and upgrades to existing facilities needed at Blue Plains to meet the total nitrogen discharge limit that has been included in DC Water's 2010 NPDES permit. Projects included in the Blue Plains Enhanced Nitrogen Removal Facilities (ENRF) were identified through a strategic planning process that resulted in development of DC Water's proposed Total -Wet Weather (TN/WW) Plan. which addresses requirements of the Clean Nitrogen Rivers Project (aka Long Term Control Plan) as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The recommended alternative in the plan requires removal of additional nitrogen from the wastewater prior to discharge, and improves the quality of discharge to the Potomac and Anacostia Rivers during wet weather events. All projects in this program are in the planning or design phase.

- Enhanced Nitrogen Removal- North (<u>Project BI</u>) \$56.5 million (formerly named Plantwide Fine Bubble Aeration System in the Plantwide Program Area) This project involves replacing the existing coarse bubble diffusers in the secondary treatment aeration system with a more efficient system. In addition to a more efficient process, this project will result in an overall savings in energy consumption. A project design engineer has investigated the upgrades required to the system and determined that to meet the new stringent discharge limit for total nitrogen from Blue Plains, upgrades in addition to the improvements to the aeration system are required for the secondary treatment process. Detailed design is scheduled to start in FY 2011.
- Enhanced Clarification Facilities (<u>Project E8</u>) \$237.3 million 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 resulting in improved water quality of the excess flow discharge. Preliminary planning has begun on this project as it relates to site planning needs at Blue Plains.
- Enhanced Nitrogen Removal Facilities (<u>Project E9</u>) \$346.6 million This project includes an expanded facility to remove additional nitrogen from the wastewater prior to discharge to the Potomac River as well as improvements to upstream processes that are required to ensure the reliability of the expanded system. Construction of this project is scheduled to begin in FY 2011.
- Centrate Treatment Facilities (Project EE) \$89.1 million This project provides for the treatment of recycle streams from the sludge dewatering process. Digestion of sludge, which results in a greatly reduced volume of sludge, also results in a high concentration of ammonia in the centrate from the dewatering process. This high concentration of ammonia has the potential to overload the nitrogen removal processes. DC Water is currently developing design concepts for this project and is participating in research to determine the most cost-effective and reliable methods to provide separate treatment of the centrate recycle stream.
- Blue Plains Tunnel (<u>Project FR and FS</u>) \$51.7 million The principal components of this project are a 23 foot diameter tunnel from Main and O Streets to Blue Plains and a diversion structure at Bolling Air Force Base. This project is one of several related to the Clean Rivers Project that will result in reduction in combined sewer overflows and reduction in peak flow rates through Blue Plains.
- Tunnel Dewatering Pump Station (<u>Project FG</u>) \$59.9 million- This project involves a pump station at Blue Plains to deliver combined sewer flows from the Anacostia Tunnel to the new wet weather treatment facilities at Blue Plains.
- Digester Demolition (Project H7) \$6.4 million This project involves the demolition of abandoned digesters and preparation of the site at Blue Plains on which the Tunnel Dewatering Pump Station and Enhanced Clarification Facilities will be constructed. The same site will be used to accommodate construction of the Clean Rivers Project(s) Tunnel. Construction is underway.

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title A2 - Liquid Processing Program Management

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Good Engineering, High pay back, Mission / Function

Project Completion: Sep 2018

Phase Design:

Construction:

Start Date

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 -41.62% 0.00% EPA/Fed -WSSC -45.53% 8.32% Fairfax -4.53% Loudoun/PI -

water is life

FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budg

get	14,368,222
get	14,368,222
jet:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	5,868	746	916	798	236	770	1,109	1,068	737	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	9,268	0	0	1,100	4,000	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title

BG - Dual Purpose Rehabilitation

Managing Department:

Engineering and Technical Services

es

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Construction:

Phase

Design:

Jul 2015

Start Date

Apr 2011

Sep 2011

Project Description:

This project replaces the sludge collection equipment, sludge and scum pumps, and other process equipment for the 8 Dual Purpose Sedimentation Basins and provides for improved flow distribution to these basins.

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/Pl - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

	20,871,445
	20,871,445
:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	679	564	1,050	3,094	8,193	2,179	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,019	8,017	104	10,732	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title

BP - Grit Chamber Facilities Phase II

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project will upgrade the grit chamber building structures and facilities including structural, architectural and building system renovation of office and storage spaces in each building. Project would include architectural repairs to exterior of buildings.

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 - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	5,500,000
et	5,434,000
et:	-66,000

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014		FY 2016				Post FY 2019
Commitments	0 Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	21 FY 2015	163 FY 2016	120 FY 2017	209 FY 2018	1,287 FY 2019	2,573 Post FY 2019
Budget	0	0	0	0	0	425	0	0	5,009	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2015

Mar 2018

Mar 2022

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title BQ - Primary Treatment Facilities Ph II

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Good Engineering, High pay back, Mission / Function

Phase **Start Date** Design: Jun 2015 Construction: Mar 2018 **Project** Completion: Mar 2022

Project Description:

This project provides structural repairs to the primary sedimentation tanks and conduits and would be initiated based on future structural inspection of the facilities. Concrete inspection and testing performed in 2001 indicated that the tanks did not require concrete repairs in the Primary Treatment Facilities Upgrade contract, but the inspection should be repeated in 10 years, when possibly repairs may be required. Concrete repairs would be made to maintain the integrity of the structures and protect DC Water's investment in these facilities.

Impact on Operations:

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

Effective Funding by User (percent):

DC -41.22% 0.00% EPA/Fed -WSSC -45.84% Fairfax -8.38% Loudoun/PI -4.56% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

14,800,000 14,625,000 -175,000

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 61	FY 2016 484	FY 2017 357	FY 2018 612	FY 2019 3,758	Post FY 2019 7,555
Commitments Budget	Pre FY 2011 0	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 1,200	FY 2016 0	FY 2017 0	FY 2018 13,425	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title

BR - Nitrification/Denitrification Fac

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Proiect

Phase

Design:

Construction:

Completion: Jun 2016

Start Date

Aug 2007

Jul 2011

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, major HVAC and plumbing upgrade for all building and galleries, and architectural rehabilitation for the Nitrification Blower Building, control buildings, and electrical buildings.

Impact on Operations:

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

Effective Funding by User (percent):

DC -41.22% 0.00% EPA/Fed -45.84% WSSC -8.38% Fairfax -4.56% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

0

0

0

0

0

59,494,112 59,494,112

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Pre FY 2011 Disbursements **Budget** 56 4.854 3.457 20.588 12,302 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Pre FY 2011 Commitments Budget 0 0 0 12,799 43,695 3,000

0 **Post FY 2019** 0 0

Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title

BT - Filtration/Disinfection Fac PH II

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Good Engineering, High pay back, Mission / Function

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 - 41.22%
EPA/Fed - 0.00%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	18,106,288
et	18,060,088
et:	-46,200
et:	-40,200

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,186	1,795	7,605	2,799	52	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,518	16,542	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2009

Apr 2011

Jul 2014

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title

BV - RWWPS No. 2 Upgrades

Managing Department:

Engineering and Technical Services

ces

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Completion:

Construction:

Aug 2019

Start Date

May 2013

Dec 2015

Project Description:

This project will upgrade the electrical switchgear and non-process related facilities and systems of Raw Wastewater Pump Station 2. The aging electrical equipment in Raw Wastewater Pump Station 2 has been exposed to hydrogen sulfide gas resulting in accelerated equipment deterioration resulting from corrosion. This project will replace this equipment and relocate sensitive equipment to a less corrosive environment.

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 - 4.56% dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t 0 t 27,522,000 t: 27,522,000

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	198	1,056	689	3,674	10,387	4,840	311	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	2,730	0	0	24,792	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title

DA - DWT Research Projects

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion: Mar 2014

Start Date

Phase

Design:

Project

Construction:

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 - 41.22%
EPA/Fed - 0.00%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	3,796,091
et	3,796,091
et:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,318	446	776	378	87	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
				1 1 2010	1 1 2017	1 1 2010	1 1 2010	1 1 2017	1 1 2010	1 1 2010	10011 1 2010

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title TF - 504C5 - Grit Chamber Bldg. 1&2

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Nov 2013 Completion:

Start Date

Jul 1998

Jan 2003

Phase

Design:

Construction:

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 -14.77% 26.55% EPA/Fed -WSSC -45.84% Fairfax -8.38% Loudoun/PI -4.46% water is life

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et 🗀	70,144,788
et 🗀	70,144,788
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	66,965	26	64	1,920	305	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	70,145	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title

TK - 504G3 - Biological Nutrient Removal

Managing Department:

Engineering and Technical Services EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Sep 1998
Construction:	Jun 1999

Project

Completion: Sep 2011

Project Description:

This project funds multiple construction contracts to demonstrate and implement Biological Nutrient Removal. The first contract involved construction of and operations assistance for the Denitrification Demonstration Facility (DDF). The DDF included methanol storage and feed facilities enabling DC Water to conduct a half-plant-scale nitrogen removal pilot study in the Nitrification Facility. The second contract provided the capability for full-scale nitrogen removal, which is currently in operation. The third contract will upgrade the process aeration blowers and reactors to optimize the process, reduce energy consumption and provide reliable operation. The blower upgrade will include rehabilitation of the motors and provision of new blower support systems. The updated blower control system will provide improved control to match blower output with process aeration requirements to reduce energy consumption. This project is needed to implement nitrogen removal and provide reliable treatment systems to maintain the high quality effluent from the Blue Plains AWTP, under a voluntary nitrogen removal program.

Impact on Operations:

The project provides capability to remove nitrogen to meet the goals of the Chesapeake Bay Agreement. Operation of the reactors in the denitrification mode requires the purchase of methanol to provide a carbon source for the denitrification process to work. The cost of methanol represents a significant added operating cost. Upgrade of the blowers, conversion to a fine bubble diffuses system, and automated dissolved oxygen control system should provide a significant electrical cost savings when blower operation is controlled to meet process aeration needs. This is expected to result in an annual energy cost savings of about \$1 million.

Effective Funding by User (percent):

DC -	35.18%
EPA/Fed -	6.04%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

95,469,814
95,469,814
0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	91,795	1,884	0	0	0	0	0	- 0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	94,982	488	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title

TM - 504G6 - Influent Screen Facility

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Description:

This project provides for the upgrade of the influent screen facilities by replacing the coarse screens with fine screen technology. The four existing screens in West Process Grit Chamber Building 1 and the nine existing screens in Raw Wastewater Pump Station 2 are replaced with fine screens. Included are screenings' washing, conveyance and loading systems to load the screenings into enclosed containers for transport to disposal sites. This project upgrades screening technology to improve treatment efficiency and reliability of the facilities.

Impact on Operations:

The new fine screens and mechanical conveying systems eliminate the need for the contract to remove screenings from beneath the screens, using a vacuum truck. Use of fine screens essentially eliminates clogging of sludge pumping equipment and reduces the quantity of trash that accumulates on the surface of sedimentation tanks and basins and in the effluent filters. The labor required to clean pumps and tanks is reduced. Due to the smaller-sized screen openings, the quantity of screenings captured by the fine screens that must be disposed of increases. The increased screening quantity could result in an annual increase in hauling cost of approximately \$360,000.

Effective Funding by User (percent):

DC - 15.05%
EPA/Fed - 26.27%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.46%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

get	38,983,697
get	38,983,697
get:	0

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011 38,868	FY 2011 38	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 38,984	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 1998

Jan 2003

Aug 2011

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title TN - 504G9 - Primary Treatment Facility

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirememt

Project

Phase

Design:

Construction:

Nov 2013 Completion:

Start Date Jul 1999

Oct 2001

Project Description:

Project TN provides a comprehensive upgrade of the East and West Process Primary Treatment Facilities. This project replaces the circular sludge collector mechanisms in Primary Sedimentation Tanks 3 through 36 with state-of-the-art mechanisms that improve suspended solids removal efficiency. The project also replaces all of the equipment, piping and valves in all nine control houses, providing new sludge, scum, and dewatering pumps. The upgraded system uses the plantwide process control and computer system to automate the sludge and scum pumping systems. The upgraded automated system will simplify the pumping systems, providing increased reliability and less operator interface. The project increases integrity and reliability of the facilities.

Impact on Operations:

Improved primary treatment performance results in a decreased organic load to secondary and reduction in total plant sludge production. This project is projected to impact chemical, energy and contract costs in the operations budget. Chemical costs increase by about \$260,000 per year due to addition of polymer in Primary and decrease by a like amount due to the reduction in polymer added in dewatering as a result of lower overall sludge production. Electrical costs decrease due to lower aeration requirements in secondary treatment and reduced sludge loading to the centrifuges. The overall cost of the sludge hauling contracts is expected to decrease by nearly \$1 million per year, prior to startup of the digester facilities, because the amount of sludge to be hauled off-site is reduced.

Effective Funding by User (percent):

DC -14.24% 27.16% EPA/Fed -45.78% WSSC -8.37% Fairfax -4.45% Loudoun/PI -



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

38,519,262
38,519,262
0

Disbursements	Pre FY 2011	FY 2011
Budget	38,367	34
Commitments	Pre FY 2011	FY 2011
Budget	38.519	0

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	<u>FY 2017</u>	FY 2018	FY 2019
34	42	36	3	0	0	0	0	0
FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019

(projected disbursements do not include contingencies)

38,519

(dollars in thousands)

Post FY 2019

Post FY 2019

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title TO - 504H1 - Secondary Treatment Fac.

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Construction: Project

Phase

Design:

Completion:

Sep 2011

Start Date

Aug 1999 Feb 2002

Project Description:

Project TO rebuilds the concrete sedimentation basin structures in the West Process Secondary Sedimentation Basins 1-12 to replace deteriorated concrete, railings, gratings and weirs. New sludge and scum collection equipment is provided in all twenty four East and West secondary sedimentation basins. Project also rehabilitates the process aeration blowers and motors and provides new blower support systems. This project upgrades process technology to improve treatment efficiency and increase integrity and reliability of the facilities.

Impact on Operations:

This project, in conjunction with PCCS, automates sludge and scum pumping which reduces labor for monitoring and control and eliminates the need for contractors to periodically pump scum from the basins. The project upgrades the process aeration blowers to permit automated dissolved oxygen control via the PCCS. Annual energy cost savings from automated Dissolved Oxygen control is expected to be \$1 million.

Effective Funding by User (percent):

DC -30.30% 10.98% EPA/Fed -WSSC -45.84% 8.38% Fairfax -4.50% Loudoun/PI -



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

t 🗀	70,593,858
t \square	70,593,858
ti 📗	- 0

Disbursements Budget	Pre FY 2011 69,728	FY 2011 236	FY 2012	FY 2013	FY 2014 20	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Commitments	Pre FY 2011			FY 2013		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	70,594	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title TQ - 504H3 - Nitrification Facility

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Sep 2011 Completion:

Start Date

Apr 2003

Jun 2005

Project Description:

This project upgrades the 28 Nitrification sedimentation basins. The sludge and scum collection equipment and pumping systems in the sedimentation basins are replaced. This project upgrades process technology, improves treatment, reduce energy consumption, and increase reliability of the facilities. Instrumentation and controls are provided to monitor and control the process using PCCS.

Impact on Operations:

The impact of not replacing this equipment would be decreased plant reliability and an increased risk of a permit violation.

Effective Funding by User (percent):

DC -35.51% 6.04% EPA/Fed -WSSC -45.58% Fairfax -8.33% Loudoun/PI -4.54%



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et 🗀	47,296,738
et 🗀	47,296,738
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	44,159	1,116	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	46,990	306	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title

TS - 504H5 - IMP EAST PRIM EFFL EXCESS FL

Managing Department: ..

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Phase

Design:

Construction:

Nov 2013

Jan 1999

Start Date

Project Description:

This project provides improvements to the control valves and instrumentation systems that control the extreme wet weather flows through the Blue Plains AWTP. During extreme wet weather events, most of the East Process flow continues into Secondary Treatment for complete treatment and discharges to the Potomac River through Outfall 002. However, a portion of the East Process flow proceeds from Primary treatment into disinfection tanks and discharges into the Potomac River through Outfall 001. The improvements to the instrumentation system that controls excess flows into the disinfection tanks and Outfall 001 ensure accurate compliance with flow limitations stipulated in the NPDES permit. This project is needed to replace aged equipment and upgrade process technology to ensure compliance with the NPDES permit.

Impact on Operations:

This project automates control of excess flow during storms and reduces the labor to monitor and adjust gate positions during storms.

Effective Funding by User (percent):

DC - 16.49%
EPA/Fed - 24.83%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.46%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et [1,684,749
et [1,684,749
t: [0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,559	29	35	29	2	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,685	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title UC - 504J1 - Filtration/Disinfection Fac.

Managing Department:

Engineering and Technical Services EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Construction:	Mar 2004
Project Completion:	Aug 2014

Start Date

Aug 2002

Phase

Design:

Project Description:

This project upgrades the Filtration and Disinfection Facility at the Blue Plains AWTP. The project converts the filters to an air-water wash type backwash system, which eliminates the surface wash system. Projects provides new underdrains, filter media, process aeration blowers and piping, and the instruments and controls to automatically backwash the filters, using the PCCS. This project upgrades process technology to improve treatment and increase reliability of the facilities. In FY 2010 a survey will be conducted on the reliability of reinforced and nonreinforced concrete structures plant-wide. Based on results from this survey, some impact on the final project budget may be required.

Impact on Operations:

The air/water backwash improves the cleaning of the filter beds, providing longer filter run times. Also, the air-water backwash system reduces the quantity of spent washwater, which is recycled throught the plant by one-third. The net impact on annual energy cost is a savings of approximately \$86,000. This considers the increased energy to operate the aeration blowers.

Effective Funding by User (percent):

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	4.56%



FY2010 Approved Life Budget	
FY2011 Revised/FY2012 Approved Life Budget	
Increase/(Decrease) to Approved Life Budget:	

lget	64,556,160
lget	70,659,476
get:	6,103,316

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	58,529	2,002	6,006	165	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	60,393	3,013	7,254	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Liquid Processing

Activity Group/Project Title UD - 504J2 - Raw Water Pump Stations 1&2

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Construction:

Phase

Design:

Nov 2013

Start Date May 2001

Apr 2007

Project Description:

This project rehabilitates the pumps, motors, and drives in Raw Wastewater Pump Station 1 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% 0.00% EPA/Fed -45.84% WSSC -8.38% Fairfax -

4.56% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

15,225,929 15,225,929 0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	13,960	288	250	117	- 20	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	14,342	884	0	<u> </u>	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

AL - Plantwide Project Program Management

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Good Engineering, High pay back, Mission / Function

Project
Completion: Apr 2018

Start Date

Phase

Design:

Construction:

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, impact of each project on operations is identified on individual project sheets.

Effective Funding by User (percent):

DC - 41.79%
EPA/Fed - 0.00%
WSSC - 45.39%
Fairfax - 8.30%
Loudoun/PI - 4.52%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

get	12,884,889
lget	12,884,889
get:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	7,869	240	277	186	618	726	846	587	305	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	8,885	0	4,000	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title AZ - COF Renovations

Managing Department:

Facilities and Security

EPMC: NRPM

Priority:

Good Engineering, High pay back, Mission / Function

Project Completion: Apr 2012

Start Date

Phase

Design:

Construction:

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. Office space renovations have been completed for the Department of Engineering and Technical Services (DETS) and the Boardroom, while those for other departments are in different stages of completion. The budget decrease is mostly attributable to the reallocation the Program Management costs.

Impact on Operations:

This project has no material impact on the operating budget.

Effective Funding by User (percent):

DC -72.34% 0.00% EPA/Fed -WSSC -21.63% Fairfax -3.96% 2.07% Loudoun/PI -



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

12	
et	-17,809,441
et	17,680,663
et:	-128,778

Disbursements Budget	Pre FY 2011 12,102	FY 2011 2,530	FY 2012 431	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 13,264	FY 2011 4,417	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Priority:

Plantwide

Activity Group/Project Title BY - Additional Chemical Systems PH III

Managing Department:

Engineering and Technical Services

Good Engineering, High pay back, Mission / Function

EPMC: NRPM Project

Completion:

Construction:

Phase

Design:

Mar 2024

Start Date

Jun 2018

Sep 2020

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.

Impact on Operations:

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

Effective Funding by User (percent):

41.22% DC -0.00% EPA/Fed -WSSC -45.84% Fairfax -8.38% Loudoun/PI -4.56%



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

3,821,638 3,821,638

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Pre FY 2011 **Disbursements** Budget 0 0 0 0 0 22 144 3.217 0 0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Commitments Pre FY 2011 Budget 0 0 0 285 0 3,537 0 0 0 0 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

CH - Misc Facility Projects

Managing Department:

Facilities and Security

EPMC: NRPM

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This will rehab and upgrade various facilities and apparatus throughout the Wastewater Treatment Plant. Security cameras will be installed throughout the WWTP, a proposed new entrance to the plant is planned, rehabilitation and upgrade of portions of the 2nd Floor of the Central Maintenance Facility (CMF) for relocated DETS and DMS staff and to meet current code requirements and other miscellaneous activities.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 77.94%
EPA/Fed - 0.00%
WSSC - 17.24%
Fairfax - 3.16%
Loudoun/PI - 1.66%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

5,489,501 ot 7,118,501 t: 1,629,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY_2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,717	1,782	1,026	193	37	37	7	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	3,175	3,943	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2015

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title CK - WWTP Sampler Program

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project

Phase Design:

Completion:

Construction:

Nov 2013

Start Date

Project Description:

The Plant Wide Automatic Sampler Program automates the collection of analytical operating data and is designed to accomplish the following; 1) Allow the plant to continue its sample collection effort, 2) Increase accuracy of data (by increasing sampling frequency) thereby allowing optimization of chemical dosage, 3) Move DC Water into the mainstream of US plant operations where automatic samplers have been in use for the past 15 years. Additionally, there would be an increase in frequency of sampling from once every 4 hours to once every 10-15 minutes thereby increasing the accuracy of results and allowing optimization of chemical usage.

Impact on Operations:

Project will increase the accuracy of analytical operation data to allow more efficient operation and lower chemical costs. As samples are now collected by hand, the automated samplers permit Department of Wastewater Treatment to reduce staff by one operator per shift for a total of 4 positions.

Effective Funding by User (percent):

41.22% DC -0.00% EPA/Fed -WSSC -45.84% 8.38% Fairfax -4.56% Loudoun/PI -



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

t	1,265,861
t	1,265,861
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,217	12	12	12	2	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,266	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

CV - Laboratory Upgrades

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Health Safety

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:

This project will have no direct impact on the operating budget. 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 - 4.56%



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

et	4,829,400
et	5,759,365
et:	929,965

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011 901	FY 2011 1.431	FY 2012 1,835	FY 2013 136	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Commitments	Pre FY 2011	,			FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	5,759	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2007 Feb 2010

May 2013

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

CW - Perimeter Security at Blue Plains

Managing Department:

Facilities and Security

EPMC: NRPM

Priority:

Good Engineering, Low, M&F over long term

Project Description:

This project will provide for a security assessment, placement of exterior and interior cameras throughout Blue Plains Facilities, install traffic control devices (i.e., bollards & speed bumps), install perimeter fencing (i.e., dock enclosures) and install portable guard houses.

Impact on Operations:

This project will have no material impact on the operating budget. However, minimal costs for maintenance of cameras will be required in future year budgets.

Effective Funding by User (percent):

DC - 41.22% EPA/Fed - 0.00% WSSC - 45.84% Fairfax - 8.38% Loudoun/Pl - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 🗀	1,450,000
et	1,450,000
et:	0

Start Date

Nov 2012

Phase

Design:

Project

Construction:

Completion:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	3	344	721	89	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	53	883	514	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

DP - Chemical Building Enhancements

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Health Safety

Project Description:

This project is to enhance operability, safety, and housekeeping in the various chemical buildings throughout Blue Plains and extend the life expectancy of various elements of the chemical systems.

Impact on Operations:

This project will help avoid future impacts on the operating budget through extended life expectancy of chemical systems.

Effective Funding by User (percent):

DC - 41.22%
EPA/Fed - 0.00%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	1,670,000
et	1,670,000
et:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	246	536	444	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	269	1,401	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Aug 2008

Apr 2011

Apr 2012

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

DQ - PCCS PLC Interface(s) / Replacements

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Construction:

Phase

Design:

Aug 2015

Start Date

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. DC Water has installed a number of PLCs over the past 8 years to provide monitoring and control of various plant systems - these PLCs were used before the Emerson PCCS was available. 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% 8.38% Fairfax -Loudoun/PI -4.56%



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

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et 🗀	2,040,000
et 🗀	2,040,000
t:	0

0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Pre FY 2011 Disbursements Budget 257 Commitments Pre FY 2011 Budget 1,110

433 116 274 249 135 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 930 0 0 0 0 0

(dollars in thousands)

Post FY 2019

Post FY 2019

0

0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

EI - Plantwide Painting of Steel Pipes

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Health Safety

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 - 4.56% dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

<u> </u>	4,960,000
	4,960,000
t:	0

Start Date

Sep 2012

Sep 2015

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	174	418	828	948	622	405	136	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	4,960	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Priority:

Plantwide

Activity Group/Project Title

EN - Central Fire Alarm System

Managing Department:

Engineering and Technical Services

Health Safety

EPMC: NRPM

Project

Completion:

Construction:

Phase

Design:

Jun 2016

Start Date

Aug 2010

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. Addition of new jobs to this project has extended the completion date.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC -41.22% 0.00% EPA/Fed -WSSC -45.84% 8.38% Fairfax -4.56% Loudoun/PI -



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

et [2,589,530
ler	
jet	2,466,530
et:	-123,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	388	164	603	476	278	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,418	1,048	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Priority:

Plantwide

Health Safety

Activity Group/Project Title FF - WWTP Flood Protection

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Design: Construction:

Project

Phase

Completion:

Sep 2012

Start Date

Project Description:

This project will provide for a study to determine the needs of flood protection at the Wastewater Treatment Plant at Blue Plains. DC Water pays flood insurance premiums, the cost of which is based, in part, on the infrastructure available to protect the plant from flooding in the Potomac River. A preliminary analysis has been performed to identify projects that would be necessary to protect the plant against a 100-year flood and a 500-year flood. Frequency of events is described by hydrologists in terms of years. For example, a flood that has a one percent chance of occurring in any year is called a 100-year flood.

Impact on Operations:

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

Effective Funding by User (percent):

41.22% DC -EPA/Fed -0.00% WSSC -45.84% Fairfax -8.38% Loudoun/PI -4.56%



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

et	500,000
et 🗀	500,000
et:	0

Disbursements Budget	Pre FY 2011	FY 2011 189	FY 2012 201	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 500	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

GP - Instrumentation, Control, & Electric -EPMC

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirememt

Project

Phase

Design:

Completion:

Construction:

Sep 2019

Start Date

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. The work was previously included under management of many different projects, prominently, TA, E8, E9 and EE, among others. Certain tasks (and associated budgets) for these projects were appropriately reduced, and consolidated under this new project.

Impact on Operations:

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

41.22% DC -0.00% EPA/Fed -WSSC -45.84% Fairfax -8.38% 4.56% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

11,636,084 19,187,030 7,550,946

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,486	2,932	698	904	1,169	1,129	994	627	609	51	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	10,505	8,052	630	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

H1 - MWCOG Budget Items

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Health Safety

Project Description:

The Metropolitan Washington Council of Governments (MWCOG) provides regional planning services for the District of Columbia and its metropolitan area. DC Water contributes, in proportion to its benefit, to the regional wastewater planning efforts performed by MWCOG. The capital funding for these tasks were historically budgeted under Project YD, Miscellaneous Projects. Project H1 now tracks these efforts independent of the other projects under YD.

Impact on Operations:

There are no anticipated impacts on operations or maintenance costs.

Effective Funding by User (percent):

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



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

jet	1,097,332
jet	1,097,332
et:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	23	36	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,097	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2011

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

H9 - Blue Plains High Priority Upgrades & Replacements

Managing Department:

Maintenance Services

EPMC: NRPM

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

Annual program for the upgrade and replacement of Major Pumps, Large Motors, and Centrifuges at Blue Plains

Impact on Operations:

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

Effective Funding by User (percent):

DC - 41.22%
EPA/Fed - 0.00%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	2,282,000
et	2,442,000
et:	160,000

Phase

Design:

Project

Construction:

Completion:

Disbursements Budget	Pre FY 2011 498	FY 2011 935	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 1,396	FY 2011 1,046	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2011

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

HC - New Warehouse Facility at Blue Plains

Managing Department:

Engineering and Technical Services

Priority:

Good Engineering, Low, M&F over long term

EPMC: NRPM

Project Completion: Jun 2014

Start Date

Aug 2011

May 2012

Phase

Design:

Construction:

Project Description:

This project will construct a new central warehouse at the Blue Plains Treatment Facility. Currently material is stored in several different areas: 2nd Floor of CMF building; Supply Building No. 1; and by Maintenance Service in its various maintenance shops located on the ground level of CMF. By consolidating all material required and classifying same as inventory and storing in one central location, it will free up much needed land area at Blue Plains for planned plant projects; eliminate duplicate inventories and obsolete materials now being stored; provide the ability to track job cost with material; and assist DC Water in installation of 'best practice' inventory control.

Impact on Operations:

This project will have no material impact on the operating budget, but will provide increased efficiency to the Maintenance department.

Effective Funding by User (percent): DC -41.22% 0.00% EPA/Fed -

WSSC -45.84% Fairfax -8.38%

4.56% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

16,361,600 16,361,600

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	20	678	5,528	4,280	1,318	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	<u>FY 2012</u>	FY 2013	<u>FY 2014</u>	FY 2015	<u>FY 2016</u>	FY 2017	FY 2018	FY 2019	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

HJ - COF Renovations and Additions

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Good Engineering, Low, M&F over long term

Completion:

PhaseStart DateDesign:Sep 2016Construction:Sep 2017

Project

ompletion: Sep 2020

Project Description:

This project will provide for much-needed additional office space throughout the Central Operations Facilities (COF) building, the COF building will be expanded by the construction of new addition(s) onto the existing building. The building in its present configuration lends itself to the construction of a new addition on the front and each far side, straightening the building to a more-modern and useful design and thus providing ample additional office space on each of the four (4) main floors.

Impact on Operations:

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

Effective Funding by User (percent): DC -68.35% **FY2010 Approved Life Budget** EPA/Fed -0.00% FY2011 Revised/FY2012 Approved Life Budget 8,872,000 24.75% WSSC -Increase/(Decrease) to Approved Life Budget: 8,872,000 water is life 4.53% Fairfax -2.37% **NEW** Loudoun/PI -FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Disbursements Pre FY 2011 Budget 925 3.997 636 0 O 0 0 0 46 1.221 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Commitments Pre FY 2011 Budget 0 0 1.470 6,485 0 917 0 0 0 0 0 (dollars in thousands) (projected disbursements do not include contingencies)

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

HK - CMF Renovations and Consolidation

Managing Department:

Engineering and Technical Services

EPM

EPMC: NRPM

Priority:

Good Engineering, Low, M&F over long term

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, eliminating duplicate stored material, DC Water will be able to consolidate other function (division of Facilities) into this building and demolish the obsolete buildings known as Supply Building 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 – by on sight project management and consulting groups. The current floor of mezzanine will be doubled in size by building out over the part of the shop area below (as the two-story area of shops is for the most part, unnecessary.)

Impact on Operations:

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

Effective Funding by User (percent):

DC - 68.35% EPA/Fed - 0.00% WSSC - 24.75% Fairfax - 4.53% Loudoun/PI - 2.37%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	0
et	4,032,000
et:	4,032,000

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 232	FY 2017 1,023	FY 2018 1,645	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 0	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 498	FY 2017 3,334	FY 2018 200	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2016

Feb 2017

Sep 2018

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

HL - DWT - Process and Operations Jobs

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project will upgrade or rehabilitate facilities and equipment throughtout the WWTP. Examples of work to be performed, but not limited to, are upgrades to grit and screens, PSW, asbestos removal that was based on safety survery, HVAC improvements throughout the plant. This project will also provide effective and efficient wastewater treatment operations.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 41.22%
EPA/Fed - 0.00%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

et	0
et	3,020,000
et:	3,020,000

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	1	1,627	134	316	104	29	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2016

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

HU - Blue Plains Logisitics

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Good Engineering, High pay back, Mission / Function

Completion: Aug 2012

Start Date

Feb 2012

Phase

Design:

Project

Construction:

Project Description:

This project will provide for a traffic sign at the entrance to the WWTP to control traffic flow in and out of the plant during peak work time frames on serveral large projects. Examples of those projects are the Blue Plains Total Nitrogen Program (BTN), the Digester Demolition Project, and the Blue Plains Long-Term Control Plan. The project will also widen Overlook Ave to provide easier entrance and exit to the plant. Generally, this project includes activities designed to facilitate the movement of resources into, through, and out of Blue Plains.

Impact on Operations:

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

Effective Funding by User (percent): 41.22% DC -FY2010 Approved Life Budget 0.00% EPA/Fed -FY2011 Revised/FY2012 Approved Life Budget 625,800 WSSC -45.84% Increase/(Decrease) to Approved Life Budget: 625,800 water is life 8.38% Fairfax -NEW Loudoun/PI -4.56% FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019 Disbursements** Pre FY 2011 **Budget** 0 266 163 0 0 0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Commitments Pre FY 2011 Budget 0 16 610 0 0 0 0 0 0 0 0 (dollars in thousands) (projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Priority:

Plantwide

Activity Group/Project Title

IC - Electrical Monitoring Systems

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Good Engineering, High pay back, Mission / Function

Project

Phase

Design:

Construction:

Completion: Dec 2013

Start Date

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% **FY2010 Approved Life Budget** 0.00% EPA/Fed -FY2011 Revised/FY2012 Approved Life Budget 1,650,000 WSSC -45.84% Increase/(Decrease) to Approved Life Budget: 1,650,000 water is life 8.38% Fairfax -4.56% **NEW** Loudoun/PI -FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019 Disbursements** Pre FY 2011 Budget n O 0 0 980 241 0 0 Ω 0 0 Commitments FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Pre FY 2011 Budget 0 0 0 0 0 0 0 1,650 0 0 0 (dollars in thousands) (projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

TA - Process Control & Computer System

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Start Date Design: Sep 1998 Construction: Aug 2002

Project

Phase

Completion: Mar 2011

Project Description:

The Process Control & Computer 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. Monitoring of energy usage is provided by plant process area and for large pumps and blowers. This project upgrades technology to improve treatment, control and optimize chemical and power costs and increase reliability of the facilities.

Impact on Operations:

The new Process Control Computer System (PCCS) assists in optimizing labor, chemical and electricity costs. The PCCS permits plant operations from a centralized location by allowing operations staff to monitor process condition and equipment status remotely. 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 of approximately \$1 million per year. The system automates chemical feed, paced by plant flows and other variables, to optimize chemical usage and cost. Implementation of PCCS, in conjunction with the Grit and Screen Facility Upgrades and Gravity Thickener Upgrade is expected to save about \$200,000 per year in labor costs. Implementation of PCCS, in conjunction with the Primary Treatment, Secondary Treatment and Nitrification Facility Upgrade projects is expected to save nearly \$2 million per year in labor costs.

Effective Funding by User (percent):

DC -	41.37%	
EPA/Fed -	0.00%	
WSSC -	45.72%	
Fairfax -	8.36%	
Loudoun/PI -	4.55%	



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et	61,392,358
et	61,392,358
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	49,804	6,618	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	61,392	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

TC - 504B6 - Additional Chemical Systems

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project
Completion: Oct 2010

Start Date Dec 1998

Apr 2001

Phase

Design:

Construction:

Project Description:

This project provides new centralized chemical receiving and storage facilities, replacing the existing systems located in the chemical building. The project also constructs pipe chases and galleries to contain chemical piping currently buried throughout the Blue Plains AWTP to protect piping, reduce potential for soil contamination and provide ready access for repair. New dry polymer receiving, storage, batching, and pumping systems are provided in the Solids Processing Building. New metal salt receiving, storage and pumping systems are provided in the Chemical Building. This project replaces aged equipment and upgrades process technology to improve treatment efficiency and reliability.

Impact on Operations:

Ferrous sulfate will be added to plant influent to prevent odors. The ferrous sulfate used at Blue Plains is waste pickle liquor for which the only cost is shipping. Use of ferrous sulfate for odor control reduces the need for sodium hypochlorite and should result in a cost savings.

Effective Funding by User (percent):

DC - 15.36% EPA/Fed - 25.98% WSSC - 45.84% Fairfax - 8.38% Loudoun/PI - 4.44% dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

 et
 74,060,546

 et
 74,060,546

 et:
 0

Disbursements Budget	Pre FY 2011 74,035	FY 2011	FY 2012	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 74,061	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

TZ - 504l6 - Elec Power Sys - Switch Gear

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project

Construction:

Phase

Design:

Start Date

Apr 2016

Mar 2003

Completion: Mar 2020

Project Description:

This project replaces the 5 KV switchgear at the Secondary Blower Building and Raw Wastewater Pump Station 1. This project is needed to update the electrical equipment and ensure reliability of the plant processes. Replacement of the plant's main switchgear has been transferred to Project XZ, Solids Processing Building Upgrade.

Impact on Operations:

Project has no material impact on operations costs

Effective Funding by User (percent):

DC - 40.60%
EPA/Fed - 0.62%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

t [37,023,479
t 🗌	36,993,479
t: [-30,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,983	155	1,326	354	0	0	0	257	6,211	5,566	1,147
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,983	14,245	2,270	35	0	0	70	965	16,425	0_	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Plantwide

Activity Group/Project Title

YD - 700D5 - Miscellaneous Projects

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Health Safety

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):

DC - 37.96%
EPA/Fed - 3.88%
WSSC - 45.37%
Fairfax - 8.29%
Loudoun/PI - 4.50%

dcd water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

37,126,059 t 46,319,061 : 9,193,002

Start Date

Nov 2010

Dec 2011

Jun 2016

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	26,406	3,615	4,295	3,446	1,403	1,198	1,126	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	30,727	3,952	8,040	0	3,600	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Activity Group/Project Title AM - Solids Processing Program Management

Managing Department: Engineering and Technical Services EPMC: EPMC4

Priority: Good Engineering, High pay back, Mission / Function

Project Description:

This project provides program management services during planning, design and construction of biosolids processes upgrade 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, impact of each project on operations is identified on individual project sheets.

Effective Funding by User (percent):

DC - 41.54% EPA/Fed - 0.00% WSSC - 45.59% Fairfax - 8.33% Loudoun/PI - 4.54% dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

20,599,567 t 20,599,567 t: 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6,346	3,235	2,756	2,098	679	213	261	172	55	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	9,700	9,900	0	0	1,000	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2018

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Solids Processing

Activity Group/Project Title

BX - Gravity Thickener Upgrades Ph II

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Phase

Design:

Construction:

Oct 2017

Start Date

Feb 2011

Sep 2013

Project Description:

This project will demolish Thickener Units 5 and 6, and provide a major upgrade to Thickener Units 7-10, including new collector mechanisms. thickened sludge pumps, and scum pumps. Project would also repair cracks in gallery roof in vicinity of Thickener Units 7-10.

Impact on Operations:

Performance of Thickeners 7-10 will improve. No significant impacts on operational costs.

Effective Funding by User (percent):

DC -41.22% 0.00% EPA/Fed -WSSC -45.84% 8.38% Fairfax -4.56% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

t]	15,497,200
t	15,497,200
:	0

0

Disbursements	Pre FY 2011
Budget	0
Commitments	Pre FY 2011
Budget	0

FY 2011	FY 2012	FY 2013
239	519	653
	EV 0040	EV 0040
FY 2011	FY 2012	FY 2013

653 3.289 4.695

0

2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 2.299 95 0 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0

Post FY 2019 0 **Post FY 2019** 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Solids Processing

Activity Group/Project Title

EV - Area Substation No. 6

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project

Construction:

Phase

Design:

Completion:

Jun 2016

Start Date

Nov 2008

Apr 2010

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. Funding for this project was transferred from Project XA.

Impact on Operations:

This project will eliminate repeated shut-downs, resulting in (unquantifiable) savings in O & M costs.

Effective Funding by User (percent):

DC -23.40% EPA/Fed -17.82% WSSC -45.84% 8.38% Fairfax -4.56% Loudoun/PI -



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

22.857,532 22,857,532

0

Budget Commitments **Budget**

Disbursements

789 Pre FY 2011 21.587

Pre FY 2011

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 10.531 5.111 1,270

0 0

289

0

0 0

0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

0

0

Post FY 2019 Post FY 2019

0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Solids Processing

Activity Group/Project Title

12 - Biosolids Loadout Crane Rehabilitation

Managing Department:

Engineering and Technical Services

EPMC: EPMC4

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

The biosolids load-out facility uses 4 overhead-rail cranes with clamshells to transfer biosolids from the 4 bunkers to the trucks that haul biosolids for land application. These cranes need major mechanical and electrical rehabilitation. Some of the items requiring attention comprise the festoon system, hoist and grab motors, load cells, control panels, cab controls and cab air conditioning

Impact on Operations:

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

Effective Funding by User (percent):

DC - 41.22%
EPA/Fed - 0.00%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	0
et	2,350,000
et:	2,350,000

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements Budget	Pre FY 2011	FY 2011 256	FY 2012 1,580	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011	FY 2011 2,350	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2011

Jun 2012

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Solids Processing

Activity Group/Project Title

TP - 504H2 - Gravity Thickeners

Managing Department:

Engineering and Technical Services

Priority:

Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Oct 1999
Construction:	Dec 2002
Droinet	

Project

Completion: Nov 2013

Project Description:

This project provides a comprehensive upgrade for Gravity Thickeners 1 through 4, replacing the circular thickener mechanisms, as well as sludge and scum pumps, and piping systems. The new state-of-the-art thickeners mechanisms improve thickener performance. A flow distribution station is added to improve control of sludge feed to each of the thickeners that remain in service. New covers for Thickeners 1 through 4 are provided. The new equipment is designed to improve process efficiency and reliability of the facilities.

EPMC: NRPM

Impact on Operations:

This project, in conjunction with PCCS, provides the capability to automate sludge and scum pumping which reduces labor for monitoring and control.

Effective Funding by User (percent):

DC -41.22% 0.00% EPA/Fed -WSSC -45.84% 8.38% Fairfax -4.56% Loudoun/PI -



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

et	19,958,237
et	19,958,237
et:	0

Disbursements Budget	Pre FY 2011 19,702	FY 2011 179	FY 2012 18	FY 2013 15	FY 2014 4	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 19,958	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Solids Processing

Activity Group/Project Title

XA - New Digestion Facilities

Managing Department:

Engineering and Technical Services

EPMC: EPMC4

Priority:

Good Engineering, High pay back, Mission / Function

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 reduces the volume and weight of biosolids to be transported to land application sites resulting in reduced truck traffic, odor, noise and pollution. In FY 2006, The Board decided to reject the single bid received on the first phase digester construction contract and deferred the project until 2010. An update to the Biosolids Management Plan was started in FY 2007 to review biosolids technologies that are now available to DC Water and to evaluate less expensive digester vessels. The final options utilizes digestion and can produce a Class A biosolids product. DC Water will utilize the Cambi Thermal Hydrolisis digestion process; first for the United States.

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 savings of over \$20 million per year, that include savings in biosolids hauling and reuse, personnel, chemicals, contracts, and energy costs.

Effective Funding by User (percent):

DC -	40.71%
EPA/Fed -	0.51%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	4.56%



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budg

get	444,415,724
get	441,342,224
jet:	-3,073,500

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	40,523	21,629	131,094	136,011	35,839	53	33	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	46,955	265,807	128,580	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2002

Dec 2010

Apr 2017

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Solids Processing

Activity Group/Project Title

XB - Biological Sludge Thickening Facility

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

167

0

Project

Phase

Design:

Construction:

Completion:

Feb 2013

Start Date

Jun 2005

Mar 2009

Project Description:

Project upgrades the existing Dissolved Air Flotation thickening facility and provides new mechanical thickening equipment to thicken all biological waste secondary, nitrification and denitrification sludges generated at the Blue Plains AWTP. 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. It also improves process efficiency and reliability and reduces objectionable odors.

Impact on Operations:

This project provides improved process efficiency and reliability, and reduces objectionable odors.

Effective Funding by User (percent):

DC -41.22% 0.00% EPA/Fed -WSSC -45.84% Fairfax -8.38% 4.56% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

47,947,646 47,947,646

0

Pre FY 2011 **Disbursements Budget** 31.659 Commitments Pre FY 2011 Budget 47,548

8,512 2.955 400 0

0 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0

0

Post FY 2019 Post FY 2019

0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Priority:

Solids Processing

Activity Group/Project Title

XC - Additional Dewatering Facilities

Managing Department:

Engineering and Technical Services

Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Nov 2

Nov 2013

Start Date Dec 1998

Dec 2001

Project Description:

Project provides seven new centrifuge dewatering units and appurtenances, and implements modifications to the existing centrifuges in the Solids Processing Building. This project provides adequate capacity to dewater all biosolids generated at the plant without the need for contract dewatering. The project became operational in late FY 2006. However, addition of new jobs to this project has extended the completion date.

EPMC: NRPM

Impact on Operations:

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

Effective Funding by User (percent):

DC - 15.55% EPA/Fed - 25.77% WSSC - 45.84% Fairfax - 8.38% Loudoun/PI - 4.46% dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 81,725,849
et 81,725,849
et: 0

Disbursements Budget	Pre FY 2011 81,263	FY 2011 103	FY 2012 112	FY 2013 66	FY 2014 10	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 81,726	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Solids Processing

Activity Group/Project Title

XZ - Solids Processing Building / DSLF

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Jun 2016

Start Date

Jun 2011

Jul 2011

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. Additional funding has been conditionally provided pending the review and final determination of odor control systems requirements in accordance with the Clean Air Act.

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):

DC - 40.19%
EPA/Fed - 1.04%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 34,428,762 et 34,293,762 et: -135,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6,794	1,041	7,900	3,267	549	1,957	4,631	1,004	12	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	8,101	9,523	6,500	10,170	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Solids Processing

Activity Group/Project Title

YZ - Digestion Facilities Site Preparation

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion:

Nov 2013

Start Date

Oct 2000

May 2010

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 O&M cost impact.

Effective Funding by User (percent):

DC - 41.22%
EPA/Fed - 0.00%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

et	2,234,454
et	2,234,454
et:	0

Disbursements Budget	Pre FY 2011 1,379	FY 2011 124	FY 2012 214	FY 2013 98	FY 2014 20	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 2,234	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Activity Group/Project Title BI - Enchanced Nitrogen Removal (ENR) North

Managing Department: Engineering and Technical Services EPMC: NRPM

Priority: Health Safety

Project Description:

This project, formerly known as 'Plantwide Fine Bubble Aeration System', involves replacing the existing coarse bubble diffusers in the secondary treatment aeration system with a more efficient system. In addition to a more efficient process, this project will result in an overall savings in energy consumption. A project design engineer has investigated the upgrades required to the system and determined that to meet the new stringent discharge limit for total nitrogen from Blue Plains, upgrades in addition to the improvements to the aeration system are required for the secondary treatment process. Detailed design is scheduled to start in FY 2011.

Impact on Operations:

These improvements provide added reliability and flexibility in operating the Secondary process and achieving the plant current total nitrogen goal and future permit limit. Annual energy cost savings of approximately \$500,000 is expected. These savings will be offset to some degree by the need for maintenance to clean and replace, periodically, the fine bubble diffusers. Aside from energy savings, this project could have a positive impact on other operational costs by providing a more consistent feed to the BNR process. These improvements will provide improved treatment levels in the Secondary process, which will reduce the capital cost of other projects that will be required to provide added nitrogen removal.

Effective Funding by User (percent):

DC -	41.22%	
EPA/Fed -	0.00%	
WSSC -	45.84%	
Fairfax -	8.38%	water is life
Loudoun/PI -	4.56%	

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

27,099,405
56,492,875
29,393,470

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	832	1,777	5,697	18,006	15,970	1,424	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,366	2,884	51,243	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2009

Jun 2012

Apr 2015

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Enhanced Nitrogen Removal Facilities Project

Activity Group/Project Title

E8 - Enchanced Clarification Facilities

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Description:

The Enhanced Clarification Facility 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, beginning in FY 2014. The estimated increase in annual O&M costs is \$3,000,000 per year in 2007 dollars.

Effective Funding by User (percent):

DC - 41.22% EPA/Fed - 0.00% WSSC - 45.84% Fairfax - 8.38% Loudoun/PI - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t 🗀	239,150,000
t 🗀	237,274,000
	-1,876,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	218	935	4,451	5,641	2,349	31,666	94,658	42,204	3,309	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	500	3,650	13,108	0	58	219,959	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2011 Jan 2015

Apr 2018

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Enhanced Nitrogen Removal Facilities Project

Activity Group/Project Title

E9 - Nitrogen Removal Facilities

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Court Ordered, Stipulated Agreements, Etc.

Mar 2009 Design: Construction: Nov 2010 **Project** Completion: Jul 2015

Start Date

Phase

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 increase operating and maintenance costs beginning in FY 2014 by approximately \$8 million per year (2007) dollars and unit prices). Increased chemical addition and power consumption comprise most of the cost increase.

Effective Funding by User (percent):

DC -31.65% EPA/Fed -9.57% WSSC -45.84% Fairfax -8.38% Loudoun/PI -4.56%

0		
U		F
wate	er is life	

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget

t	346,550,818
et 🗀	346,550,818
t:	0

Disbursements Budget	Pre FY 2011 22,949	FY 2011 34,497	FY 2012 80,283	FY 2013 60,656	FY 2014 28,200	FY 2015 14,853	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 27,048	FY 2011 306,303	FY 2012 10,000	FY 2013 3,200	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Enhanced Nitrogen Removal Facilities Project

Activity Group/Project Title

EE - Centrate Treatment Facilities

Managing Department:

Engineering and Technical Services

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project		
··ojoot		

Completion:

Construction:

Phase

Design:

Jun 2015

Start Date

Aug 2009 Dec 2012

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.

EPMC: NRPM

Impact on Operations:

Operation of the new system will increase operating and maintenance costs beginning in FY 2014 by approximately \$8 million per year (2007 dollars and unit prices). Increased chemical addition and power consumption comprise most of the cost increase.

Effective Funding by User (percent):

DC - 41.22%
EPA/Fed - 0.00%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 🗀	89,125,000
et 🗀	89,125,000
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	3,446	5,211	5,618	16,252	34,675	6,435	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	4,165	9,135	1,942	73,883	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Enhanced Nitrogen Removal Facilities Project

Activity Group/Project Title

EG - Wet Weather Peak Mitigation (Blue Plains Tunnel)

Managing Department:

Engineering and Technical Services

EPMC: EPMC5

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Completion:

Phase

Design:

Construction:

Jul 2020

Start Date

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 and a tunnel dewatering pump station at 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 2014. The estimated annual cost increase is \$3 million per year, in 2007 dollars.

Effective Funding by User (percent):

DC -	41.22%
EPA/Fed -	0.00%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	4.56%



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget

t	177,380,058
t 🗀	177,380,058
t:	0

Disbursements	Pre FY 2011	FY 2011					FY 2016		FY 2018		Post FY 2019
Budget	6,580	4,677	29,647	48,225	34,545	18,828	18	18	18	18	17
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	10,709	166,671	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Enhanced Nitrogen Removal Facilities Project

Activity Group/Project Title FG - Secondary Treatment Upgrades for TN

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Description:

This project will expand Secondary Reactors 5 and 6 to double their size. The design of the reactor expansion was included in the current Secondary Treatment Facilities Upgrade - Phase 2 project because prior Blue Plains flow projections indicated that the 370 MGD design conditions would be realized by 2010. This work has been removed from the current construction bid documents because the MWCOG flow projections, updated in 2002, now indicate that the 370 MGD design conditions will not be seen until 2025. Thus expanded facilities are not required at this time. Construction of expanded facilities will be completed in time to meet design conditions.

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 -4.56%



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et	59,925,000
et	59,925,000
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	195	1,904	52,613
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	8,175	0	51,750

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2025

Phase

Design:

Project Completion:

Construction:

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Enhanced Nitrogen Removal Facilities Project

Activity Group/Project Title

FR - BP Tunnel Dewatering Pumping Sta

Managing Department:

Engineering and Technical Services

EPMC: NRPM

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Completion:

Phase

Design:

Construction:

n: Mar 2018

Start Date

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.

Effective Funding by User (percent):

DC - 41.22%
EPA/Fed - 0.00%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/Pl - 4.56%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	27,020,635
et 🏻	26,704,635
et:	-316,000

Disbursements	Pre FY 2011	FY 2011		FY 2013		FY 2015				FY 2019	Post FY 2019
Budget	143	428	647	419	1,026	924	7,693	7,670	1,903	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,022	0	0	0	1,649	23,034	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Enhanced Nitrogen Removal Facilities Project

Activity Group/Project Title

FS - Div D - Bolling Overflow and Diversion

Managing Department:

Engineering and Technical Services

EPMC: EPMC5

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project

Phase

Design:

Construction:

Completion: Dec 2025

Start Date

Jul 2015

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 in the operating budget.

Effective Funding by User (percent):

DC -41.22% 0.00% EPA/Fed -WSSC -45.84% 8.38% Fairfax -4.56% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

10,074

0

25,042,180 25,042,180

Disbursements	Pre FY 2011
Budget	380
Commitments Budget	Pre FY 2011

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
645	467	0	784	1,110
FY 2011	FY 2012	FY 2013	FY 2014	FY 2015

2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** 5.642 0 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** 0 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

0

0

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Wastewater Treatment Service Area

Program Title:

Enhanced Nitrogen Removal Facilities Project

Activity Group/Project Title

H7 - Blue Plains Tunnel Site Preparation

Managing Department:

Engineering and Technical Services

EPMC: EPMC5

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Description:

This project is to demolish existing abandoned digesters to make way for the new dewatering pump station and the enhanced clarification facility (ECF). This revised location was necessary because these facilities would not fit at the original planned location. The projet cost has been reduced due to favorable contract bids received.

Impact on Operations:

There are no anticipated impacts on operations or maintenance costs.

Effective Funding by User (percent):

DC - 42.71%
EPA/Fed - 0.00%
WSSC - 44.68%
Fairfax - 8.17%
Loudoun/PI - 4.44%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	13,139,200
et	6,360,303
et:	-6,778,897

Phase

Design:

Project

Construction:

Completion:

Disbursements Budget	Pre FY 2011 1,183	FY 2011 3,554	FY 2012	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 5,270	FY 2011 1,090	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019 0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2009

Feb 2010

Jun 2011



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2010-2019 ...







Sanitary Sewer Service Area

dewater.com

SANITARY SEWER

DC Water is responsible for wastewater collection and transmission in the District of Columbia, including operation and maintenance of the sanitary sewer system. DC Water's sanitary sewer system includes approximately 600 miles of large interceptor sewers and smaller gravity collection sewers. DC Water is also responsible for sewer lateral connections from the sewer mains to the property lines of residential, government, and commercial properties. In addition, DC Water is responsible for the 50 mile long Potomac Interceptor System, which provides conveyance of wastewater from areas in Virginia and Maryland to Blue Plains. The existing sanitary sewer system in the District of Columbia dates back to 1810, 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.

During FY 2009, DC Water completed a Sewer System Facilities Plan. This document culminated a five year effort involving sewer inspection and condition assessment, development of a sewer GIS and database, hydraulic monitoring and modeling to assess system capacity and the development of prioritized activities for system improvement. This Sewer System Facilities Plan identified a significant increase in funding needed for sewer infrastructure improvements.

As a result, the lifetime budgets in this area were increased by more than \$400 million last year and again by more than \$130 million in the current planning period. The proposed ten-year CIP disbursements have been increased by just over \$40 million mainly as a result of the addition of FY 2019 (\$46 million) and the removal of FY 2009 (\$21 million) from the ten-year plan.

Some of the projects that are planned to begin in FY 2011 and FY 2012 include:

- A6 Lining of the NWBSO at 22nd and P Sts, NW
- BO01 Henson Ridge Storm Sewer
- BO02 Branch Road Storm Sewer
- BO03 Macomb Street Relief Storm Sewer
- BO06 Park St and Bangor Drive Storm Sewer Rehabilitation
- I 105 Metro Groundwater Reduction
- DM Upper Anacostia Main Interceptor
- DR02 Lower Area Trunk Sewer Rehabilitation
- FW01 Piney Branch Trunk Sewer Rehabilitation
- G4 Upper Potomac Interceptor Sewer Rehabilitation
- JO01 B Street and New Jersey Ave Trunk Sewer Rehabilitation
- J1 Oxon Run Sewer Leakage Correction

- N708 Potomac Interceptor Repairs at Waxpool Road, Loudoun County, Virginia
- N709 Potomac Interceptor System Internal Inspections
- N 710 Potomac Interceptor Erosion Control Study
- N711 Potomac Interceptor Access Road Improvements

Key Findings of the 2009 Sewer Facilities Plan:

- Generally speaking, major sewer pipe infrastructure can meet current and future population needs; however, continued investment in upgrades to major infrastructure elements is needed.
- 88% of the sewers inspected had some defects, 60% of which could be addressed using localized repair and the remaining require mainly lining.
- 94% of the manholes inspected were found to have one or more defects.
- The number and severity of pipe defects indicates an expected increase in problems in pipes greater than 75 years old. Older pipes can be in good condition (and younger ones can be in poor condition), but at the 75 year mark, DC Water can assume more extensive and frequent inspection is needed.
- There are approximately 210 miles of sewers in stream valleys and about 12.3 miles of these sewers were found to need some type of repair.
- There are about 316,000 linear feet of sewers with some portion under buildings; of those inspected, a preliminary list has been developed, and approximately 7,000 linear feet of sewers have been found to have multiple and/or significant defects, warranting rehabilitation or replacement.

Key Recommendation of 2009 Sewer Facilities Plan:

Continue a two-pronged, parallel approach to the CIP program – implement identified projects resulting from ongoing system condition and needs assessment and increase and continue an annual sewer pipe renewal program. Based on a 20-year planning outlook, this will require a \$1.2 billion increase (2008 dollars) in capital spending to address currently identified projects (\$536 million) and a sewer pipe renewal program (\$664 million). Of the \$536 million, about \$232 million are currently included in the lifetime budget for this service area. The remaining \$300 million will be included in future requests as they are analyzed and prioritized with all other funding needed for all service areas.

The current CIP includes the following projects:

Collection Sewer Projects - \$133.9 million

(project pages IV-8 to IV-20)

This program 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 collection system sewers as well as projects that serve existing properties and new development. Noteworthy projects are:

- East Side Interceptor Rehabilitation Project 'J3' The portion of the sewer that traverses the National Arboretum has significant structural distress. Design is complete for the rehabilitation of the sewer with construction started in 2009.
- Sewer Rehabilitation on 10th & 12th Streets, N.W. Project '19' This project consists of the rehabilitation of deteriorated 36" and 30" diameter sewers on 10th Street, N.W. and on 12th Street, N.W in the vicinity of Pennsylvania Avenue.

Ongoing Sanitary Sewer Projects – \$42.1 million

(project pages IV-21 to IV-35)

This area includes capital projects managed by the Department of Sewer Services including the replacement of sewer laterals and related capital improvements. The program also includes funding for the District of Columbia Department of Transportation (DDOT) road projects, which often require the relocation of sewers. Budget requirements are projected based on the best available information from DDOT. Other projects include:

• Pope Branch 12 inch Sewer Replacement – Project Q3 - This involves the complete rehabilitation of the existing sanitary sewer that runs along Pope Branch as part of an intergovernmental project to restore the park. Project includes rehabilitation of approximately 4,400 feet of sewer. Design was completed during 2009 and construction is scheduled to start in 2010.

Pumping Facilities – \$25.9 million

(project pages IV-36 to IV-40)

This program includes projects required for the rehabilitation or replacement of existing wastewater pumping stations as well as projects for the engineering and construction of new wastewater pumping facilities, as needed, to enhance the reliability and integrity of DC Water's sanitary sewer system. In addition, a Security Upgrade (Project 'CX') is scheduled to begin in FY 2010, which will place interior and exterior cameras throughout DC Water's Sewer Services facilities, install traffic control devices, and install perimeter fencing. Additionally, this program includes costs for activities related to the Authority's planned relocation of certain facilities located at the Main and 'O' Street Pumping stations.

The current program includes projects to rehabilitate existing wastewater pumping stations:

- Rock Creek Project 'L3' The design is complete and construction is underway.
- Upper Anacostia Project 'L4' The pumping station design is complete and construction is underway.

Sanitary Sewer Service Area - Management – \$103.2 million

During FY 2010, DC Water continued with an ongoing evaluation of the sanitary and combined sewer systems, as well as design management for sewer pumping station rehabilitations and sewer infrastructure projects, as described in more detail below.

- Sanitary Sewer Program Management & Planning (EPMC-IIIA/IIIB) Project 'AU' This project provides design, review and
 management of the sewer system to determine if it is in an adequate structural condition and has sufficient capacity to meet
 current service demands and planned growth. The planning effort is also required to comply with the current National
 Pollutant Discharge Elimination System (NPDES) permit, the Nine Minimum Controls consent decree, and prevention of nonpermitted sewer overflows.
- Design Management for Sanitary Sewer Pumping Stations This ongoing project began in FY 2001, and provides for the management of the design and construction of three small sanitary sewage pumping stations requiring major rehabilitation or replacement.

Interceptor/Trunk Sewer/Force Sewers – \$430.1 million

(project pages IV-43 to IV-72)

This program includes the replacement or rehabilitation of large diameter sewers that have reached their useful life or are in need of major repair. In addition, this category includes additional funding for sewer projects (G5 and G6) that were identified as part of the comprehensive assessment of the sewer system. A description is included below.

The current CIP contains several projects in this service area, including:

- Potomac Interceptor Rehabilitation Project 'N7' The Potomac Interceptor Sewer System is a 50-mile long sewer that
 provides conveyance of wastewater from areas in Virginia, Maryland and the District to Blue Plains. DC Water has been
 working with its wholesale customers on a variety of capital projects to address odor control issues related to the Potomac
 Interceptor and to ensure the long-term structural integrity of this major sewer. The project (\$47.9 million) has faced
 challenges, such as, larger equipment needed to control odors, high architectural costs related in part to historical
 preservation requirements of the National Park Service, and difficult construction locations. The project work includes:
 - Potomac Interceptor Rehabilitation in Fairfax and Loudon Counties This capital improvement Project includes funding to design and reconstruct portions of the interceptor in Fairfax and Loudoun Counties. The design revisions were needed as part of a project design reassessment.

- Additional Inspections and Access Road Improvements There are three projects to further assess over 20 miles of the pipeline, improve deteriorated access roads for operations and maintenance needs, and to evaluate soil erosion along the pipeline at stream crossings and along the banks of the C&O Canal.
- PI Repair @ Waxpool Rd This capital project involves the relining of 930 feet of the 48-inch Potomac Interceptor in Loudoun County near Waxpool Road. The final design was submitted in FY-2008 after the original contract was modified to remove a portion of the Upper Potomac Interceptor repair in Washington DC due to unresolved access issues with the National Park Service.

Odor Control Projects – Project 'N7'

- Interim Odor Controls As an interim step, DC Water installed odor-absorbing chemicals and passive carbon filters in manholes at selected locations where problems have been experienced. These interim controls have been continually maintained, pending the implementation of the permanent odor controls.
- Permanent Odor Controls DC Water plans to install a permanent odor control system that includes a forced air/activated carbon filter system. This project will cost approximately \$50.3 million. The conceptual design was completed in FY 2003. During the past six years, DC Water has been seeking the requisite National Park Service permit, performing associated environmental assessments, and coordinating with the community. Permits and property access issues are continuing and recent acceptance of architectural features by the National Park Service indicate that DC Water is nearing completion of all coordination issues.
- Upper Potomac Interceptor Rehabilitation Project 'G4' This project involves the repair of a major portion of the trunk sewer. This project was separated out as a stand alone contract due to access restriction and ongoing negotiation with National Park Service. The design was completed in FY2009, and construction is anticipated to start in early 2011.
- Future Sewer System Upgrades Project A4
 - Tide Gate Replacements This project is for the replacement of the structures at various outfalls to prevent the river from flowing into the combined sewer system during high tides. It is estimated that approximately 40,000 gallons per day of river water that is currently being treated at Blue Plains WWTP can be prevented from entering the combined sewer system upon completion of the project.
 - Georgetown Sewer Rehabilitation Combined sewer inspections performed throughout the Georgetown neighborhood of the District found severe structural defects in the existing sewer system. This project is for the design and construction

for the rehabilitation of approximately 2,600 feet of the existing sanitary system. This project will utilize trenchless technologies to limit the impact to the existing neighborhood.

Watts Branch Sewers Rehabilitation – The DC Department of Environment (DDOE), DC Water, and United States Fish & Wildlife Service (USFWL) are working together to design plans for the stream restoration of Watts Branch. The sewer system improvements are being performed by DC Water staff. The project was to be broken into three phases 1, 2, and 3 and involves the improvements to the sewers along Watts Branch. Phase 1 work was necessary to begin prior to the USACE / DDOE Stream restoration projects. It involved three sites for excavation and some lining of a few sewers that currently cross Watts Branch. Phase 2 involves the relocation of the Watts Branch interceptor for approximately 2 blocks to eliminate sewer crossings of Watts Branch as well as lining of the interceptor from west of Grant Street / 46th Street to where the sewer exits the park. Phase 3 is miscellaneous work such as manhole lining or additional manhole placement for ease of maintenance.

Projects scheduled to begin in FY 2011 and FY 2012:

- G5 Sewer Rehab Near Creek Beds The Sewer Facilities Plan identified several areas within the city's stream valleys where sewer systems have become exposed due to creek bed erosion. Start up-funds were programmed to begin planning, design and coordination with park authorities so some progress can be made to begin addressing vulnerable sewers in these very vulnerable locations.
- G6 This project rehabilitates sanitary sewers located under buildings citywide. Other activities included in this project are cleaning, pre and post closed circuit television inspection (CCTV), sealing joints and repair of offset pipe.

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title

G1 - Small Local Sewer Rehab 1

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project

Phase

Design:

Construction:

Completion: Apr 2015

Start Date

Jun 2011 Feb 2013

Project Description:

This multi-phase / multi-job project was developed from the suggested project list of Local Sewer Rehabilitation Projects included in the 2009 Sewer System Facilities Plan. These projects rehabilitate defective collection sewers using appropriate lining methods and point repairs at various locations throughout the District. Project includes job G100, Local Sewer Rehabilitation – Contract 1, for the rehabilitation of approximately 13,000 feet of sewers in five neighborhoods (Wards 2, 3, 4, 5 and 7). Project includes job G101, Rehabilitation of Local Sewers in Georgetown, for the rehabilitation of approximately 4,500 feet in Georgetown. Project also includes the non-Sewer Facilities Plan related job G102, Barry Road Sanitary Sewer Replacement, for replacement of the sanitary sewer at Barry Road.

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t	28,000,000
t	28,000,000
::	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	101	735	3,610	10,821	2,409	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	1,864	0	26,136	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title

G8 - Small Local Sewer Rehab 2

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia 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 failure of the infrastructure in the future with undesirable environmental and social consequences.

Effective Funding by User (percent):

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

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

2,750,000 2,750,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	33	71	411	1,014	231	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	183	0	2,567	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2012

Jan 2014

Mar 2016

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title

G9 - Small Local Sewer Rehab 3

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Phase **Start Date** Mar 2013 Design: Construction: Jan 2015 **Project**

Completion: Mar 2017

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia 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 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% 0.00% WSSC -0.00% Fairfax -0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

t 🗀	5,650,000
t 🗔	5,650,000
t: 🗀	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	95	147	848	2,079	476	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	377	0	5,273	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Priority:

Sanitary Collection Sewers

Activity Group/Project Title

GA - Small Local Sewer Rehab 4

Managing Department:

Engineering and Technical Services

Good Engineering, High pay back, Mission / Function

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia 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.

EPMC: EPMC3

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% 0.00% EPA/Fed -0.00% WSSC -Fairfax -0.00% Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

8,700,000 8,700,000

Start Date

Mar 2014

Jan 2016

Mar 2018

Phase

Design:

Project

Construction:

Completion:

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Disbursements Pre FY 2011 Budget 0 0 147 228 1,310 3,204 742 0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Commitments Pre FY 2011 Budget 8,120 0 0 0 0 580 0 0 0 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title

GB - Small Local Sewer Rehab 5

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Design: Mar 2015 Construction: Jan 2017 **Project** Completion: Mar 2019

Start Date

Phase

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 40,000 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 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% 0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

12,000,000 12,000,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY_2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	203	314	1,806	4,482	1,031	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	800	0	11,200	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title | GC - Small Local Sewer Rehab 6

Managing Department:

Engineering and Technical Services

Priority:

Good Engineering, High pay back, Mission / Function

EPMC: EPMC3	Project
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Completion:

Construction:

Phase

Design:

Mar 2020

Start Date

Mar 2016

Jan 2018

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 40,000 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 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% 0.00% WSSC -0.00% Fairfax -0.00% Loudoun/PI -



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

t	12,400,000
et 🗀	12,400,000
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	210	325	1,890	4,661	1,457
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	827	0	11,573	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title

GD - Small Local Sewer Rehab 7

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 40,000 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 failure of the infrastructure in the future with undesirable environmental and social consequences.

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

12,700,000 12,700,000

Start Date

Mar 2017

Jan 2019

Mar 2021

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	<u>F</u>
Budget	0	
Commitments Budget	Pre FY 2011	<u>F</u>

(projected disbursements do not include contingencies)

FY 2011 FY 20	12 FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
0	0 (0	0	0	216	336	1,943
FY 2011 FY 20	12 FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
0	0 (0	0	0	847	0	11,853

(dollars in thousands)

Post FY 2019

Post FY 2019

8.014

0

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title | GE - Small Local Sewer Rehab 8

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 40,000 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 failure of the infrastructure in the future with undesirable environmental and social consequences.

Effective Funding by User (percent):

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

Loudoun/PI - 1 0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

13,100,000 13,100,000

Start Date Mar 2018

Jan 2020

Jan 2023

Phase

Design:

Proiect Completion:

Construction:

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 225	FY 2019 349	Post FY 2019 11,004
Commitments Budget	Pre FY 2011 0	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 874	FY 2019 0	Post FY 2019 12,226

(projected disbursements do not include contingencies)

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title | GF - Small Local Sewer Rehab 9

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Phase Start Date Design: Mar 2019 Construction: Jan 2021 **Project** Completion: Mar 2023

Project Description:

This project is to rehabilitate local sanitary sewers throughout the District of Columbia and is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would rehabilitate approximately 40,000 linear feet (LF) of defective sewer pipes of various diameters ranging from 10-inches to 36-inches with an average sewer pipe diameter of approximately 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:

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

Effective Funding by User (percent):

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

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

13,495,000 13,495,000

NEW

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 220	Post FY 2019 12,295
Commitments Budget	Pre FY 2011 0	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 900	Post FY 2019 12,595

(projected disbursements do not include contingencies)

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title

HB - Sewer Capital Equipment

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

Annual program for the repair and replacement of large motors and pumps in the Sewer Service 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 🗀		1,520,000
et 🗀	81	4,560,000
et: 🗀		3,040,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	9	469	387	541	544	546	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	660	860	760	760	760	760	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2015

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title

11 - Selective Sewer Separation & I/I Sewer Rehab.

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Completion: Jan 2014

Start Date

Jan 2011

Feb 2004

Phase

Design:

Project

Construction:

Project Description:

This project consists of five jobs to reduce extraneous flows into the sewer system. Extraneous flows to be removed include inflow and infiltration (I/I) into the sewer system, and sewer separation projects in the combined sewer area of the District to reduce flows to the Blue Plains Advanced Wastewater Treatment Plant. I/I is caused by groundwater and stormwater leaking into sewer pipes and manholes, and is controlled by rehabilitation projects. Sewer separation projects reduce flow by separating storm flow from sanitary flow in the combined sewer system.

Impact on Operations:

Jobs in this project will reduce operating costs at Blue Plains by reducing overall wastewater flows requiring treatment.

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%

dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t 6,682,537 t 6,682,537 t: 0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	4,253	55	670	452	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	4,297	205	2.181	^	0	^	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title

19 - Sewer Rehab. 10th-12th St, Bet. Penn

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project assesses the condition of a sewer in the Downtown area between 10th and 12th Streets on Pennsylvania Avenue. At the completion of the assessment, a suitable design will be completed and the sewer will be rehabilitated.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

jet	1,150,000
jet	1,150,000
et:	0

0

0

Budget Commitments

Budget

Disbursements

Pre FY 2011 1,001

Pre FY 2011 209

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 150 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 149

0 0 0 0

0

0 0 0 0

Phase

Design:

Project Completion:

Construction:

0 **Post FY 2019**

0

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2007

Oct 2009

Jun 2011

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Collection Sewers

Activity Group/Project Title J3 - Sewer Upgrade - City Wide

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion: May 2014

Start Date

Dec 2010

Nov 2002

Phase

Design:

Construction:

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 consist of four jobs to address sewer upgrade needs. This project increases the reliability, restores the integrity, and maintains the capacity of DC Water's sanitary sewer 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% 0.00% WSSC -0.00% Fairfax -0.00% Loudoun/PI -



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

get	11,033,000
get	12,718,000
jet:	1,685,000

Disbursements Budget	Pre FY 2011				FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Commitments	2,656 Pre FY 2011	518 FY 2011	1,710 FY 2012	2,180 FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	3,842	440	8,436	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

Q3 - FY2003 - DSS Sanitary Sewer Project

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2003 for sanitary infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

DC -89.43% 10.57% EPA/Fed -WSSC -0.00% 0.00% Fairfax -0.00% Loudoun/PI -



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

	8,711,000
	8,711,000
: [0

0

Start Date

Apr 2007

Apr 2003

Apr 2013

Disbursements	Pre FY 2011
Budget	4,416
Commitments	Pre FY 2011
Budget	4,932

3.779

481

2,201 509 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0

0 0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

0

0 0 0 0

Phase

Design:

Project Completion:

Construction:

Post FY 2019 0

Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title Q7 - FY2007 - DSS Sanitary Sewer Project

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2007 for sanitary infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

TV 2044 TV 2042 EV 2042 EV 2044 EV 2045 EV 2046 EV 2047 EV 2049 EV 2049 Doct EV 2040

et	5,670,000
et	5,670,000
et:	0

Budget	5,603	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	5,603	67	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2007

Sep 2011

Phase_

Design:

Project Completion:

Construction:

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

Q8 - FY2008 - DSS Sanitary Sewer Project

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Completion: Dec 2011

Start Date

Jun 2008

Phase

Design:

Project

Construction:

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2008 for sanitary infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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

0.00%

water is life

0

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget:

0

et	4,640,000
et	4,640,000
ıt:	0

0

Disbursements Budget

Commitments

Budget

Loudoun/PI -

Pre FY 2011 4.141 Pre FY 2011

4,640

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 68 0

0 0

0

0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

Post FY 2019 Post FY 2019

0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

AP - FY2009 - DSS Sanitary Sewer Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2009 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system.

Impact on Operations:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

5,720,000 5,720,000

0

Disbursements	Pre FY 2011
Budget	4,302

Commitments Pre FY 2011 Budget 4,640

302

1,172 66 0 1,080

0 0

0

0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0

0

Phase

Design:

Project Completion:

Construction:

0 **Post FY 2019** 0

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2009

Jan 2012

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

A9 - FY2010 - DSS Sanitary Sewer Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

onty: Good Engineering, riigh pay back, wiission / Function

Project Description:

This project provides for the FY2010 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system.

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t [6,790,000
et [6,790,000
t: [0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,134	3,663	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6,790	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2010

Sep 2011

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

BF - FY2011 - DSS Sanitary Sewer Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project provides for the FY2011 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. Job numbers will be issued to identify the 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%

dc	
water is life	

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

8,165,000
8,165,000
0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	3,241	3,699	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	6,475	1,690	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2012

Apr 2012

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

CE - FY2012 - DSS Sanitary Sewer Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project provides for the FY2012 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. Job numbers will be issued to identify the 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% 0.00% EPA/Fed -WSSC -0.00% Fairfax -0.00% Loudoun/PI -

0.00%

water is life

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

et	9,385,000
et	9,385,000
et:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	5,334	2,111	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	9,385	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2012

Apr 2013

Phase

Design:

Project Completion:

Construction:

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title CQ - FY2013 - DSS Sanitary Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project provides for the FY2013 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. Job numbers will be issued to identify the 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% 0.00% EPA/Fed -0.00% WSSC -Fairfax -0.00% 0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

10,205,000 10,205,000

0

Start Date

Feb 2013

May 2014

Disbursements Pre FY 2011 Budget 0 Commitments Pre FY 2011 Budget 0

0 0 4,965 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 10,205 0

2,377 0

0 0

0

0

0

Phase

Design:

Project Completion:

Construction:

Post FY 2019 **Post FY 2019**

0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

(dollars in thousands)

(projected disbursements do not include contingencies)

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

D6 - FY2014 - DSS Sanitary Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description: This project provides for the FY2014 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. Job numbers will be issued to identify the 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% 0.00% EPA/Fed -0.00% WSSC -Fairfax -0.00% 0.00% Loudoun/PI -



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et 🗀	10,575,000
et 🗀	10,575,000
et: 🗀	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	5,179	2,477	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	10,575	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2014

May 2015

Phase

Design:

Project

Construction:

Completion:

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

DI - FY2015 - DSS Sanitary Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project provides for the FY2015 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. Job numbers will be issued to identify the 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 🗀	10,846,000
et 🗀	10,846,000
t:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	5,332	2,531	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	10,846	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2015

Apr 2016

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

DW - FY2016 - DSS Sanitary Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2016 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. Job numbers will be issued to identify the 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 11,215,000 et 11,215,000 et: 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015			FY 2018	FY 2019	Post FY 2019
Budget Commitments	0 Pre FY 2011	0 FY 2011	0 FY 2012	0 FY 2013	0 FY 2014	0 FY 2015	5,506 FY 2016	2,614 FY 2017	0 FY 2018	0 FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	11,215	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2016

Apr 2017

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

FP - FY2017 - DSS Sanitary Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2017 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. Job numbers will be issued to identify the 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 🗀	11,500,000
et 🗀	11,500,000
ıt:	0

Disbursements Budget	Pre FY 2011	FY 2011 0	FY 2012 0	FY 2013	FY 2014 0	FY 2015	FY 2016 0	FY 2017 5,653	FY 2018 2,726	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 0	FY 2011 0	FY 2012	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 11,500	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2017

May 2018

Phase

Design:

Project Completion:

Construction:

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

H6 - FY2018 - DSS Sanitary Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Completion: Apr 2019

Start Date

Feb 2018

Phase

Design:

Construction:

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2018 for sanitary infrastructure improvements. Job numbers will be issued to identify different jobs within the project.

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



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

et	11,845,000
et 🗀	11,845,000
et:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	5,804	2,786	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	11,845	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title HN - FY2019 - DSS Sanitary Sewer Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2019 for sanitary sewer mains and lateral infrastructure improvements. Job numbers will be issued to identify different jobs within the project.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

0
12,200,000
12,200,000

NEW

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 6,221	Post FY 2019 3,524
Commitments Budget	Pre FY 2011 0	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 12,200	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2019

Apr 2020

Phase

Design:

Project Completion:

Construction:

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary On-Going

Activity Group/Project Title

EU - Sewer Lateral Rehab and Main Lining

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

sion / Function

Phase Start Date
Design:
Construction: Dec 2008

Project
Completion: Mar 2014

Project Description:

This project has been created as a comprehensive program to accelerate the repair or replacement of sewer laterals which have already been reported and cleaned out by the Department of Sewer Services. In cases such as deterioration, tree roots and grease buildup damage have made straightforward solutions unlikely and given rise to the need for a more comprehensive program to provide permanent solutions in these types of situations. There are approximately 650 identified laterals of this nature. In addition, the TV assessment program implemented by Sewer Services has identified 30 mains which require lining to be restored to their full capacity within DC Water's sanitary sewer system.

Impact on Operations:

While there will be no financial impact on the operating budget, this project will eliminate repeated service calls by Sewer Services personnel for these laterals and mains, freeing the Sewer staff to address other tasks.

Effective Funding by User (percent):

(projected disbursements do not include contingencies)

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



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

	14,600,000
	14,600,000
: -	0

(dollars in thousands)

Disbursements Budget	Pre FY 2011 5,211	FY 2011 1,656	FY 2012 1,602	FY 2013 672	FY 2014 101	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 11,900	FY 2011 2,700	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

2 Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Pumping Facilities

Activity Group/Project Title

CX - Sewer Facilities Security Upgrades

Managing Department:

Facilities and Security

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

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%

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

tt 1,135,000 et 1,135,000 tt: 0

Phase

Design:

Project

Construction:

Completion:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	137	109	193	232	39	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	435	0	700	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2014

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Pumping Facilities

Activity Group/Project Title

GZ - Sewer Instrumentation & Control

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project
Completion: Se

Phase

Design:

Construction:

Sep 2014

Start Date

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.

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 - 100.00%
EPA/Fed - 0.00%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/Pl - 0.00%

dcd water is life

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

2,400,000 et 2,400,000 t: 0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	127	375	476	479	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	2,400	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Pumping Facilities

Activity Group/Project Title

L3 - Rock Creek Sewage Pumping Station

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Description:

Project L3 provides for a comprehensive rehabilitation of this pumping station. This project provides for new pumps, electrical system, control system, HVAC system, odor control system and structural repairs as recommended by the consultant's Rehabilitation Concept Report.

Impact on Operations:

Rehabilitation of this station will restore its rated pumping capacity and improve reliability by replacing pumps, motors and controls, provide for new ventilation systems, odor control, electrical system and other support systems. The project will repair structural defects, improve the safety provisions in the building and improve the exterior appearance of the facility. There will be no material impact on operating costs.

Effective Funding by User (percent):

DC - 44.11% EPA/Fed - 0.00% WSSC - 35.39% Fairfax - 12.41% Loudoun/PI - 8.08% dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 11,131,290 et 11,131,290 et: 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	7,626	88	16	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	11,056								_		1

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2003

Apr 2007

Jun 2012

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Pumping Facilities

Activity Group/Project Title

L4 - Upper Anacostia Sew. Pump. Station

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project
Completion: Sep 2011

Start Date

Nov 2003

May 2008

Phase

Design:

Construction:

Project Description:

Project L4 originally provided for a comprehensive rehabilitation of this pumping station. The deficiencies were identified and the correction costs were estimated. The cost of a new replacement station on the same site was also estimated and found to be more cost effective. The new station will feature submersible pumps and motors in a below grade wet well. A separate above grade structure will house the electrical equipment, controls, instrumentation, ventilation equipment and odor control system.

Impact on Operations:

There will be no material impact on operating costs.

Effective Funding by User (percent):

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

dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

9,134,559 9,134,559 0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6,508	259	58	15	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	9,005	130	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Pumping Facilities

Activity Group/Project Title

L5 - Earl Place Sewage Pumping Station

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirememt

Project Completion: Sep 2011

Start Date Feb 2002

Aug 2005

Phase

Design:

Construction:

Project Description:

Project L5 provides for a comprehensive rehabilitation of this pumping station. This project provides for new pumps, electrical system, control system, HVAC system, a new force main and structural repairs as recommended by Rehabilitation Concept Report.

Impact on Operations:

Rehabilitation of this station will restore its rated pumping capacity and improve reliability by replacing pumps, motors and controls, provide new ventilation systems, electrical system and other support systems. The project will repair structural defects and improve the exterior appearance of the facility. There will be no material impact on operating costs.

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	2,097,568
et 🗀	2,097,568
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,565	70	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,048	50	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Sewer Program Mgmt

Activity Group/Project Title

AU - Sanitary Sewer Program Management

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project
Completion: Sep 2021

Phase

Design:

Construction:

Start Date

Project Description:

This project provides engineering program management services for the sanitary sewer service area in the District. This five-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 three 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:

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

jet [61,094,994
get 🔲	61,094,994
et: [0

Disbursements Budget	Pre FY 2011 15,474	FY 2011 4,889	FY 2012 3,171	FY 2013 2,890	FY 2014 3,492	FY 2015 2,803	FY 2016 2,367	FY 2017 2,554	FY 2018 3,485	FY 2019 4,229	Post FY 2019 7,153
Commitments Budget	Pre FY 2011 21,035	FY 2011 19,260	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 20,800	FY 2017 0	FY 2018 0	FY 2019	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

1 Note: Under the terms of the IMA, the capital costs associated with each joint use facility are to be split among the users in proportion to the peak flow each user is allocated. It is not possible, at this time, to allocate costs by individual facility. It is anticipated that as projects are developed for work associated with specific facilities and costs are developed, the individual users will be notified and billed according to approved cost sharing agreements.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Sewer Program Mgmt

Activity Group/Project Title

DN - Sewer Inspection Program

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

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.

Phase	Start Date	
Design:	Mar 2010	- 1
Construction:	Nov 2010	
Project Completion:	Jan 2023	

Effective Funding by User (percent):

DC -

100.00%

EPA/Fed -

0.00%

WSSC -

0.00%

Fairfax -

Budget

0.00%

Loudoun/PI -

Commitments

0.00%

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water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

39,140,000 42,055,000 2,915,000

Loudouini 1	0.0070
Disbursements	Pre FY 2011
Budget	164

164
Pre FY 2011
1.006

164	
011	<u> </u>
006	

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 2,439 1,154 2,000 4,000

1,037 3,164 2,680 3,400

5,185

3,971

6,025

3,980

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 6,125 6,225

3,070

4,040

Post FY 2019 2,262

5,409

3,144 **Post FY 2019** 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title A4 - Future Sewer System Upgrades

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

Design: May 2004 Construction: Jul 2006 **Project** Completion: Apr 2024

Start Date

Phase

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.

DC -85.38%

Effective Funding by User (percent):

5.43% EPA/Fed -WSSC -9.19% 0.00% Fairfax -Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

48,900,000 48,900,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY:
Budget	10,886	6,034	1,763	2
Commitments	Pre FY 2011	FY 2011	FY 2012	FY:
Budget	19,541	17,059	8,300	2

Y 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	
6,034	1,763	2,350	3,004	2,522	1,912	661	234	0	
Y 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	
7,059	8,300	2,000	2,000	0	0	0	0	0	

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

0

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

DM - Upper Anacostia Main Interceptor Relief Sewer

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirememt

Project Completion:

Phase

Design:

Construction:

Dec 2014

Start Date

Sep 2010

Jul 2012

Project Description:

This project involves the replacement of approximately 2000 LF of 18-inch separate sanitary sewer installed 70 years ago with a 30-inch relief sewer. This will relieve the UAMI from surcharging during high flow periods minimizing flooding and back-ups, and was moved forward from FY 2013. This will also provide capacity for the high level of development that is revitalizing Anacostia Gardens, Liliy Pond and Kenwilworth Terrace neighborhoods.

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% 0.00% Fairfax -Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

12,350,000
12,350,000
0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	314	397	4,337	3,718	83	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	750	0	11,600	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

DR - Low Area Trunk Sewer Rehabilitation

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion: Jul 2013

Start Date

Dec 2010

Jun 2009

Phase

Design:

Construction:

Project Description:

This project provides for the cleaning, assessing, design and repair of the Low Area Trunk Sewer after a collapse of a section of the sewer near the US Capitol Building. The Section from 13 St, NW to the siphons at 3rd St, NW, approximately 5,200 linear feet of 42" sewer requires heavy cleaning and inspection. Light cleaning is required on 6,800 linear feet of 42" sewer from the siphon to the Main Pumping Station.

Impact on Operations:

Repair of this Trunk Sewer will ensure DC Water's ability to collect and transmit the full sewer capacity to Blue Plains. Repair and reliability of the sewer will provide cost avoidance of future major emergency response in this area.

Effective Funding by User (percent):

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



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

-							
get	4,616,000						
get	4,616,000						
get:	0						

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	657	222	331	1,008	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,400	308	1,908	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title | FV - Rehab Lower East Side Interceptor

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Budget

Potential Failure/Ability to continue meeting permit requirement

Project

Construction:

Phase

Design:

Completion: Dec 2015

Start Date

Jan 2012

Sep 2013

Project Description:

This project will rehabilitate approximately 15,300 feet of the 72 inch diameter Lower East Side Interceptor using a slip lining method. The portion of the Lower East Side Interceptor proposed for rehabilitation is located between RFK Stadium and the Southeast Federal Center.

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% 0.00% WSSC -0.00% Fairfax -0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

0

0

0

14.800.500 14,800,500

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Disbursements Pre FY 2011 Budget 313 5,072 759 0 0 0 312 3,918 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Commitments Pre FY 2011

987

0

13,813

(projected disbursements do not include contingencies)

0

(dollars in thousands)

Post FY 2019

Post FY 2019

0

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

FW - Rehab Piney Branch Trunk Sewer

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Construction:

Phase

Design:

Jan 2016

Start Date

Jul 2011

Jun 2013

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% 0.00% EPA/Fed -

0.00% WSSC -Fairfax -0.00%

Loudoun/PI -

0.00%

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

25,000,000 25,000,000

Pre FY 2011 Disbursements Budget 195 778 792 7.631 Commitments Pre FY 2011 Budget 0 1.668 23,333 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** 6.735 1.187 0 0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** 0 0 0 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

0

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

FY - Rehab Upper Rock Creek Interceptor

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion: Dec 2017

Start Date

Jun 2013

May 2015

Phase

Design:

Construction:

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



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

	16,000,000
	16,000,000
Ĩ	0

Disbursements	Pre FY 2011
Budget	0
Commitments	Pre FY 2011
Budget	0

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
0	0	120	528	783	5,461
FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
0	0	1,070	0	14,930	0

FY 2017	FY 2018	FY 2019
4,219	434	0
FY 2017	FY 2018	FY 2019
0	0	0

Post FY 2019 0

Post FY 2019

(projected disbursements do not include contingencies)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

G2 - Sewer Structure Rehabilitation (1)

Managing Department:

Engineering and Technical Services

ces

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

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 or inability to access this infrastructure in an emergency in the future, resulting in 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%



FY2010 Approved Life Budget	
FY2011 Revised/FY2012 Approved Life Budget	
Increase/(Decrease) to Approved Life Budget:	

t \square	9,000,000
t \square	9,000,000
::	0

Start Date
Dec 2012

Jun 2014

Dec 2015

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	222	780	4,792	275	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	593	5,607	2,800	0	0	0	0	0

(projected disbursements do not include contingencies)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

G4 - Upper Potomac Intercept Sewer Rehab.

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

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:

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

Effective Funding by User (percent):

DC - 69.54%
EPA/Fed - 0.00%
WSSC - 30.46%
Fairfax - 0.00%
Loudoun/PI - 0.00%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	3,825,000
et	3,927,906
et:	102,906

Start Date

Oct 2009

Aug 2011

Oct 2012

Phase

Design:

Project Completion:

Construction:

						-	•	•	_
Commitments Pre FY 2011 FY 2011 FY 3,415	Y 2012 <u>I</u>	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018 0	FY 2019	Post FY 2019

(projected disbursements do not include contingencies)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

G5 - Sewer Rehab Near Creek Beds

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Project

Phase

Design:

Completion:

Construction:

Dec 2018

Start Date

Jun 2011

Feb 2013

Priority:

Health Safety

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:

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

32,000,000 32,000,000

94

0

Disbursements Pre FY 2011 Budget 0 Commitments Pre FY 2011 Budget 0

79 870

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 565 1.954 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

1,000

7.239 12,530 5,870

5,600 3,630

3.399

5.080

2.308 1,176 2,500 0 **Post FY 2019 Post FY 2019** 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title G6 - Sanitary Sewers Under Buildings 1

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

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. The budget for this project has been reduced to fund separate projects that were carved out for similar work in future years.

Impact on Operations:

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

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



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et 🗀	28,968,000
et 🗀	8,468,000
t:	-20,500,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	42	378	495	310	1,025	1,535	844	7	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	3,000	59	120	2,695	2,595	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2009

Jan 2010

Oct 2016

Phase

Design:

Project Completion:

Construction:

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

GG - Large Sewer Rehab 2

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Phase Start Date Mar 2012 Design: Aug 2014 Construction: **Project** Completion: Aug 2016

Project Description:

This project to rehabilitate and repair major sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project provides a program to rehabilitate major sewer segments after the inspection. evaluation and prioritization as determined by the sewer inspection program. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs.

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% 0.00% EPA/Fed -WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00% water is life

FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

get	3,000,000
jet	3,000,000
et:	0

Disbursements Budget	Pre FY 2011
Commitments Budget	Pre FY 2011

FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
0 29	75	82	1,107	777	0	0	0
FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
0 200	0	2,800	0	0	. 0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

0

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

GH - Large Sewer Rehab 3

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project to rehabilitate and repair major sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project provides a program to rehabilitate major sewer segments after the inspection, evaluation and prioritization as determined by the sewer inspection program. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs.

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%

dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t: 6,150,000 t 6,150,000 t: 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	69	154	169	2,271	1,590	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	410	0	5,740	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Mar 2013

Aug 2015

Aug 2017

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

GI - Large Sewer Rehab 4

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project to rehabilitate and repair major sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project provides a program to rehabilitate major sewer segments after the inspection, evaluation and prioritization as determined by the sewer inspection program. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs.

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

get	9,530,000
get	9,530,000
jet:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	107	240	260	3,526	2,501	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	636	0	8,894	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2014

Aug 2016

Aug 2018

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title GJ - Large Sewer Rehab 5

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Completion: Aug 2019

Start Date

Mar 2015

Aug 2017

Phase

Design:

Project

Construction:

Project Description:

This project to rehabilitate and repair major sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project provides a program to rehabilitate major sewer segments after the inspection, evaluation and prioritization as determined by the sewer inspection program. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs.

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



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

et	13,100,000
et	13,100,000
et:	0

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 149	FY 2016 329	FY 2017 359	FY 2018 4,908	FY 2019 3,460	Post FY 2019
Commitments Budget	Pre FY 2011 0	FY. 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 874	FY 2016 0	FY 2017 12,226		FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

GK - Large Sewer Rehab 6

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project to rehabilitate and repair major sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project provides a program to rehabilitate major sewer segments after the inspection, evaluation and prioritization as determined by the sewer inspection program. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs.

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%

0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

13,500,000 13,500,000

Start Date

Mar 2016

Aug 2018

Aug 2020

Phase

Design:

Project Completion:

Construction:

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Disbursements **Budget** 374 0 O 0 0 Ω 0 153 340 5,079 4,558 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Commitments Pre FY 2011 Budget 0 0 0 0 0 0 Ω 900 0 12,600 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

GL - Large Sewer Rehab 7

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project to rehabilitate and repair major sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project provides a program to rehabilitate major sewer segments after the inspection, evaluation and prioritization as determined by the sewer inspection program. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs.

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%

dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 13,900,000 et 13,900,000 et: 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	158	354	388	11,357
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	927	0	12,973	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2017 Aug 2019

Aug 2021

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title GM - Large Sewer Rehab 8

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project to rehabilitate and repair major sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project provides a program to rehabilitate major sewer segments after the inspection, evaluation and prioritization as determined by the sewer inspection program. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs.

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget

t 🗀	14,300,000
et 🗀	14,300,000
t:	0

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011 0	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 165	FY 2019 367	Post FY 2019 12,192
Commitments Budget	Pre FY 2011 0	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 954	FY 2019 0	Post FY 2019 13,346

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2018

Aug 2020

Aug 2022

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

GN - Large Sewer Rehab 9

Managing Department:

Engineering and Technical Services

S

EPMC: EPMC3

Good Engineering, High pay back, Mission / Function

Priority:
Project Description:

This project to rehabilitate major sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project provides a program to rehabilitate major sewer segments after the inspection, evaluation and prioritization as determined by the sewer inspection program. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs.

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%

water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

15,705,000 15,705,000

Start Date

Mar 2019

Aug 2021

Aug 2023

Phase

Design:

Project Completion:

Construction:

Loudoun/PI - 0.00%

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018		Post FY 2019
Budget Commitments	0 Pre FY 2011	0 EV 2011	0 EV 2012	0 FY 2013	0 FV 2014	0 FY 2015	0 FY 2016	0 FY 2017	0 FY 2018	160 FY 2019	14,374 Post FY 2019
Budget	0	0	0	0	0	0	0	0	0	980	14,725

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

HG - New Field Operations & Maintenance Facility

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

Project Description:

This project will provide for the development of a new four (4) acre site for new Eastern Sector Water and Sewer Investigation and repair Satellite crew Maintenance Service Group. This will effectively replace the operations now housed at O Street and Main Pump Stations – by taking the consolidated water services and sewer services group and relocate to this new site, along with the Maintenance Service Group assigned for operations outside of Blue Plains. The work will include the construction of a new 16,000 s.f. one and one-half story building, for shops, offices, and storage of materials, four vacuum trucks, and field meeting/assignment rooms. All cost 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:

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	0
et	9,434,000
et:	9,434,000

NEW

Phase

Design:

Project Completion:

Construction:

Loudoun/PI - 0.00%

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	24	776	5,829	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	382	1,075	7,977	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2016 Oct 2017

Jul 2018

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title HH - New Fleet Management Facility

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

Project Description:

This project will relocate all operations from O Street and Maim 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. All cost 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:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

9,669,000 9,669,000

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	28	794	5,975	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	415	1.075	8.179	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2016

Oct 2017

Jul 2018

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

HT - Rehabilitation of Anacostia Force Main

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

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 (LF) 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 HT03 provides electromagnetic survey inspections every 5 years to determine if future segments are at risk. Job HT04 provides visual and sonic material testing at various locations throughout the 32,700 LF of the AFM and Job HT05 plans for the future analysis and condition assessment of the AFM.

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%

dC water is life

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

6,150,000 6,150,000

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements	Pre FY 2011					FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	174	318	1,669	1,079	87	46	95	458	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	700	1,800	2,750	0	0	150	750	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2011

Jun 2012

Aug 2018

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

IF - Sanitary Sewer Rehabilitation 2

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

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, 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 exhibits deteriorated conditions.

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%

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

 et
 0

 et
 12,000,000

 t:
 12,000,000

NEW

Phase

Design:

Project Completion:

Construction:

Loudoun/PI - 0.00%

Disbursements Budget	Pre FY 2011	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 100	FY 2015 286	FY 2016 1,831	FY 2017 2,645	FY 2018 2,478	FY 2019 1,020	Post FY 2019
Commitments Budget	Pre FY 2011	FY 2011	FY 2012	FY 2013 0	FY 2014 260	FY 2015 3.907	FY 2016 4.007	FY 2017 3.827	FY 2018	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2014

Jul 2015

Sep 2019

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

IG - Sanitary Sewer Rehabilitation 3

Managing Department:

Engineering and Technical Services

Engineering and resimine

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

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, 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 exhibits deteriorated conditions.

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%

dc water is life

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

12,930,000 12,930,000

Start Date

Mar 2017

Jul 2018

Sep 2022

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017 110	FY 2018 314	FY 2019 2,000	Post FY 2019 8,319
Commitments Budget	Pre FY 2011	FY 2011	FY 2012	FY 2013 0	FY 2014 0	FY 2015	FY 2016 0			FY 2019 4,305	Post FY 2019 4,135

(projected disbursements do not include contingencies)

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title IK - Potomac Force Main Rehabilitation

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

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 have no material impact in the operating budget.

Effective Funding by User (percent):

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



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

0
1,500,000
1,500,000

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	65	368	340	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	150	1,350	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Jan 2012

Apr 2013

Mar 2014

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Priority:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title IL - Creekbed Sewer Rehabilitation 2

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Project

Phase

Design:

Construction:

Completion: Dec 2019

Start Date

Dec 2013

Jun 2015

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:

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

Health Safety

Effective Funding by User (percent):

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



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

0
20,010,000
20,010,000

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 143	FY 2015 307	FY 2016 2,274	FY 2017 3,046	FY 2018 5,519	FY 2019 3,036	Post FY 2019 92
Commitments Budget	Pre FY 2011 0	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 385	FY 2015 3,769	FY 2016 3,966	FY 2017 9,990	FY 2018 1,900	FY 2019 0	Post FY 2019 0

(projected disbursements do not include contingencies)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

IM - Creekbed Sewer Rehabilitation 3

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Phase

Design:

Project Completion:

Construction:

Start Date

Aug 2016

Mar 2018

Aug 2022

Priority:

Health Safety

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:

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

Effective Funding by User (percent): DC -100.00% **FY2010 Approved Life Budget** 0.00% EPA/Fed -FY2011 Revised/FY2012 Approved Life Budget 16,107,000 WSSC -0.00% water is life Increase/(Decrease) to Approved Life Budget: 16,107,000 Fairfax -0.00% 0.00% Loudoun/PI -NEW **Disbursements Pre FY 2011** FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019 Budget** 0 0 0 0 0 0 257 721 3.606 9,318 Commitments Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Budget 0 0 0 0 0 0 150 540 6.428 6.085 2.904 (projected disbursements do not include contingencies) (dollars in thousands)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title IN - Upper East Side Trunk Sewer Rehabilitation

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

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 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 LF. Job IN02 will rehabilitate the ESI by relining the pipe utilizing the appropriate methodology and reinstating service connections.

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%



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budg

get	0
get	14,250,000
jet:	14,250,000

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	39	371	1,029	2,910	3,339	2,553
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	635	0	6,205	7,410	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Aug 2015

Feb 2017

Aug 2020

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title J0 - B St/New Jersey Ave Trunk Sewer Rehab.

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Phase

Design:

Project

Construction:

Completion:

Priority:

Good Engineering, High pay back, Mission / Function

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:

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

Effective Funding by User (percent): DC -100.00% FY2010 Approved Life Budget EPA/Fed -0.00% FY2011 Revised/FY2012 Approved Life Budget WSSC -0.00% Increase/(Decrease) to Approved Life Budget: 0.00% water is life Fairfax -0.00% Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	105	980	2,032	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	470	5,150	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2009

May 2011

Jun 2012

3,920,000

5,620,000

1,700,000

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

J1 - Oxon Run Sewer Leakage Correction

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion: Feb 2016

Start Date

Oct 2011

Feb 2014

Phase

Design:

Construction: .

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:

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

Effective Funding by User (percent): DC -100.00% FY2010 Approved Life Budget 7,945,000 0.00% EPA/Fed -FY2011 Revised/FY2012 Approved Life Budget 7,945,000 WSSC -0.00% Increase/(Decrease) to Approved Life Budget: water is life Fairfax -0.00% Loudoun/PI -0.00% **Disbursements** Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019 Budget** 92 171 565 3,606 1,348 0 0 133 Commitments FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Pre FY 2011 **Post FY 2019** Budget 500 133 0 7,312 0 0 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Sanitary Sewer Service Area

Program Title:

Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title

N7 - Potomac Sewer System Rehab.

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

High Profile, Good Neighbor Policy

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:

The PI Odor Remedy job is expected to increase operating costs.

Effective Funding by User (percent):

DC - 10.60% EPA/Fed - 0.00% WSSC - 32.13% Fairfax - 32.13% Loudoun/PI - 25.14%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	47,866,936
et	50,281,936
et:	2,415,000

Start Date

Mar 2003

Dec 2001

Jul 2018

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6,529	5,823	14,207	6,370	267	181	181	166	76	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	19,884	27,523	1,775	275	275	275	275	0	0	0	0

(projected disbursements do not include contingencies)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

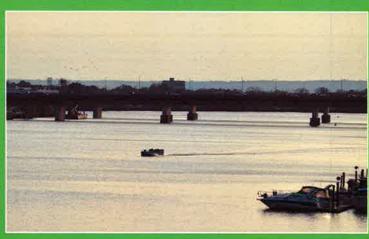


DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2010-2019







SECTION V Combined Sewer

Overflow Service Area

dcwater.com

COMBINED SEWER AREA

Similar to many 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 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 53 permitted CSO outfalls in the District. This service area includes projects that will reduce the number of overflows by 96 percent over a 20-25 year period, as well as rehabilitate, replace, or relocate Combined Sewer facilities throughout the District of Columbia.

DC Water is currently engaged in implementing its Clean Rivers Project (aka Long Term Control Plan, or 'LTCP') for CSOs that discharge to the Anacostia River, Rock Creek and the Potomac River. This is by far the largest portion of this Program, and the schedule for completing the Clean Rivers Project spans over a 20-year period that ends in 2025. It is included in a Federal Consent Decree between the United States, the District Government and DC Water. The consent decree was entered by the court in March 2005. Projects to control CSOs to the Anacostia River are at the top of the court ordered schedule and DC Water has recently completed a draft final Facility Plan for these projects. The Facility Plan includes a Summary Report and detailed implementation schedule which DC Water has submitted to EPA as required by the consent decree. DC Water is now moving forward in the design and construction phases of the Anacostia River projects according to the detailed implementation schedule submitted to EPA.

A recent Court decision from an environmental group's lawsuit involving the interpretation of Total Maximum Daily Pollutant Load (TMDL) measurement may have a potential impact on the Clean Rivers Project implementation schedule, as we ensure that the Plan we undertake can achieve the goals and requirements of the District's water quality standards which are the bases for the Clean Rivers Project. DC Water continues to work with EPA to clarify and resolve this issue.

The benefits of our twenty-year plan are significant. When fully implemented, in conjunction with the 'nine minimum controls' program, combined sewer overflows will be reduced by a projected 96 percent (98 percent on the Anacostia River), resulting in improved water quality and a significant reduction in debris on our national capital's waterways. In addition, DC Water's clean-up efforts on the Anacostia River are a key cornerstone of the District's plan to redevelop both sides of the river, including the new baseball stadium and proposed retail development and affordable housing among other projects.

The Clean Rivers Project includes a variety of improvements throughout the District:

- \$1.67 billion (Project CY) to construct a ten mile tunnel system to control Anacostia River overflows, three miles of branch tunnels to relieve surface flooding and a tunnel dewatering pumping station with project completion in FY 2025.
- \$419 million (Project CZ) to construct a three-mile tunnel system to control Potomac River overflows and a lift station, with facility planning to begin in 2015 and project completion in FY 2025.
- \$70 million (Project DZ) to construct a mile long tunnel system to control Piney Branch/Rock Creek overflows, with facility planning to begin in 2016 and project completion in FY 2025.

Construction is nearly complete on projects worth approximately \$170 million that were included in the settlement of a lawsuit against DC Water regarding implementation of the federal CSO Nine Minimum Controls program. These projects were previously budgeted and planned by DC Water prior to the lawsuit. We are also nearing completion to separate additional combined sewer areas in both Anacostia and Rock Creek watersheds. Additionally, we are underway with detailed designs to add Low Impact Development (LID) at several DC Water facilities. We have undertaken the rehabilitation of our major pumping stations to increase their capacity: three of these stations are in the construction phase and scheduled to be completed in FY 2011 while the fourth (Poplar Point Pumping Station) construction is scheduled to be completed in FY 2012. Work completed on the 'nine minimum controls' program has already successfully reduced overflows from combined sewers by nearly 40 percent.

On-going and Upcoming projects in this area include:

- Poplar Point Pumping Station rehabilitation (Project K4), with a lifetime budget of \$9.8 million, provides for improvements that include replacement of the pump motors and controls and rehabilitation of the pumps, structural and architectural repairs, HVAC upgrades, the addition of an odor control system, and electrical and lighting upgrades. Design of the station is complete and construction began in FY 2010.
- Northeast Boundary Swirl Facility (Project EL), with a lifetime budget of \$4.5 million, provides for a partial rehabilitation of this
 facility including the replacement of the chemical feed systems, partial replacement of the electrical system and the
 replacement of other components damaged by flooding and chemicals. The design phase of the project is nearing completion
 with construction scheduled to begin in 2011.
- DC Water Low Impact Development Projects (Project BA) with a lifetime budget of \$3.0 million is designed to control wet weather related pollution from DC Water owned facilities as part of the agreement for the LTCP Consent Decree. LID technology will be evaluated for it's effectiveness in controlling storm water runoff and improvement in water quality. Implementation of LID technologies has started at several facilities; the design of the remaining facilities will be completed in FY 2011.
- Rock Creek CSO Projects (Project BH) with a lifetime budget of \$18.1 million provides for further reduction of CSOs into Rock Creek as part of the agreement for the LTCP Consent Decree. The Rock Creek Regulator Adjustment project (Job BH01) includes modifications to various regulator structures and the separation of several segments of the combined sewer system. This project is nearing design completion with construction scheduled to start in 2011. Job BH02, the Rock Creek Sewer Separation project provides for the separation of sanitary and storm sewers in several sub-watersheds of the Rock Creek basin. Construction has started and is expected to be completed in FY 2012.
- Outfall Sewer Rehabilitation (Project D2) with a lifetime budget of \$56 million provides for the rehabilitation of approximately 16,000 feet of the influent sewers to Blue Plains AWT to ensure reliable conveyance of 1,076 mgd by April 2011. After DC Water inspected the large diameter sewers which convey wastewater from the pumping stations to Blue Plains, the

inspections revealed significant corrosion and exposed reinforcing steel in portions of the pipes. Engineering analyses determined that the conduits could not carry 1,076 mgd due to their condition. As a result, this project will rehabilitate approximately 4 miles of the Outfall Sewers. In accordance with the decree, DC Water has requested approximately a 4 year extension to 2011 to convey 1,076 mgd until the rehabilitation project is complete. The cost of this project has been incorporated within the ten-year capital plan to ensure that the benefits of the Clean Rivers Project can be fully realized and that DC Water is in complete compliance with all requirements.

- Main & 'O' Pump Station Intermediate Upgrade (Project FQ), with a lifetime budget of \$17.3 million, reflects work originally anticipated to be completed later in the ten-year plan. However, a small portion of the work was removed from the original upgrade project (EK) and has been brought forward in this new project along with some other needed work to provide for needed replacement of storm water pumps and various sluice gates and gate valves at the Main and O Street Pumping Stations.
- Combined Sewers under Buildings (Project G7) with a lifetime budget of \$19.8 million this project is to rehabilitate and /or relocate combined sewers located under buildings citywide. This project is a result of the recommendations from the sewer assessment. Other activities included in this project are cleaning, pre and post CCTV, sealing joints and repair of offset pipe.

Service Area Title:

Combined Sewer Overflow

Program Title:

CSO Program Management

Activity Group/Project Title AV - CSO Program Management

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion: Sep 2021

Phase

Design:

Construction:

Start Date

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. Examples of the projects to be managed are: CSO Long Term Control Plan Development Project, CSO Nine Minimum Control Projects, Fabri-Dam Rehabilitation Project, Pump Stations Rehabilitation, and the CSO control projects recommended under the CSO LTCP Development Project and approved by the regulatory agencies.

Impact on Operations:

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

Effective Funding by User (percent):

(projected disbursements do not include contingencies)

DC -89.93% EPA/Fed -10.07% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

get	40,720,146
get	40,720,146
ıet:	0

(dollars in thousands)

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	3,956	3,480	1,883	1,905	2,307	1,851	1,562	1,680	2,294	2,783	5,021
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6,641	19,479	0	0	0	0	14,600	0	0	0	0

1 Note: Under the terms of the IMA, the capital costs associated with each joint use facility are to be split among the users in proportion to the peak flow each user is allocated. It is not possible, at this time, to allocate costs by individual facility. It is anticipated that as projects are developed for work associated with specific facilities and costs are developed, the individual users will be notified and billed according to approved cost sharing agreements.

Service Area Title:

Combined Sewer Overflow

Program Title:

CSO Program Management

Activity Group/Project Title

K2 - CSO-Long Term Control Plan

Managing Department:

Engineering and Technical Services

EPMC: DETS

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Description:

The project is to develop the Combined Sewer System (CSS) Long Term Control Plan (LTCP). Development of the plan involves extensive field work collecting data on combined sewer overflow (CSO), water quality of the rivers impact by CSO, investigation of other sources of pollution, development and use of water quality models to track changes in water quality for various CSO control scenario, cost benefit analysis.

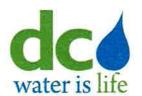
In the current phase of this project, the consultant is providing assistance in managing the Anacostia Facility Plan project, transfer of technical information developed during the CSS LTCP process and providing other technical support such as hydraulic analyses and modeling. Services required by DC Water relate to compliance of the 3-Party Consent Decree and the CSS LTCP Consent Decree are also provided under this project.

Impact on Operations:

The work under this project has contributed to more efficient operation and maintenance of the CS system and CSO control structures, and will continue to do so, reducing O&M costs, and compliance with regulatory requirements.

Effective Funding by User (percent):

DC -	54.71%
EPA/Fed -	44.59%
WSSC -	0.55%
Fairfax -	0.10%
Loudoun/PI -	0.05%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 🗀	14,518,848
et 🗀	14,518,848
t: 🗀	0

Phase

Design:

Project

Construction:

Completion:

Disbursements	Pre FY 2011
Budget	14,290
Commitments	Pre FY 2011
Budget	14,519

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
1	0	0	0	0	0	0	0	0
		=>/ 00/0	EV 0044	EV 0046	EV 0040	EV 2047	TV 0040	EV 0040
FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

Start Date

Oct 2010

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title A7 - Supplemental Environmental Projects / Nine Minimium Controls

Managing Department:

Engineering and Technical Services

EPMC: DETS

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Description:

This project was created to respond to requirements negotiated under the 3-Party Consent Decree to settle a lawsuit alleging violation of the Combined Sewer Overflow provisions of the federal Clean Water Act.

Under this project, DC Water will provide funds to the Chesapeake Bay Foundation to undertake green roof projects within the CSO area in the District, DC Water will also provide funds to the Urban Forestry Administration in the DC DOT to plant 3,000 trees in the CSO area and to install 2 rain gardens in N.E. DC.

Impact on Operations:

This project will not have any material impact on the operations.

Effective Funding by User (percent):

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

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

1,900,000 1,900,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,545	24	25	21	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,700	200	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2007

Jul 2013

Phase

Design:

Project

Construction:

Completion:

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

BA - DC WATER Low Impact Development Projects / Nine Minimium Con

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Completion: Oct 2014

Start Date

Feb 2002

Jun 2004

Phase

Design:

Construction:

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 -100.00% EPA/Fed -0.00% 0.00% WSSC -0.00% Fairfax -Loudoun/PI -0.00% water is life

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et 🗀	3,000,000
et 🗀	3,000,000
t: 🗀	0

Disbursements Budget	Pre FY 2011 454	FY 2011 174	FY 2012 111	FY 2013 1,029	FY 2014 291	FY 2015 7	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 815	FY 2011 0	FY 2012 2,005	FY 2013 180	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

BB - Potomac Pumping Station Rehab / Nine Minimium Controls

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Completion:

Construction:

Phase

Design:

Sep 2012

Start Date

Jul 2002

Apr 2005

Project Description:

Project BB provides for the rehabilitation that will restore the station to reliable operating condition and restore its pumping capacity to the rated flow of 460 MGD. This project provides for the rehabilitation or replacement of pumps, motors, motor controls and the electrical system. It also provides for improvements to the HVAC system.

Impact on Operations:

Rehabilitation of this station will increase the overall reliability of the station and the amount of flow that can be pumped to Blue Plains thus reducing the quantity of overflows. There will be no material impact on operating costs.

Effective Funding by User (percent):

DC -25.68% 24.21% EPA/Fed -27.34% WSSC -Fairfax -14.44% Loudoun/PI -8.33%



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

	20,052,932
	20,052,932
7	0

Disbursements Budget	Pre FY 2011 18,450	FY 2011 536	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 20,053	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

³ Note: Facilities are listed as Joint Use. However, flow analysis indicates that the historical cost allocations may be subject to change. Flow analysis, and resulting cost allocations, are under review by users.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title BH - Rock Creek CSO Projects / Nine Minimium Controls

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Oct 2013 Completion:

Start Date

Mar 2007

Mar 2009

Phase

Design:

Construction:

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.

Effective Funding by User (percent):

DC -49.94% 50.06% EPA/Fed -0.00% WSSC -0.00% Fairfax -0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

18,070,900 18,070,900

Disbursements Budget	Pre FY 2011 4.961	FY 2011 3.829	FY 2012 3.254	FY 2013 642	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Commitments	Pre FY 2011	-,	- ,	-	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	13,277	4,794	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title | BK - CSO Nine Minimum Control Projects

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Description:

This project has been added to make financial provisions to comply with requirements in the 3-party consent decree. These funds will provide for:

CSO Event Indicator Lights: The lights are triggered by CSO events, and will be placed at two CSO locations to alert potential users of the river of an active CSO. This will be an automatic system including an overflow detector, an automatic electronic communication system and a pole fitted with a light that will be visible to the users of the river.

Additional CSO Signs: At a select number of locations, at or near CSO outfall structures, special signs will be installed (pending National Park Service's approval) to alert potential users of CSO impacted rivers about the location of the outfall.

Impact on Operations:

Addition of the lights and signs will result in increased operating costs to provide for inspection and maintenance activities.

Effective Funding by User (percent):

62.40% DC -EPA/Fed -37.60% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budg

jet	1,391,000
jet	1,391,000
et:	0

Phase

Design:

Project

Construction:

Completion:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,147	76	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,391	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2009

Feb 2008

Nov 2010

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

D2 - Outfall Sewer Rehabiliation / Nine Minimium Controls

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Court Ordered, Stipulated Agreements, Etc.

Completion:

PhaseStart DateDesign:Nov 2007Construction:Apr 2009

Project

Completion: Sep 2011

Project Description:

This project will rehabilitate the existing Outfall Sewer System tributary to the headworks of the Blue Plains WWTP. Four 10-foot diameter sewers were inspected in 2005 and it was concluded that the pipelines will need to be rehabilitated in order to provide reliable service. This project is eligible for 50/50 matching funding from the Congressional CSO Appropriation.

Impact on Operations:

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

Effective Funding by User (percent): DC -41.73% FY2010 Approved Life Budget 56,000,000 41.73% EPA/Fed -56,000,000 FY2011 Revised/FY2012 Approved Life Budget WSSC -15.10% Increase/(Decrease) to Approved Life Budget: water is life Fairfax -0.94% Loudoun/PI -0.50% FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Pre FY 2011 Disbursements Budget 2 0 0 27.086 16.681 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Commitments Pre FY 2011 Budget 0 0 0 0 0 0 0 0 0 0 56,000 (dollars in thousands) (projected disbursements do not include contingencies)

³ Note: Facilities are listed as Joint Use. However, flow analysis indicates that the historical cost allocations may be subject to change. Flow analysis, and resulting cost allocations, are under review by users.

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title K1 - Main & "O" St. Pump Stations / Nine Minimium Controls

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Completion:

Phase

Design:

Construction:

Sep 2013

Start Date

Dec 2004

Apr 2005

Project Description:

Project K1 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, upgrading the electrical and ventilation systems, replacing screens and installing screening handling systems and odor control systems. These are needed to reduce combined sewer overflow to the river, meet the requirements of the Federal Clean Water Act and restore the stations to a reliable operating condition.

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. It will also decrease the personnel hours spent handling the screenings. It will improve the appearance of the overall facility by replacing and upgrading the brickwork on the "O" Street Station, replacing the pavement, providing new landscaping and exterior lighting and restoring the building exterior of the Main Station. There will be no material impacts on operating costs.

Effective Funding by User (percent):

(projected disbursements do not include contingencies)

DC -	55.41%
EPA/Fed -	44.59%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

t	75,900,723
et 🗀	75,900,723
t:	0

(dollars in thousands)

Disbursements Budget	Pre FY 2011 70,771	FY 2011 1,141	FY 2012 38	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 75,368	FY 2011 533	FY 2012 0	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019 0

2 Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

K3 - East Side Pumping Station / Nine Minimium Controls

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Description:

Project K3 provides for the restoration of the pumping capacity of this facility to its rated flow of 45 MGD by providing a new, above grade pumping station. This is necessary to reduce combined sewer overflow to the Anacostia River by increasing flow to Blue Plain to meet the requirements of the Federal Clean Water Act.

Impact on Operations:

Replacement of this station will increase the amount of flow that can be pumped to Blue Plains thus reducing the quantity of overflow. It will provide a facility with greatly improved ventilation, odor control, screening handling system, lighting and safety features. It will provide a much higher degree of reliability than the existing facility. There will be no material impact on operating costs.

Effective Funding by User (percent):

DC - 55.82%
EPA/Fed - 44.18%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 17,193,005 et 17,193,005 et: 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget Commitments	16,406 Pre FY 2011	195 FY 2011	0 FY 2012	0 FY 2013	0 FY 2014	0 FY 2015	0 FY 2016	0 FY 2017	0 FY 2018	0 FY 2019	0 Post FY 2019
Budget	17,193	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2003

Aug 2004

Sep 2011

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title K4 - Poplar Point Pumping Station / Nine Minimium Controls

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project May 2013 Completion:

Start Date Apr 2005

Jan 2010

Phase

Design:

Construction:

Project Description:

Project K4 provides for the rehabilitation of the existing pumping station and improvement to its reliability. This project includes structural and architectural repairs to the station, HVAC upgrades, addition of odor control, electrical and lighting upgrades and storm drain and paving modifications. Final decision on a new station will depend on CSO Long Term Control Plan recommendations.

Impact on Operations:

The station's rated capacity of 45 mgd has been restored by replacing the pump impellers. This meets the Earth Justice Consent Decree requirement. The rehabilitation project will provide an improved ventilation system and a new odor control system, improve the station lighting, eliminate manual screenings handling by providing washers, compactors and dumpsters for the screenings and improve the station reliability by replacing many of the support systems. It will also repair structural defects and improve the appearance of the station exterior. There will be no material impact on operating costs.

Effective Funding by User (percent):

DC -	95.64%	
EPA/Fed -	4.36%	
WSSC -	0.00%	
Fairfax -	0.00%	
Loudoun/PI -	0.00%	



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

et	9,751,001
et	9,751,001
et:	0

Disbursements Budget	Pre FY 2011 2.534	FY 2011 1.639	FY 2012 2,280	FY 2013 474	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Commitments Budget	Pre FY 2011 5,818	, -	,		FY 2014 0	FY 2015 0	FY 2016	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

K5 - Dry-Weather Overflow Elimination / Nine Minimium Controls

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Dec 2000
Construction:	Mar 2000

Project

Completion: Apr 2012

Project Description:

Under this project, engineering and design for the rehabilitation of the CSO overflow structures to eliminate dry weather overflow has been completed. Construction has been initiated at these locations. As a separate activity, the combined sewer system area served by outfall 006 will be separated into two separate systems for the collection of sanitary and storm sewage flow separately. This will result in the elimination of the outfall and resultant CSOs. In addition, this project includes the inspection of the Anacostia River siphons in Year 2010. The siphons are scheduled for inspection every 10 years to ensure their reliability and to evaluate their condition.

Impact on Operations:

When the CSO structures are rehabilitated, there will be an increase in the efficiency of operation and maintenance tasks related to these structures that will result in a cost reduction. However, some additional workload will be required to operate and maintain the trash collection facilities at the separated stormwater outfalls resulting in no net reduction to operational costs.

Effective Funding by User (percent):

DC -	63.43%	
EPA/Fed -	36.57%	
WSSC -	0.00%	UC
Fairfax -	0.00%	water is life
Loudoun/PI -	0.00%	

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

0

12.128.271 12,128,271

Disbursements	Pre FY 2011
Budget	10,040
Commitments	Pre FY 2011
Budget	12,028

FY 2011	FY 2012
552	65
FY 2011	FY 2012

0 0 0

FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 n 0

Post FY 2019

Post FY 2019

(projected disbursements do not include contingencies)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title CI - O Street - Facility Projects

Managing Department:

Facilities and Security

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

Project Description:

This project will rehab and upgrade various facilities and apparatus within the "O" street compound. This is a separate project from the rehabilitation of the Main & O Street Pumping Stations and will be managed by Facilities and DMS.

Impact on Operations:

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

DC -100.00% 0.00% EPA/Fed -

(projected disbursements do not include contingencies)

Effective Funding by User (percent):

WSSC -0.00% 0.00% Fairfax -

Loudoun/PI -0.00%

dc	1
water is life	

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

et	1,396,891
et	1,396,891
et:	0

Start Date

Jul 2008

Oct 2010

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	613	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,397	0	0	0	0	0	0	0	0	0	0
(projected disbursements do not include contingencies) (dollars in thousand										rs in thousands)	

2 Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program Combined Sewer Overflow Service Area Title: Phase Start Date **Program Title:** Combined Sewer Projects Design: Construction: DB - Sewer Services Field Facility & Relocation **Activity Group/Project Title Engineering and Technical Services EPMC**: EPMC3 Managing Department: **Project**

Completion:

Mar 2008

Project Description:

Priority:

This project was to address the new stadium projects in the vicinity of Main and "O", and the renovations attendant thereto. Both Long-term and short-term alternate locations for Fleet (and vehicle storage) and Sewer Services' staff must be addressed, as well as the security of the remaining pump station, as well as the large sewer main that traverses the property. We expect to be fully reimbursed by the District, through the Anacostia Waterfront Development Corporation (AWDC) for all related costs, and expect no impact on DC Water rate-payers. This work, and its budget was transferred to 'Land Use Facility Plan' projects under the Sanitary Sewer service area.

Board Policy, DC Water's commitment to outside agencies

Impact on Operations:

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

Effective Funding by User (percent): DC -100.00% FY2010 Approved Life Budget 39,509,505 EPA/Fed -0.00% FY2011 Revised/FY2012 Approved Life Budget 446, 197 0.00% WSSC -Increase/(Decrease) to Approved Life Budget: -39,063,308 water is life Fairfax -0.00% 0.00% Loudoun/PI -CLOSED **Disbursements** Pre FY 2011 **Post FY 2019** FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Budget** 0 0 O Ω n 0 0 446 0 Commitments Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Budget 446 0 0 0 0 0 0 0 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program Combined Sewer Overflow Service Area Title: **Start Date** Phase **Combined Sewer Projects Program Title:** Design: Construction: DD - Main & O Pump Sta. Development Effort **Activity Group/Project Title Managing Department: EPMC**: EPMC3 Project Mar 2011

Completion:

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Description:

This project is for preliminary efforts needed to address the new stadium projects in the vicinity of Main and "O", and the renovations attendant thereto. The budget and project scope have been transferred to 'Land Use Facility Plan' projects under the Sanitary Sewer service area.

Impact on Operations:

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

Effective Fund	ing by User (perce	ent):									
DC -	100.00%					FY2	010 Appre	oved Life	Budget F		2,000,000
EPA/Fed -	0.00%	25			FY2011 Re				` =		790,570
WSSC -	0.00%										
Fairfax -	0.00%	Wa	ater is	life	Increase/(Decrease) to Appro	oved Life I	Budget: [-1,209,430
Loudoun/PI -	0.00%			-							
Disbursement	s <u>Pre FY 2011</u>	FY 2011	FY 2012	FY 2013	3 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	628	85	0	(0 - 0	0	0	. 0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	3 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	791	0	0	(0 0	0	0	0	0	0	0
(projected disburs	sements do not include	e contingenci	es)							(dolla	rs in thousands)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program Combined Sewer Overflow Service Area Title: **Start Date** Phase **Combined Sewer Projects** Design: **Program Title:** Construction: DS - New DC Water Headquarters **Activity Group/Project Title Managing Department: EPMC**: EPMC3 **Project**

Completion:

Feb 2011

Good Engineering, Low, M&F over long term

Project Description:

Priority:

This project was for the planning and feasibility study for a proposed new DC Water Headquarters building. However, since the implementation of the Land Use Facility plan, the remaining budget has been transferred to Land Use Facility Plan efforts.

Impact on Operations:

Effective Fundi	ng by User (perce	ent):									
DC -	100.00%					FY2	010 Appro	oved Life I	Budget		2,000,000
EPA/Fed -	0.00%				Y2011 Rev						460,000
WSSC -	0.00%						• • •		· -		
Fairfax -	0.00%	wa	iter is	lite	Increase/(Decrease) to Appro	ved Lite i	Buaget: L		-1,540,000
Loudoun/PI -	0.00%			_							
Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	183	119	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	460	0	0	0	0	0	0	0	0	0	0
(projected disburs	ements do not include	e contingencie	es)							(dolla	rs in thousands)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title EJ - Potomac Pumping Station - Phase III

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Phase

Design:

Construction:

Jun 2015

Start Date

Oct 2009 Aug 2012

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):

DC -46.49% EPA/Fed -3.22% WSSC -26.01% Fairfax -15.80% Loudoun/PI -8.48% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

14,491,000 14,491,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	543	717	2,771	4,684	1,709	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	853	1,296	11,820	390	132	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

EK - Long Term Rehabilitation Main & O Pump Stations

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

Project Completion: Jan 2023

Start Date

Jun 2016

Aug 2019

Phase

Design:

Construction:

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 as necessary, all six storm pumps, motors and controls as necessary, 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).

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



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

et	72,444,000
et	72,444,000
et:	0

Disbursements	Pre FY 2011	<u>F</u>
Budget	0	
Commitments	Pre FY 2011	E
Budget	0	

Y 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	
0	0	0	0	0	602	2,781	
Y 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	
		<u> </u>			<u> </u>	1 1 2017	

0	602	2,781
<u> 2015</u>	FY 2016	FY 2017
0	11,533	0

1 2010	<u> </u>
2,748	2,88
Y 2018	FY 20

60,391

Post FY 2019 56.365 **Post FY 2019**

(projected disbursements do not include contingencies)

(dollars in thousands)

520

2 Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title EL - Swirl Facility Rehabilitation

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Aug 2014

Start Date

Nov 2008

Oct 2011

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:

This project will decrease maintenance costs by generally improving the condition of the facility. Installing correctly sized pumps for the current capacity, thus decreasing the flooding of the station and the related cleanup costs, as well as preventing water getting into the switch gear and shorting out, which will also improve overall reliability and effectiveness of the station.

Effective Funding by User (percent):

DC -	98.40%
EPA/Fed -	1.60%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

jet 🗀	4,495,000
jet 📙	4,495,000
et:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	87	290	1,434	1,070	152	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	644	525	3,096	230	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

EQ - Potomac Pump Station Rehab - Phase IV

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

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 -100.00% 0.00% EPA/Fed -WSSC -0.00% 0.00% Fairfax -

Loudoun/PI -

0.00%

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

7,515,000 7.515.000

Disbursements Budget	Pre FY 2011
Commitments	Pre FY 2011
Budget	0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0 0

1.085

140

650 5.550

Phase

Design:

Project Completion:

Construction:

3,571 230

794

Post FY 2019 0

Post FY 2019

582

(dollars in thousands)

Start Date

Jun 2016

Nov 2017

May 2019

(projected disbursements do not include contingencies)

Service Area Title:

Combined Sewer Overflow

Program Title:

Priority:

Combined Sewer Projects

Activity Group/Project Title

FQ - Main & O St PS Intermediate Upgrade

Managing Department:

Engineering and Technical Services

Potential Failure/Ability to continue meeting permit requirement

Pnase	Start Date	
Design:	Nov 2010	
Construction:	Jun 2010	
Project		

Ctart Date

Dhana

Oct 2014 Completion:

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. In Main, 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 the 48" Butterfly Valve 16 on the discharge side of Pump No. 4 with a plug valve, remove and plug the 30" Butterfly Valve 17 on the overflow to the river, and replace the 66" Sluice Gate 9 on the suction side of Pump No. 1. It replaces the discharge flap gates on all six storm pumps. In 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.

Impact on Operations:

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

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



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budget:

jet	17,345,000
jet	17,345,000
ot:	0

Disbursements	Pre FY 2011
Budget	90
Commitments	Pre FY 2011
Budget	100

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
1,087	541	4,706	5,470	51	0	0	0	0
FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
2,388	14,557	300	0	0	0	0	0	0

EPMC: EPMC3

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

FX - Rehab Northeast Boundary Sewer-PH 1

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Dec 2016

Start Date

Dec 2012

May 2014

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%

water is life

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

t 18,500,000 t 18,500,000

Loudoun/PI -

0.00%

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 631	FY 2014 968	FY 2015 6,145	FY 2016 4,752	FY 2017 483	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 0	FY 2011	FY 2012 0	FY 2013 1,234	FY 2014 17,266	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

FZ - Tiber Creek Sewer Lining -Ph 1

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Construction:

Phase

Design:

Dec 2017

Start Date

Nov 2013

May 2015

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%

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

16,500,000 16,500,000 1 0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY_2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	622	836	5,449	4,207	431	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	1,101	15,399	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

G7 - Combined Sewers Under Buildings

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Mar 2009
Construction:	Sep 2010

Project

Oct 2016 Completion:

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. New projects have been created to continue this work in phases, with associated budget transfers from G7 to the new projects.

Impact on Operations:

Commitments

Budget

There will be no significant impacts on operational costs.

Effective Funding by User (percent): DC -100.00% **FY2010 Approved Life Budget** 67,080,000 0.00% EPA/Fed -FY2011 Revised/FY2012 Approved Life Budget 19,780,000 WSSC -0.00% Increase/(Decrease) to Approved Life Budget: -47,300,000 water is life Fairfax -0.00% Loudoun/PI -0.00% Post FY 2019 Disbursements Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Budget O 3.594 1.983 17 163 1.699 2.223 889 2.420 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

6,094

0

0

0

0

(projected disbursements do not include contingencies)

Pre FY 2011

7.000

137

280

6,269

(dollars in thousands)

0

Post FY 2019

1 Note: Under the terms of the IMA, the capital costs associated with each joint use facility are to be split among the users in proportion to the peak flow each user is allocated. It is not possible, at this time, to allocate costs by individual facility. It is anticipated that as projects are developed for work associated with specific facilities and costs are developed, the individual users will be notified and billed according to approved cost sharing agreements.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

IH - Combined Sewer Rehabilitation 2

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Construction:

Phase

Design:

Oct 2019

Start Date

Mar 2014 Sep 2015

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 2009 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:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

27,600,000 27,600,000

Loudoun/PI -

0.00%

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	227	507	3,473	6,028	6,035	2,952	32
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	594	8,920	9,220	8,866	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

IJ - Combined Sewer Rehabilitation 3

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Oct 2022

Start Date

Mar 2017

Sep 2018

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 2009 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:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

t 🗀	0
t 🗀	30,000,000
t:	30,000,000

NEW Loudoun/PI -0.00%

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017			Post FY 2019
Budget Commitments	0 Pre FY 2011	0 FY 2011	0 FY 2012	0 FY 2013	0 FY 2014	0 FY 2015	0 FY 2016	249 FY 2017	559 FY 2018	3,838 FY 2019	21,839 Post FY 2019
Budget	0	0	0	0	0	0	0	647	9,720	10,018	9,615

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Combined Sewer Overflow

Program Title:

Combined Sewer Projects

Activity Group/Project Title

IP - Tiber Creek Trunk Sewer Rehabilitation

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

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:

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	0
et	8,250,000
et:	8,250,000

NEW

Phase

Design:

Project Completion:

Construction:

doun/PI - 0.00%

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014					FY 2019	Post FY 2019
Budget	0	0	0	0	295	819	3,382	1,101	60	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013			FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	835	7,415	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2014

Apr 2015

Dec 2017

Service Area Title:

Combined Sewer Overflow

Program Title:

DC Clean Rivers Project

Activity Group/Project Title

CY - CSO LTCP Anacostia Projects

Managing Department:

Engineering and Technical Services

Priority:

Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	Start Date
Design:	Apr 2009
Construction:	Feb 2010

Project

Completion: Dec 2025

Project Description:

The purpose of this project is to capture and provide storage for combined sewer overflows (CSOs) being discharged to the Anacostia River. The project comprises construction of approximately 8 miles of tunnels with a volume of about 126 million gallons. Two basic tunnels will be constructed; one extending from Poplar Point to the area of RFK Stadium with the second running from the stadium area, then along Florida Avenue to about 8th Street NW. Construction also includes two side tunnels off the northerly side of the Florida Avenue tunnel for flood control, consolidation of 3 existing CSO outfalls in the Navy Yard area, a pumping station at Poplar Point to dewater the tunnels to the existing collection system for treatment of the stored CSO at Blue Plains, an intercepting sewer along the east side of the Anacostia River to capture overflows from two CSO outfalls and convey them to the tunnels and various diversion structures to convey combined sewer flow to the tunnels. When completed, this project together with CSO control projects already completed or underway are expected to reduce CSOs to the Anacostia River by about 98 percent.

EPMC: EPMC5

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):

DC -	92.23%
EPA/Fed -	2.76%
WSSC -	3.91%
Fairfax -	0.71%
Loudoun/PI -	0.39%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

1,673,325,016
1,672,282,016
-1,043,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	50,530	42,751	79,579	116,188	100,501	127,541	148,478	143,022	56,721	56,071	485,990
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	90,187	266,142	87,415	89,874	369,276	75,247	101,742	4,587	192,980	116,865	277,966

(projected disbursements do not include contingencies)

Service Area Title:

Combined Sewer Overflow

Program Title:

DC Clean Rivers Project

Activity Group/Project Title

CZ - CSO LTCP Potomac Projects

Managing Department:

Engineering and Technical Services

EPMC: EPMC5

Priority:

Court Ordered, Stipulated Agreements, Etc.

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. When completed, this project, together with CSO control projects already completed, or underway, are expected to reduce CSOs to the Potomac River by about 93 percent.

Impact on Operations:

The project will result in increased operations and maintenance costs related to the tunnel, pumping station 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):

DC -93.24% EPA/Fed -0.16% WSSC -5.15% Fairfax -0.94% Loudoun/PI -0.51%



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budg

get	418,700,000
get	418,700,000
jet:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	424	753	547	0	0	1,618	5,385	5,500	9,207	12,711	352,441
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
					1 20 1 1	1 1 2010	I I LOTO	<u> </u>	<u> </u>		1 0011 1 2010
Budget	837	1,461	0	0	0	20,935	0	0	56,801	0	338,666

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Mar 2018

Mar 2021

Dec 2025

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Combined Sewer Overflow

Program Title:

DC Clean Rivers Project

Activity Group/Project Title

DZ - CSO LTCP Rock Creek Projects / Nine Minimium Controls

Managing Department:

Engineering and Technical Services

EPMC: EPMC5

Priority:

Court Ordered, Stipulated Agreements, Etc.

Project Completion:

Phase

Design:

Construction:

Dec 2025

Start Date

Mar 2019

Mar 2022

Project Description:

The purpose of this project is to capture and provide storage for combined sewer overflows (CSOs) being discharged to Piney Branch, a tributary to Rock Creek. The project comprises construction of a tunnel approximately 1 mile long, with a volume of about 9.5 million gallons, above the banks of Rock Creek. Construction also includes a pipeline and control structure to convey stored CSO to the existing collection system for treatment at Blue Plains and diversion structures to convey CSO to the tunnel. When completed, this project, together with CSO control projects already completed, or underway, are expected to reduce CSOs to Rock Creek by about 90 percent

Impact on Operations:

The project will result in increased operations and maintenance costs related to the tunnel, pipeline and 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):

DC - 99.53%
EPA/Fed - 0.41%
WSSC - 0.05%
Fairfax - 0.01%
Loudoun/PI - 0.00%

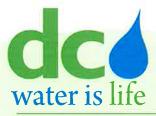
dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

70,341,600 et 70,341,600

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	178	430	316	0	* 0	0	243	811	838	1,486	59,856
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	352	615	0	0	0	0	3,517	0	0	10,551	55,306

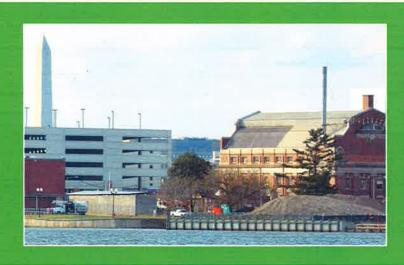
(projected disbursements do not include contingencies)



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2010-2019







SECTION VI

Stormwater Service Area



STORMWATER

Over 34 miles of rivers and streams in and around the District of Columbia do not support swimming and aquatic life. Stormwater runoff from separated and combined sewers is the primary source of pathogens that cause impairments to the District's local waterways. The District's stormwater system includes both separate and combined sewers, has approximately 600 miles of storm sewer pipes, catch basins, inlets, special structures and related facilities. Some components of the existing storm sewer system are over 100 years old. The system is constructed of a variety of materials such as ductile iron, plastic, steel, brick, cast iron, cast-in place concrete, brick and concrete, vitrified clay, and concrete. DC Water is responsible for the maintenance and replacement of certain public facilities that convey stormwater runoff to the Anacostia and Potomac Rivers, Rock Creek, and other receiving streams within certain areas of the District of Columbia, specifically the areas of the District served by combined sewers.

In other locations, those served by separate storm sewers, the tasks are shared by several agencies, with the District of Columbia's Department of the Environment (DDOE) having central responsibility for managing the work. The District is required to meet certain regulatory requirements in managing its separate stormwater system under the District's MS4 permit issued by the federal government. Since 2007, DDOE has been responsible for the separate storm water system and compliance with the Clean Water Act as the stormwater administrator. Among other things, DDOE coordinates the stormwater management (MS4) task force, making recommendations regarding stormwater priorities, goals and recommendations on the adequacy of funding mechanisms for stormwater management activities. In November 2007, DDOE negotiated a revised permit with several best practice enhancements, with some having measurable and quantifiable milestones.

While DC Water has a long term control plan to address these issues within the combined sewer areas, DC Water's staff continues to participate in the MS4 task force, and to monitor the impact of other MS4 NPDES requirements on DC Water and its ratepayers. Significant progress has been made throughout the District. Since 2001, DC Water collected the MS4 stormwater fees on behalf of the District and acted as stormwater administrator until the creation of DDOE and the transfer of duties in early 2007. DC Water continues to collect those fees on behalf of the District and transfers them to DDOE quarterly. Most recently, a Memorandum of Understanding and continued dialogue among task force members resulted in a better definition of roles, responsibilities and funding sources for the activities required to enhance stormwater management. Discussion of other matters, such as the turnover of stormwater pumping facility maintenance continues.

DC Water's lifetime budget for the Stormwater Service Area is \$62 million. Projects include rehabilitation or replacement of certain storm sewer systems that have experienced structural deterioration, studies and analysis. DC Water has continued to support stormwater management in the District of Columbia through catch basin cleaning in the combined sewer area (per our Blue Plains NPDES permit and an important component of storm water pollution control efforts) and through coordination of cleaning activities throughout the District (along with DC Public Works) as a member of the taskforce and an agency that values the design and implementation of environmentally responsible policies and programs. As new technologies for water quality, catch basin and best management practices become available and are installed by DC Department of Transportation, DC Water has pledged to support

stormwater efforts through expeditious review and approval, as appropriate, of proposals and providing catch basin cleaning and maintenance of new technologies utilizing available funding under the MS4 program. In addition, DDOE has, from time to time, identified areas within the District that may require additional study of stormwater impact. DC Water has the expertise available to support this research as required to enable evaluation of alternatives and best practices for future decision making.

Local Drainage Projects - \$18 million

(project pages VI-5 to VI-8)

This category includes several projects to relieve local flooding and to address short term needs for improvements to storm sewers located in the separate and combined sewer areas. A significant project to highlight is the sewer lining for the Northwest Boundary Sewer Overflow (NWBSO) at 22nd & P Streets, NW (Job A601), which will correct a drainage and flooding problem. Complication with access permits resulted in a delay of construction advertisement. The design was completed in FY 2008 with construction delayed until FY 2011.

On-Going Stormwater Projects – \$9. 7 million

(project pages VI-9 to VI-24)

These include projects carried out by DC Water's Department of Sewer Services, including storm sewer rehabilitation and extensions to serve new development.

Pumping Facilities - \$0.0 million

As in last year's budget, we have not included funding for stormwater pumping rehabilitation projects. We have been engaged in extensive discussions with the District over the last few years regarding how responsibilities for a variety of stormwater-related functions are divided among District agencies, including responsibility for stormwater pumping stations. To date, turn over of these activities to others is still anticipated.

DDOT Storm Projects – \$5.1 million

(project pages VI-25 to VI-42)

This program funds projects associated with DDOT road projects, which often require relocation of storm sewers, inlets or other structures.

Stormwater Research and Program Management - \$10.6 million

(project pages VI-43 to VI-43)

This area provides for required technical assessments and hydraulic studies required to assess problems in the storm water system. For example, a comprehensive study of the Palisades Stormwater neighborhood flooding problems was completed in FY 2008 and a study of the Federal Triangle area, requested by various federal agencies, is ongoing. These investigations are anticipated to be reimbursed through the MS4 fees and thus have no impact upon the rate payers; however, the budget is included within this program

area. This also funds program management costs associated with studies and designs of DC Water facilities that may involve review of stormwater facilities.

Trunk/Force Sewers - \$18.6 million

(project pages VI-44 to VI-44)

This program includes funds for major maintenance of the storm water piping system as well as funding for two capital projects that were previously undertaken.

- Henson Ridge Relief Sewer Job BO01 The project involves the installation of a relief sewer for the Henson Ridge neighborhood in the SE quadrant of the District to relieve flooding on Mississippi Avenue. Construction has started and the project is anticipated to be completed in 2011.
- Park Drive Storm Outfall Rehabilitation Job BO06 The budget includes reconstruction of a stormwater outfall to a stream on National Park Service property at the end of 32nd Street, SE, near Park Drive. The outfall will include an energy dissipater and stabilization of the stream bank in the immediate vicinity of the outfall to prevent erosion of the outfall. Construction is anticipated to begin in FY 2011.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater Local Drainage

Activity Group/Project Title

A6 - Lining, 22nd & Psts., NW

Managing Department:

Engineering and Technical Services

. EPMC: EPMC3

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Construction:

Phase

Design:

Jul 2013

Start Date

Oct 2004

Oct 2011

Project Description:

This projects 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:

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% 0.00% Fairfax -

Loudoun/PI -

water is life 0.00%

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

0

et [3,019,246
et [3,019,246
et: 🔽	0

0

Disbursements Pre FY 2011 **Budget** 240 Commitments Pre FY 2011 **Budget** 526

10 0

86 27 2,493 0

0 0 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0

0

0

Post FY 2019 0

Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater Local Drainage

Activity Group/Project Title GY - Storm Rehab @ Various Locations

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

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:

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

Effective Funding by User (percent):

DC -100.00% EPA/Fed -0.00% 0.00% WSSC -

0.00% Fairfax -

0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

12,780,000 6,580,000 -6,200,000

Start Date Jun 2011

Jan 2012

Aug 2018

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011 0	FY 2011	FY 2012 6	FY 2013 21	FY 2014 42	FY 2015 63	FY 2016 76	FY 2017 70	FY 2018 24	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 0	FY 2011 30	FY 2012 465	FY 2013 930	FY 2014 1,390	FY 2015 1,905	FY 2016 1,860	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater Local Drainage

Activity Group/Project Title ID - Storm Sewer Rehabilitation 2

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

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:

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

Effective Funding by User (percent):

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

Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

6,200,000 6,200,000

Phase

Design:

Proiect Completion:

Construction:

NEW

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 6	FY 2017 21	FY 2018 71	FY 2019 91	Post FY 2019 1,949
Commitments Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 140	FY 2017 2,010	FY 2018 2,100	FY 2019 1,950	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Jun 2016

Jan 2017

Aug 2021

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater Local Drainage

Activity Group/Project Title IE - Storm Sewer Rehabilitation 3

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

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:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et 🗀	0
et 🗀	2,200,000
t:	2,200,000

Start Date

Jun 2019

Jan 2020

Aug 2022

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	0	7	1,840
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	0	155	2,045

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title C1 - FY2001 - DSS Storm Sewer Project

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2001 for storm water 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%

0.00% Loudoun/PI -

dc	ı
water is life	

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et 🗀	247,000
et 🗀	247,000
t:	0

Start Date

Sep 2002

Nov 2010

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	169	4	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	247	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

C4 - FY2004- DSS Storm Sewer Project

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Mty. Good Engineering, Flight pay back, Mission / Function

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2004 for storm water 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/Pl - 0.00%



FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

et	497,000
et	497,000
et:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	416	23	8	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	416	81	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2004

Dec 2011

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title C6 - FY2006- DSS Storm Sewer Project

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2006 for storm water 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% 0.00% WSSC -0.00% Fairfax -0.00% Loudoun/PI -



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et	497,000
et 🗀	497,000
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	371	46	16	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	416	81	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2007

Dec 2011

Phase Design:

Project Completion:

Construction:

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

C7 - FY2007- DSS Storm Sewer Project

Managing Department:

Sewer Services

EPMC: EPMC3

Phase

Design:

Project Completion:

Construction:

Start Date

Dec 2010

Dec 2011

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2007 for storm water 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% FY2010 Approved Life Budget 497,000 0.00% EPA/Fed -FY2011 Revised/FY2012 Approved Life Budget 497,000 WSSC -0.00% Increase/(Decrease) to Approved Life Budget: water is life 0.00% Fairfax -Loudoun/PI -0.00% FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Disbursements Pre FY 2011 Budget 6 344 78 0 0 Commitments FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Pre FY 2011 **Post FY 2019** Budget 6 0 0 0 0 0 491 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

² Note: Facilities are not listed as Joint Use. However, flow analysis indicates that a portion of flow through facility originates outside of the District. Flow analysis, and resulting cost allocations, are under review by users.

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

C8 - FY2008 - DSS Storm Sewer Project

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2008 for storm water 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% 0.00% WSSC -Fairfax -0.00% Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

0

497,000
497,000

0

0

Start Date

Jun 2008

Dec 2011

Budget Commitments Budget

Disbursements

419 Pre FY 2011 419

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Pre FY 2011

51

78

17 0

0 0

0

0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

0

n

Phase

Design:

Project Completion:

Construction:

Post FY 2019 0 **Post FY 2019**

0

(projected disbursements do not include contingencies)

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title AO - FY2009 - DSS Storm Sewer Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2009 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system.

Impact on Operations:

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

Effective Funding by User (percent):

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

0

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

	497,000
	497,000
: 🗀	0

Start Date

Sep 2009

Nov 2011

Phase

Design:

Project Completion:

Construction:

Disbursements Budget Commitments

Budget

214 Pre FY 2011 421

Pre FY 2011

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 75 111

76

31 0 18 0 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

0

0 0

0

0

Post FY 2019 0 **Post FY 2019**

0

(projected disbursements do not include contingencies)

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title AN - FY2010 - DSS Storm Sewer Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2010 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the 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% water is life

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et	600,000
et	600,000
t:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	500	58	18	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	500	100	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2010

Jan 2012

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

BD - FY2011 - DSS Storm Sewer Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2011 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the 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%

dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	618,000
jet	618,000
et:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	205	263	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	618	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2012

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

CD - FY2012 - DSS Storm Water Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2011 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

637,000 637,000

Budget Commitments Budget

Disbursements

0 Pre FY 2011 0

Pre FY 2011

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

211 252 637 0

0

0 0

0

0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

Phase

Design:

Project

Construction:

Completion:

Post FY 2019

0

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2012

Jun 2013

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

CN - FY2013 - DSS Stormwater Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2013 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the 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% 0.00%

Fairfax -Loudoun/PI -

0.00%

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012			FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	202	263	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	660	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2013

Jun 2014

660,000

660,000

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

D7 - FY2014 - DSS Stormwater Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2014 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the 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%

dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	680,000
et	680,000
t:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	212	275	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	680	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2014

Jun 2015

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title DJ - FY2015 - DSS Stormwater Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2015 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the 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% 0.00% EPA/Fed -WSSC -0.00% 0.00% Fairfax -0.00% Loudoun/PI -



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et	701,000
et	701,000
t:	0

Start Date

Mar 2015

Jun 2016

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	219	281	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	701	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

DX - FY2016 - DSS Stormwater Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2016 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. Job numbers will be issued to identify the 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%



FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

et	720,000
et	720,000
t:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	294	223	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	720	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2016

May 2017

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

FN - FY2017 DSS Stormwater Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2017 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

No significant O&M cost impact.

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t 745,000 t 745,000 t: 0

Phase

Design:

Project Completion:

Construction:

Disbursements Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Budget** 0 0 0 0 0 0 301 232 Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Commitments Budget 0 0 0 0 0 0 0 745 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

0

Start Date

Feb 2017

May 2018

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

H5 - FY2018 - DSS Stormwater Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2018 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the location of projects issued to identify the location of projects.

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% water is life

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

et	770,000
et	770,000
t:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	309	245	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	770	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2018

May 2019

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater On-Going

Activity Group/Project Title

HM - FY2019 - DSS Stormwater Projects

Managing Department:

Sewer Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2019 for stormwater infrastructure improvements. 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

jet	0
jet	795,000
et: [795,000

NEW

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 316	Post FY 2019 297
Commitments Budget	Pre FY 2011	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 795	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2019

May 2020

Phase

Design:

Project Completion:

Construction:

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

P1 - FY2000 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion: Jul 2011

Phase

Design:

Project

Construction:

Start Date

Project Description:

This project was created as an annual program for planned District of Columbia Department of Transportation projects in FY2000 for stormwater 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% 0.00% EPA/Fed -WSSC -0.00% Fairfax -0.00% 0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

755,198 755,198

0

Disbursements Pre FY 2011 Budget 408 Commitments Pre FY 2011 Budget 500

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 4 0 255 0 0

0 0 n FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0 0

Post FY 2019 Post FY 2019 0

(projected disbursements do not include contingencies)

(dollars in thousands)

0

0

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

P2 - FY2001 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Description:

This project was created as an annual program for planned projects by the District of Columbia Department of Transportation in FY2001 for stormwater 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	713,955
jet	713,955
et:	0

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011 600	FY 2011 5	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 714	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2011

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

P3 - FY2002 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion:

Construction:

Phase Design:

Project

tion: Aug 2011

Start Date

Project Description:

This project was created as an annual program for planned projects by the Department of Transportation in FY2002 for stormwater 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 🗀	184,672
et 🗀	184,672
t: 🗀	0

Disbursements Budget	Pre FY 2011 116	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 185	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

P4 - FY2003 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion:

Construction:

Phase

Design:

Sep 2011

Start Date

Project Description:

This project was created as an annual program for planned projects by the Department of Transportation in FY2003 for stormwater 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%

dc water is life

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

175,000 175,000 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Disbursements Pre FY 2011 **Budget** 0 8 0 0 0 0 Commitments Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Budget 0 175 0 0 0 0 0 0 0 0 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

P5 - FY2004 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion: Sep 2011

Start Date

Phase

Design:

Construction:

Project Description:

This project was created as an annual program for planned projects by the Department of Transportation in FY2004 for stormwater 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% 0.00% WSSC -Fairfax -0.00% 0.00% Loudoun/PI -



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

S	
et	20,000
et 🗀	20,000
t:	0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019 Disbursements** Pre FY 2011 Budget 0 Ω 0 0 0 0 1 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Commitments Pre FY 2011 **Budget** 0 0 0 0 0 0 0 0 20 0 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

P8 - FY2007 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion: Sep 2011

Start Date

Phase

Design:

Project

Construction:

Project Description:

This project was created as an annual program for planned projects by the Department of Transportation in FY2007 for stormwater 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%

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

-	
et	155,000
et	155,000
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	. 0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	155	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

P9 - FY2008 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Description:

This project was created as an annual program for planned projects by the Department of Transportation in FY2008 for stormwater 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

jet	1,000,000
get	1,000,000
et:	0

Phase

Design:

Project Completion:

Construction:

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Disbursements Pre FY 2011 Post FY 2019 Budget** 7 0 n 0 O 0 0 n Commitments FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Pre FY 2011 Budget 0 0 0 0 0 0 1,000 0 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2011

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

AR - FY2009 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion:

Construction:

Phase

Design:

letion: Sep 2011

Start Date

Project Description:

This project is for the FY2009 annual program of stormwater infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District of Columbia Department of Transportation. This project is needed to minimizes public inconvenience caused by construction work and to save DC Water the paving cost. Job numbers will be issued to identify the 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%

water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	160,000
et	160,000
et:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	8	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	160	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

B3 - FY2010 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion: Sep 2012

Phase

Design:

Project

Construction:

Start Date

Project Description:

This project is for the FY2010 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the 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% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

165,000 165,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	1	8	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	165	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

BM - FY2011 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Description:

This project is for the FY2011 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget:

0

0

ŧ	170,000
t	170,000

0

Commitments **Budget**

Disbursements

Budget

0 Pre FY 2011 0

Pre FY 2011

0 0 170

0 0

8

0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

0

0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

Phase

Design:

Project

Construction:

Completion:

Post FY 2019 0

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2013

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

CB - FY2012 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion: Sep 2014

Start Date

Phase

Design:

Construction:

Project Description:

This project is for the FY2012 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 175,000 et 175,000 et: 0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	1	8	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	175	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

CL - FY2013 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion: Sep 2015

Start Date

Phase

Design:

Project

Construction:

Project Description:

This project is for the FY2013 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the storm water system. This project is needed to replace aged infrastructure to restore integrity and reliability of the storm sewer system. Job numbers will be issued to identify the 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%



FY2010 Approved Life Budget	
FY2011 Revised/FY2012 Approved Life Budget	
Increase/(Decrease) to Approved Life Budget:	Γ

jet 🗌	180,000
jet 🗌	180,000
et:	0

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 1	FY 2015 8	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 0	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 180	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

D8 - FY2014 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion:

Phase

Design:

Proiect

Construction:

Sep 2016

Start Date

Project Description:

This project is for the FY2014 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the storm water system. This project is needed to replace aged infrastructure to restore integrity and reliability of the storm sewer system. Job numbers will be issued to identify the 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et [185,000
jet [185,000
et: 🛚	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	1	9	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	185	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

DK - FY2015 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion: Sep 2015

Start Date

Phase

Design:

Project

Construction:

Project Description:

This project is for the FY2015 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the storm water system. This project is needed to replace aged infrastructure to restore integrity and reliability of the storm sewer system. Job numbers will be issued to identify the 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/Pl - 0.00%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	191,000
jet	191,000
et:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	10	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	191	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

DT - FY2016 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion: Sep 2016

Start Date

Phase

Design:

Construction:

Project Description:

This project is for the FY2016 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 🗀	196,000
et	196,000
et:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	9	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	196	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

FM - FY2017 DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: EPMC3

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion: Sep 2017

Phase

Design:

Construction:

Start Date

Project Description:

This project is for the FY2017 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the storm water system.

Impact on Operations:

No significant O&M cost impact.

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

et	205,000
et	205,000
t:	0

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 9	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 0	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 205	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Stormwater Service Area

Program Title:

DDOT Stormwater

Activity Group/Project Title

H4 - FY2018 - DDOT Stormwater Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion: Sep 2018

Start Date

Phase

Design:

Project

Construction:

Project Description:

This project is for the FY2018 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the stormwater system.

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%

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t 215,000 t 215,000

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 0	FY 2011	FY 2012	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 215	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Activity Group/Project Title HP - FY2019 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation EPMC: EPMC3

Priority: Board Policy, DC Water's commitment to outside agencies

Project Description:

This project was created as an annual program for planned projects by the District of Columbia Department of Transportation in FY 2019 for stormwater infrastructure improvements where stormwater systems will need to be modified. 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

0
220,000
220,000

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016	FY 2017 0	FY 2018 0	FY 2019 10	Post FY 2019
Commitments Budget	Pre FY 2011	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 220	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2019

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater Research & Program Mgmt

Activity Group/Project Title

AT - Stormwater Program Management

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, High pay back, Mission / Function

Completion:

Phase

Design:

Project

Construction:

Sep 2021

Start Date

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:

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

Effective Funding by User (percent):

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

Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

10,630,190 10,630,190

Disbursements Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Budget 5.813 1.157 266 201 243 195 165 172 234 285 550 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Commitments Pre FY 2011 **Post FY 2019** Budget 1,927 0 0 1,600 0 0 0 7,103 0

(projected disbursements do not include contingencies)

(dollars in thousands)

0

Service Area Title:

Stormwater Service Area

Program Title:

Stormwater Trunk/Force Sewers

Activity Group/Project Title BO - Future Stormwater Projects

Managing Department:

Engineering and Technical Services

EPMC: EPMC3

Priority:

Good Engineering, Low, M&F over long term

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:

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

Effective Funding by User (percent):

DC -	97.06%
EPA/Fed -	2.94%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

et	18,605,000
et 🗀	18,605,000
et:	0

Phase

Design:

Project

Construction:

Completion:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,002	1,446	2,974	3,603	1,987	47	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6,043	428	7,531	2,634	1,970	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2006 Oct 2009

Jan 2015



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2010-2019







Water System Service Area

dcwater.com

WATER

Projects in the Water Service Area are designed to maintain safe, adequate and reliable potable water supply to customers and for fire protection. Categories of projects include the rehabilitation and replacement of water mains, storage facilities, and pumping stations. This area also includes water service connection and meter replacements.

The water distribution system includes appurtenances necessary for proper system operation, inspection, and repair. DC Water's system includes approximately 1,300 miles of pipe and over 36,000 valves of various sizes. A variety of valve types allow flow control, prevent air entrapment, allow watermain draining, permit flow in only one direction, and allow water transfer between service areas during emergencies. The system also includes approximately 9,000 hydrants in public space for water main system operational requirements and to support DC Fire and Emergency Services.

The lifetime budget for the Water Service Area is approximately \$1.4 billion, which is \$197.3 million higher than last year's CIP, primarily due to the continuing ramp-up through 2014/2015 and implementation of the recommendations in the Water System Facility Plan. Major water projects include construction of new storage facilities; water main replacements, rehabilitations and extensions; fire hydrant replacements; and valve replacements.

Water System Facilities Planning

DC Water began work on its first Water System Facilities Plan in 1998 and completed it in September 2000. Initially, the focus of DC Water efforts was to make critical repairs to the water and wastewater infrastructure. As a priority related to the water system, DC Water addressed an Administrative Order and Consent Decree issued to its predecessor agency (WASUA) to implement improvements needed for water storage facility rehabilitation, cross-connection elimination and various operations-oriented projects. In September 2000, DC Water completed its first Water System Facilities Plan, which identified fourteen specific projects; a majority of which have been completed or are under construction.

In 2009, a Water Facilities Plan Update was completed that recommended CIP projects through 2030 with a total combined budget that exceeds \$1 billion. The plan recommended \$640 million (In FY 2008 dollars) for the Water Pumping Stations, Water Storage Facilities, Water Distribution System and Miscellaneous projects. A number of the 'highest priority' projects were already incorporated into the FY 2008 - FY 2017 CIP.

In FY 2010, construction of a number of capital projects started using funds appropriated through the American Recovery and Reinvestment Act (ARRA). These projects include Small Diameter Water Main Replacement 6 (N801), Large Valve Replacement 8 (BZ01), Small Diameter Water Main Replacement FY2010 (MX08/N802) and Fort Stanton Reservoir No.2 Joint Seals (FA01).

The increase in the lifetime budget for this service area reflects the findings of this update. The ten year CIP (disbursements) shows a increase of about \$57.6 million, and reflects the ramp up to the one percent per year replacement as recommended in the Plan beginning in FY 2010 with full implementation of the small mains program in FY 2014 and the large mains program in FY 2016.

A partial listing of the projects that are currently planned to begin in FY 2011 are set forth below.

Water Distribution

- AK01 Fourth High Check Valve and WSSC Connections
- BZ02 & S305

 Large Valve Replacements
- DF01 24" Water Main Rehabilitation Rock Creek Crossing
- S501 and S504 Large Diameter Water Main Repairs
- GQ01 Fire Hydrant replacement

Pumping Stations

- AY01 Upgrades to FT Reno Pumping Station
- F801 16th and Alaska Pump Station Upgrades
- FH01 Discharge Piping at Bryant Street Station
- M614 Painting of the BSPS Pump Room

Projects BZ02, DF01, S501, F801 & M614 are design start projects and the rest are construction start projects.

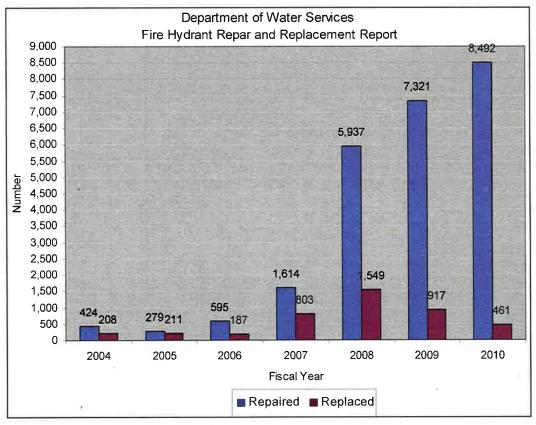
Water Distribution System – \$666.9 million

(project pages VII-8 to VII-47)

This program provides for rehabilitation, replacement or extension of the water distribution system through several project categories. This year's water distribution system budget includes increases for a variety of water quality-related work, primarily in the small main area. Highlights of the work under this program by project category are:

- Valve Replacements This involves replacing defective valves throughout the water distribution system. Operable valves are necessary to complete the annual flushing program, for routine and emergency system repairs, and for support of capital projects that require valve operation to isolate portions of the system. Seven contracts replacing 136 large valves (16-inch and larger) are either completed or under construction, and additional contracts to replace approximately 25 large valves annually are programmed into the 10-yr CIP.
- Fire Hydrant Program The original \$26.5 million program provided funding for the replacement/upgrade of up to 3000 of the critical public fire hydrants on behalf of the District of Columbia government over a five year period that began in FY 2006.

Through FY 2010, over 4,300 hydrant replacements in public space were completed by DC Water as shown in the graph below. An additional 2,980 have been proposed to DC Fire and Emergency Medical Services to be replaced in the CIP part of Phase 2 of this Program. However, an on-going discussion with the District (for entering into an MOU) to define the scope of work to be undertaken by DC Water and the constraints in cost reimbursement by the District, may lead to a curtailment in the number of Fire Hydrant replacements.



In addition, repairs and maintenance are ongoing. In October 2007, DC Water and the DC Fire and Emergency Medical Services entered into a Memorandum of Understanding to jointly inspect all public fire hydrants annually within the District and provide an identification and replacement program for a portion of the inventory. As DC Water has completed the original quantity target prior to the end of the five year period, the continuation of the phase two program has been included within this budget proposal for

approximately \$30 million over a six year period. As the cost is born by the District of Columbia (DC) and not the rate payers, the proposal will be subject to review and acceptance by DC officials and the appropriate budget process. However, inclusion within the DC Water budget proposal will provide congressional contracting authority that will be required to move forward. A major highlight through FY 2010 has been both the significant replacement of outdated fire hydrants and the use of computer technology to geographically locate all public fire hydrants and provide public access to the current condition of the hydrants through the use of Google Earth.

Small Diameter Water Main Rehabilitation - Work includes rehabilitating small diameter (12-inch diameter and smaller) water mains to improve system reliability as well as improve water pressure, maintain water quality and ensure adequate flows in the system. Construction is underway to replace small diameter mains in the new pressure zone east of the Anacostia River were higher pressures combined with older mains in this area makes replacement necessary. Additionally, a holistic approach to the water main rehabilitation program was implemented. The concept for this approach is, for a given block where the small diameter water main replacement is required DC Water will also assess all the necessary work to be done. For example, replacement of all valves and hydrants will be accomplished at the same time as required. Finally, it was coordinated that the District Department of Transportation will complete a majority of the road and sidewalk restoration work after the water mains are installed. The concept is to complete all needed improvements to a block at one time to minimize disruption and costs. Future fiscal year small diameter water main replacement projects will follow this holistic approach.

On-Going Water Projects - \$191 million

(project pages VII-48 to VII-60)

The ongoing program includes small projects for extension of water mains to service new development in the District of Columbia, repairing water main breaks, replacing valves and fire hydrants, replacing water service connections, and other minor water main rehabilitation work. Budgeted projects reflect the substantial costs of street repairing due to the street repair and restoration regulations required of DC Water and other area utilities. DC Water has budgeted for in-sourcing of the work related to the Valve operations, which was hitherto contracted out.

Water Pumping Facilities - \$150.1 million

(project pages VII-61 to VII-73)

This program includes several projects to rehabilitate or replace water-pumping stations in the system.

■ The Fort Reno Pumping Station will be upgraded to improve pressure in the fourth high service area in the northwest quadrant of the District. This project includes the replacement of pump controls, three existing variable drives and electrical equipment. The improvements also include an emergency backup generator and twenty-eight (28) remote pressure monitoring stations at critical locations in the water distribution system, which will improve system operations. Construction is scheduled to commence in FY 2011 at a total project budget of \$10.8 million.

A project to upgrade the 16th and Alaska Avenue Pumping Station is included in the CIP and provides for the installation of redundant suction and discharge headers; replacement of the electrical distribution equipment and controls; improvements to the ventilation system for cooling of the station and provisions for a second electric feeder. The total budget for this project is \$4.4 million. Construction is scheduled to commence in FY 2012.

DDOT Water Program - \$95.9 million

(project pages VII-74 to VII-93)

This program includes projects for relocation, rehabilitation, replacement and extension of water mains, for which the work is completed under District Department of Transportation (DDOT) construction contracts for street paving or reconstruction. The increase in this program area results from increased activity from DDOT which has the affect of reallocating a portion of the one percent replacement program (from the Water Distribution Area) to these projects.

Water Storage Facilities - \$71.9 million

(project pages VII-94 to VII-98)

Studies have identified the need for several new storage facilities to support changing development patterns, to provide additional water pressure to certain areas of the District, and to provide emergency backup service. The most immediate need is for two million gallons of elevated storage tank in the southern portion of the Anacostia first high service area. In June 2010, DC Government approved the project under the special merit provision of the historic preservation regulations and design commenced. Coordination with District authorities to obtain additional approvals will be completed by early FY 2011 and construction scheduled to be completed in FY 2014. In addition, siting studies for the two new storage facilities are scheduled as follows: 5 million gallon reservoir in the 2nd high service area, (Project MR), and a 2 million gallon elevated storage tank in the 4th high service area, (Project MQ). Design of each of these facilities follows the completion of the siting study with construction commencing in FY 2014 and FY 2017 respectively.

Following a recommendation from the EPA sanitary survey, the installation of impermeable membranes to cover three buried underground finished water storage facilities was programmed into the CIP. This work will be constructed in coordination with the triennial cleaning & disinfection schedule of each facility beginning in 2019 and continuing through 2021, as approved by EPA.

Construction of the emergency rehabilitation of the Fort Stanton Reservoir #2 (Project FA) commenced in FY 2010. The emergency work is required to stop the leakage at the reservoir, and repair the damage caused by the failure of the embankment and drainage system near the reservoir.

Water Service Area - Management - \$51.1 million

(project pages VII-99 to VII-99)

This program area provides engineering program management services for the water system capital improvements program, including assessing system needs, developing facilities plans and conceptual designs, and managing design consultants through the development of scope of work, cost estimates, task orders or agreements, and design document review. In FY 2009, a water system

facilities plan was completed and the recommendations, as indicated above, have been included in both the lifetime budgets and the ten year CIP. The plan includes water demand projections and identifies needs through 2030.

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

A3 - 16" Tie-in to McMillan Plant

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Phase

Design:

Project Completion:

Construction:

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Description:

This project includes the installation of approximately 4.600 linear feet of 16-inch diameter water main along Michigan Avenue to connect the existing 16-inch Third High water main at Harewood Road, NE to the McMillan Water Treatment Plant (WTP). This project provides a looped main along Michigan Avenue improving the service reliability to the WTP and eliminates the dead end condition of the 16-inch main along Harewood Road.

Impact on Operations:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

0

3,418,948 2,745,275 -673,673

Start Date

Apr 2003

Feb 2006

Feb 2010

Pre FY 2011 **Disbursements** Budget 2,745 Commitments **Pre FY 2011 Budget** 2,745

0 0 0 n 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0 0 0 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** 0 0 **Post FY 2019** 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

0

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

AK - WSSC Interconnections

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

Project Description:

This project entails the upgrade of 5 metered interconnections between DC Water and WSSC to improve water supply reliability by providing an alternative source of supply during emergency conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

2,566,736 2,566,736

Pre FY 2011 **Disbursements Budget** 759 Commitments Pre FY 2011 Budget 884

344 992 1.683 0 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0 0 0 0

Phase

Design:

Project Completion:

Construction:

(dollars in thousands)

Post FY 2019

Post FY 2019

0

Start Date

Dec 2008

Aug 2011

Sep 2012

(projected disbursements do not include contingencies)

0

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

BZ - Large Valve Replacement (Contract 08-09)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

Replacement of 40 broken large diameter valves under two separate contracts through out 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 improve valve operations thus increasing schedule efficiences. O & M cost avoidance will be realized.

Effective Funding by User (percent):

DC - 83.16%
EPA/Fed - 16.84%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

7,000,000 11,860,000 11: 4,860,000

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011 300	FY 2011 1,400	FY 2012 1,422	FY 2013 2,623	FY 2014 2,087	FY 2015 410	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 3,330	FY 2011 440	FY 2012 3,670	FY 2013 4,420	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Mar 2009

Feb 2010

Dec 2014

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

C9 - Large Diameter Water Mains 1

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

Project Description:

Replacement of 12,000 linear feet of 30-inch cast iron water main from the Georgetown Reservoirs to Washington Circle, NW is required, as a result of a pipe condition assessment. Installed in 1859, this pipe is one of the oldest transmission mains in the District and is located in MacArthur Boulevard, Canal Road, and M Street, NW. A section of this 30-inch cast iron pipe broke in December 2002, which resulted in low pressure in the First High Service Area because this main serves as a critical link between Dalecarlia and the First High Service 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	18,400,000
et 🗀	18,400,000
et: 🗀	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	137	538	1,222	6,595	4,929	336	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	300	1,370	16,730	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2014

Apr 2016

Oct 2018

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

D4 - Small Valve Replacements - 5

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

Replacement of broken critical small diameter valves at thirty five locations through out the water distribution system. Replacement of critical 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.

0

0

Impact on Operations:

This project realize O & M cost avoidance in future budgets.

Effective Funding by User (percent):

DC -61.31% 38.69% EPA/Fed -WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%

Disbursements



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

0

0

et	1,166,132
et	1,166,132
et:	0

Budget 430 Commitments Pre FY 2011 Budget 1,166

170 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

0 0 0 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0 0 0 0

Phase

Design:

Project Completion:

Construction:

0 **Post FY 2019** 0

Post FY 2019

(projected disbursements do not include contingencies)

Pre FY 2011

(dollars in thousands)

Start Date

Mar 2007 Nov 2009

May 2011

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

DE - Small Diameter Water Main Rehab 12

Managing Department:

Project Description:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

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 deteriorated pipe, improve available fire flows and water quality.

Impact on Operations:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

37,000,000 31,805,000 -5,195,000

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013	FY 2014 0	FY 2015 633	FY 2016 1,870	FY 2017 7,903	FY 2018 11,697	FY 2019 3,147	Post FY 2019
Commitments Budget	Pre FY 2011 0	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 3,080	FY 2016 28,725	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2015

Sep 2016

Feb 2019

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

DF - Rehab 24" Steel Main - Rock Creek

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

Project Description:

This project is to rehabilitate 300 linear feet a of 24-inch low service steel main under the ramp of the Whitehurst Freeway and Rock Creek in vicinity of K and 30th Streets, NW. Rehabilitation includes lining the existing 24-inch water main with HDPE and replacement of thrust blocks, couplings and fittings. The water main in 29th and K Streets, NW will be replaced with new HDPE pipe.

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%

Disbursements

Commitments

Budget



49

680

411

0

29

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

0

0

0

0

0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

0

74

0

et	966,1
et 🗀	966,1
4. F	

0

0

Phase

Design:

Project Completion:

Construction:

Budget 216 70 (projected disbursements do not include contingencies)

Pre FY 2011

Pre FY 2011

176

(dollars in thousands)

Post FY 2019

Post FY 2019

0

Start Date

Mar 2011

Aug 2012

Feb 2014

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

DL - City Wide Fire Hydrant Program

Managing Department:

Water Services

EPMC: EPMC2

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion:

Construction:

Phase

Design:

Dec 2012

Start Date

Jul 2007

Project Description:

This project provides funding for the replacement and upgrade of approximately 9,000 fire hydrants on behalf of The District government. It is expected that approximately 3000 broken and older model type fire hydrants will be replaced or rehabilitated under this project.

Impact on Operations:

New or rehabilitated hydrants will reduce the number of service calls required by operating crews. Since the maintence cost of the hydrants is reimbursed by The DC government, there will be no impact on retail rate payers.

Effective Funding by User (percent):

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



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

et	25,539,718
et 🗀	25,539,718
et:	0

Disbursements	Pre FY 2011
Budget	21,306
Commitments	Pre FY 2011
Commitments	FIEFI ZUII

FY 2011 FY 20	12 FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
2,425	33 0	0	0	0	0	0	0
FY 2011 FY 20	12 FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
1,192	0 0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

0

0

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

F1 - Small Diameter Water Main Rehab 13

Managing Department:

Engineering and Technical Services

es

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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 deteriorated pipe, improve available fire flows and water quality.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

38,000,000 32,560,000 -5,440,000

Phase

Design:

Project

Construction:

Completion:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	652	1,920	8,222	12,093	3,677
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	3,160	29,400	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Apr 2016

Sep 2017

Feb 2020

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title F2 - Small Diameter Water Main Rehabilitation (14)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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:

No significant O&M cost impact.

Effective Funding by User (percent):

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

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

39,000,000 33,170,000 -5,830,000

Phase

Design:

Project

Construction:

Completion:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	667	1,995	8,385	17,888
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	3,250	29,920	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2017 Sep 2018

Feb 2021

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

F6 - Steel Water Mains Rehabilitation Phase I

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion: Jan 2015

Start Date Sep 2010

Dec 2011

Phase

Design:

Construction:

Project Description:

This project is to evaluate, rehabilitate and/or install cathodic protection systems on high priority large diameter steel water mains, where there is a near term need to rehabilitate and/or install cathodic protection in order to mitigate the effects corrosion degradation.

Impact on Operations:

No significant O&M cost impact.

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

et 🗀	8,340,000
et	8,340,000
et:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	14	174	889	2,394	2,136	393	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	262	180	4,160	3,738	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

FE - 20" Low Service Main & PRV

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Completion:

Phase

Design:

Construction:

Feb 2015

Start Date

Apr 2012

Aug 2013

Project Description:

This project includes the installation of approximately 4,500 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. The PRV between the 1st High and the Low Service Areas will also be located at the intersection of Potomac Avenue, G Street and Kentucky Avenue, SE.

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget

et 🗀	4,910,000
et 🗀	4,910,000
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	85	276	2,397	740	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	400	4,510	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

FT - Steel Water Mains Rehabilitation Phase II

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is to install cathodic protection (CP) systems or rehabilitate twenty-one (21) large diameter steel mains. There is a need of CP systems or rehabilitation for these large diameter steel mains in order to mitigate the effects corrosion degradation of these pipelines. This project includes an evaluation of these mains to determine the detailed scope of CP systems or rehabilitation required.

Impact on Operations:

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

Effective Funding by User (percent):

(projected disbursements do not include contingencies)

DC -100.00% 0.00% EPA/Fed -WSSC -0.00%

0.00% Fairfax -

Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

38,500,000 38,500,000 0

Start Date

Apr 2017

Aug 2018

Mar 2022

Phase

Design:

Project

Construction:

Completion:

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 665	FY 2018 2,222	FY 2019 4,803
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016			FY 2019
Budget	0	0	0	0	0	0	0	3,200	35,300	(

0 0

(dollars in thousands)

Post FY 2019

Post FY 2019

25.781

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

FU - 2nd High Air Vacuum Valves

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project consists of the installation of automatic air / vacuum valves and pressure transmitter at the highpoint of an existing 2nd High Service Area 36-inch concrete water main near Rock Creek Church Road, NW.

Impact on Operations:

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

Effective Funding by User (percent):

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

Disbursements

Commitments

Budget

Budget

water is life

0

0

14

70

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

122

0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

413

0

43

760

jet	830,000
jet	830,000
et:	0

0

Phase

Design:

Project Completion:

O

0

Construction:

0 0 (projected disbursements do not include contingencies)

Pre FY 2011

Pre FY 2011

0

0

(dollars in thousands)

Post FY 2019

Post FY 2019

0

Start Date Apr 2013

Sep 2014

Feb 2016

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

GQ - Fire Hydrant Replacement Program - Phase II

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Board Policy, DC Water's commitment to outside agencies

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:

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

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



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	29,600,000
et 🗀	29,600,000
et:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	83	1,518	647	2,814	4,661	4,404	4,105	3,502	427	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	83	5,900	2,459	5,311	5,252	5,252	5,344	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2011

Jan 2011

May 2017

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

GR - Small Diameter Water Main Rehab. 15

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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.

Effective Funding by User (percent):

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

dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

 et
 40,000,000

 et
 32,000,000

 et:
 -8,000,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	694	2,056	26,469
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	3,330	28,670	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Apr 2018

Sep 2019

Feb 2022

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title |GU - Crosstown Water Main Rehabilitation

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Construction:

Phase

Design:

Apr 2013

Start Date

Dec 2009

Oct 2011

Project Description:

This project is for the rehabilitation of a portion of the Crosstown Water Main which is currently leaking and out of service since December 19, 2008. The leak surfaced through Rock Creek Parkway and on the bank of Rock Creek in Rock Creek Park in the vicinity of 25th and N Streets NW. and was first reported to DC Water by the National Park Service on December 4, 2008.

Impact on Operations:

DWS will have to operate for a few hours on a regular basis on the tunnel section of the Crosstown Water Main to flush the section and avoid water quality problems. Depending on the chlorine residual this operation may have to be done on a weekly basis.

Effective Funding by User (percent):

DC -100.00% EPA/Fed -0.00% 0.00% WSSC -0.00% Fairfax -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

12,400,933 12,400,933

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	594	344	6,026	2,651	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,141	0	11,260	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

GX - Large Dia, Water Main Repl. II

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Project

Completion:

Construction:

Phase

Design:

Feb 2022

Start Date Apr 2018

Sep 2019

Priority:

Good Engineering, Low, M&F over long term

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% 0.00% WSSC -0.00% Fairfax -0.00% Loudoun/PI -

Disbursements



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget

t	20,000,000
et 🗀	20,000,000
t:	0

Budget Commitments Pre FY 2011 Budget

0 0

0

0

0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0

0 0

n

0 0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

0

0 1,600

0

18,400

968

320

Post FY 2019 16,259 **Post FY 2019**

0

(dollars in thousands)

(projected disbursements do not include contingencies)

Pre FY 2011

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title HA - DWS Water Pumping

Managing Department:

Water Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

Annual program for the upgrade and replacement of large motors and pumps in the Water Service area

Impact on Operations:

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

Effective	Funding	by User	(percent):

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



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

:	520,000
	1,560,000
:	1,040,000

Start Date

Sep 2015

Phase

Design:

Project

Construction:

Completion:

Disbursements Budget	Pre FY 2011 60	FY 2011 335	FY 2012 225	FY 2013 211	FY 2014 213	FY 2015 214	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 260	FY 2011 260	FY 2012 260	FY 2013 260	FY 2014 260	FY 2015 260	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title | HX - Small Diameter Water Main Rehabilitation 16

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Construction: Sep 2020 **Project** Completion: Feb 2023

Start Date

Apr 2019

Phase

Design:

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.

Effective Funding by User (percent):

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



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

et 🗀	0
jet 🗌	33,500,000
et: 🗌	33,500,000

NEW

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 568	Post FY 2019 29,415
Commitments Budget	Pre FY 2011 0	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 2,825	Post FY 2019 30,675

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

18 - Large Valve Replacement (Contract 11-13)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Function

Project Completion: Sep 2017

Start Date

May 2012

Sep 2013

Phase

Design:

Construction:

Project Description:

This project will replace broken large diameter valves under separate contracts through out 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.

Effective Funding by User (percent):

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

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	0
et	16,870,000
et:	16,870,000

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	54	273	2,011	3,913	3,780	1,990	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	450	5,470	5,650	5,300	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

IA - Large Valve Replacement (Contract 14-16)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Completion: Sep 2020

Phase

Design:

Project

Construction:

Start Date

May 2015

Sep 2016

Project Description:

This project will replace broken large diameter valves under separate contracts through out 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.

Effective Funding by User (percent):

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



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

jet	0
get	18,390,000
et:	18,390,000

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014		FY 2016				Post FY 2019
Budget	0	0	0	0	0	57	305	2,212	4,314	4,197	2,653
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	500	5,970	6,140	5,780	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

IB - Large Valve Replacement (Contract 17-19)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project will replace broken large diameter valves under separate contracts through out 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.

Effective Funding by User (percent):

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



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 0 et 20,130,000 et: 20,130,000

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	63	342	17,025
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	550	6,530	13,050

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date May 2018

Sep 2019

Sep 2023

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title MK - 877A1 - 24" Wtrmain Ft. Stanton Res to MLK AVE

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project includes the installation of approximately 5,300 linear feet of 24-inch diameter water main connecting the 20-inch diameter main along MLK Jr. Avenue to the Fort Stanton reservoirs. This project will provide an alternate feed to the Fort Stanton Reservoirs and proposed First High South Low Lift Pumping Station, improving the overall reliability of the Anacostia First High service 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/Pl -	0.00%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	18,091,298
et	18,091,298
et:	0

Start Date Aug 2002

Sep 2007

Jan 2012

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	14,965	1,217	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	<u>FY 2018</u>	FY <u>2019</u>	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

MT - Small Diameter Watermain Rehab. (01)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Phase Start Date Jul 2003 Design: Sep 2005 Construction: **Project** Completion: Sep 2011

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 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%



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budg

get	12,771,115
get	12,771,115
get:	0

Disbursements Budget	Pre FY 2011 11,039	FY 2011 249	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 12,554	FY 2011 218	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

MU - Small Diameter Watermain Rehab. (02)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Completion:

Phase

Design:

Construction:

Jul 2011

Start Date

Aug 2005 Jul 2008

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 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	16,423,862
et	14,923,862
et:	-1,500,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 20 <u>13</u>	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	9,522	3,036	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	14,852	72	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

MV - Small Diameter Watermain Rehab. (03)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Completion: Mar 2011

Start Date May 2006

Mar 2009

Phase

Design:

Construction:

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 in the operating budget.

Effective Funding by User (percent):

DC -44.36% EPA/Fed -55.64% WSSC -0.00% Fairfax -0.00% Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

16,913,649 15,413,649 -1,500,000

Disbursements Budget	Pre FY 2011 8,540	FY 2011 3,277	FY 2012	FY 2013	FY 2014	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 15,414		FY 2012	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

MW - Small Diameter Watermain Rehab. (04)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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 in the operating budget.

Effective Funding by User (percent):

DC - 71.67%
EPA/Fed - 28.33%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	9,005,120
et	7,555,120
et:	-1,450,000

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011 3,662	FY 2011 956	FY 2012 408	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 7,555	FY 2011	FY 2012	FY 2013 0	FY 2014	FY 2015	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2008

Oct 2007

Jun 2012

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title | MX - Small Diameter Watermain Rehab. (05)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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 in the operating budget.

Effective Funding by User (percent):

DC -62.00% EPA/Fed -38.00% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budg

get	13,067,216
get	13,067,216
jet:	- 0

Phase

Design: Construction:

Project Completion:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	887	3,001	2,561	1,374	853	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	9,457	840	2,770	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2008

Oct 2008

Sep 2014

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

MY - Elim. Dead Ends (Contract 3 and 4)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Health Safety

Project Description:

These are the third and fourth of four contracts to eliminate the potential for stagnant water at dead ends by looping of the water distribution network or by adding a fire hydrant at the dead end to allow flushing of the pipeline.

Impact on Operations:

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

Effective Funding by User (percent):

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

Disbursements

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

8,529,952 8,529,952

0

Budget Commitments **Budget**

7.693 Pre FY 2011 8,530

Pre FY 2011

0 0 0 0

0 0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0

0

0

Phase

Design:

Project

Construction:

Completion:

Post FY 2019 0

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2003

Oct 2005

Dec 2010

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

N8 - Small Diameter Watermain Rehab. (06)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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 in the operating budget.

Effective Funding by User (percent):

DC -41.04% 58.96% EPA/Fed -0.00% WSSC -Fairfax -0.00% Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

13,000,000 13,000,000

0

Start Date Apr 2009

Jan 2010

Sep 2012

Budget Commitments Budget

Disbursements

1.755 Pre FY 2011 13.000

Pre FY 2011

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 5,103 0

0 1.853 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

0

0 0

O

0 0 0 0

Phase

Design:

Proiect Completion:

Construction:

Post FY 2019 Post FY 2019

0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

N9 - Small Diameter Watermain Rehab. (07)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Completion: May 2014

Start Date

Aug 2010

Nov 2011

Phase

Design:

Construction:

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 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% dc water is life

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

et	18,000,000
et 🗀	18,000,000
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	528	3,243	7,015	2,407	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,500	0	16,500	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

NA - 863A1 - Clean & Line 20" 4th High Wtrmain

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

Project Completion: Mar 2011

Start Date

Nov 2003

Mar 2009

Phase

Design:

Construction:

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 in the operating budget.

Effective Funding by User (percent):

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

Disbursements



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget:

0

0

et	4,454,330
et 🗀	4,454,330

0

Budget 2,376 Commitments Pre FY 2011 Budget

4,454

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 452 0 0 0

0 0

O

0

0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

Post FY 2019 Post FY 2019

0

(projected disbursements do not include contingencies)

Pre FY 2011

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title 00 - Small Diameter Watermain Rehab. (08)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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 in the operating budget.

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

23,000,000 18,425,000 -4.575.000

Phase

Design:

Project

Construction:

Completion:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	393	1,220	4,650	6,775	1,821	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	1,910	16,515	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Apr 2011

Aug 2012

Feb 2015

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title O1 - Small Diameter Watermain Rehab. (09)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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 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% water is life

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

28,000,000
23,700,000
-4,300,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	508	1,402	5,903	8,665	2,308	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	2,330	21,370	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2012

Sep 2013

Feb 2016

Phase

Design:

Project Completion:

Construction:

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

O2 - Small Diameter Watermain Rehab. (10)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Phase

Design:

Project Completion:

Construction:

Priority:

Good Engineering, High pay back, Mission / Function

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 deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

33,000,000 28,450,000 -4.550.000

Start Date

Apr 2013

Sep 2014

Feb 2017

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	559	1,663	7,015	10,295	2,752	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	2,750	25,700	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title O3 - Small Diameter Watermain Rehab. (11)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Phase **Start Date** Apr 2014 Design: Construction: Sep 2015

Project

Completion: Feb 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 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 in the operating budget.

Effective Funding by User (percent):

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

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budge

0
0
0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	612	1,841	8,555	12,506	3,361	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	3,000	28,205	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

QM - Small Valve Replacements - 4

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project includes the replacement of approximately 258, 12-inch and smaller, inoperable distribution valves. The replacement of these inoperable valves will improve the reliability of the system by limiting the number of valves that need to be closed under emergency conditions and limiting the number of customers that would otherwise lose water service. This project will also improve the effectiveness of the DWS flushing program.

Impact on Operations:

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

Effective Funding by User (percent):

DC -43.27% 56.73% EPA/Fed -WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%

Disbursements



20

0

0

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

et	3,050,262
et	3,050,262
et:	0

Start Date

Sep 2002

Jul 2004

Sep 2012

Phase

Design:

Project Completion:

Construction:

Budget 2,831 Commitments Pre FY 2011 Budget 2,977

73 0

66

0 0 0 0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0 0 0 0

Post FY 2019 0

Post FY 2019

(dollars in thousands)

(projected disbursements do not include contingencies)

Pre FY 2011

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

S3 - Large Valve Replacement (Contract 03-07)

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Phase **Start Date** Design: Jul 1999 Construction: Jan 2004 **Project** Completion: Jul 2013

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.

Effective Funding by User (percent):

DC -61.52% EPA/Fed -38.48% WSSC -0.00% 0.00% Fairfax -0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

22,852,835 22,852,835

Disbursements Budget	Pre FY 2011 16,490	FY 2011 534	FY 2012 1,579	FY 2013 604	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 18,206	FY 2011 4,646	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Distribution Systems

Activity Group/Project Title

S5 - WDSC6 - Lg.Dia.Wtrmain Int. Repairs

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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

dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

14,106,322

0

Start Date

Mar 2010

Feb 2012

May 2014

Phase

Design:

Project Completion:

Construction:

FY 2018 FY 2019

FY 2018 FY 2019

0

0

Dishursements Pre FY 2011

Dispursements	Pre FT 2011
Budget	2,645
Commitments	Pre FY 2011
Budget	2.953

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
746	2,328	3,769	991	0	0	0
FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

E3 - FY2003 - DWS Water Projects

Managing Department:

Water Services

EPMC: DETS

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2003 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. Job numbers will be issued to identify the location of projects.

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

7,551,456
7,447,102
-104,354

Phase

Design:

Project Completion:

Construction:

doun/PI - 0.00% CLOSED

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	7,447	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	7,447	0	44 0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2003

Jul 2010

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title AI - FY2008 - DWS Water Projects

Managing Department:

Water Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2008 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% 0.00% EPA/Fed -WSSC -0.00% Fairfax -0.00% Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

6,967,611 6,967,611

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6,836	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6,968	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2008

Oct 2011

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

AQ - FY2009 - DWS Water Projects

Managing Department:

Water Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2009 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. Job numbers will be issued to identity the location of projects.

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

Disbursements

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

7,922,869 7,922,869

Budget 7.686 Commitments Budget

Pre FY 2011 7,923

Pre FY 2011

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 136 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0

Phase

Design:

Project Completion:

Construction:

Post FY 2019 0

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2009

Mar 2011

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

AF - FY2010 - DWS Water Projects

Managing Department:

Water Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2010 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. Job numbers will be issued to identify the location of projects.

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% 0.00% Loudoun/PI -



490

0

FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budg

get	6,200,000
get	8,560,000
jet:	2,360,000

Disbursements	Pre FY 2011
Budget	3,829
Commitments	Pre FY 2011
Budget	7 420

1,140 7,420

2.588

273 0 0 0

0 0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0

Phase

Design:

Project Completion:

Construction:

Post FY 2019 0

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2009

Aug 2013

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

BE - FY2011 - DWS Water Projects

Managing Department:

Water Services

EPMC: DETS

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2011 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. Job numbers will be issued to identify the location of projects.

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%



FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

get	4,130,000
get	8,450,000
jet:	4,320,000

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011	FY 2011 3,672	FY 2012 2,790	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Duaget	U	8,450	Ü	Ü	Ü	U	0	Ü	Ü	U	U

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2011

Mar 2012

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

CC - FY2012 - DWS Water Projects

Managing Department:

Water Services

EPMC: DETS

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2012 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. Job numbers will be issued to identify the location of projects.

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%

dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 🗀	4,255,000
et 🗀	8,083,000
t: 🗀	3,828,000

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011
Commitments Budget	Pre FY 2011

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
0	4,993	1,721	0	0	0	0	0	0
FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
0	8,083	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

0

Start Date

Oct 2011

Jul 2013

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title CP - FY2013 - DWS Water Projects

Managing Department:

Water Services

EPMC: DETS

Priority:

Good Engineering, High pay back, Mission / Function

Project Completion:

Phase

Design:

Construction:

Jul 2014

Oct 2012

Start Date

Project Description:

This project is for the FY2013 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. Job numbers will be issued to identify the location of projects

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



FY2010 Approved Life Budg FY2011 Revised/FY2012 Approved Life Budg Increase/(Decrease) to Approved Life Budge

get	4,920,000
get	8,673,000
et:	3,753,000

Disbursements	Pre FY 2011	FY 2011	FY_2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	4,244	2,000	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	8,673	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

D5 - FY2014 - DWS Water Projects

Managing Department:

Water Services

EPMC: DETS

Priority:

Good Engineering, High pay back, Mission / Function

Completion: Jul 2015

Start Date

Oct 2013

Phase

Design:

Project

Construction:

Project Description:

This project is for the FY2014 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. Job numbers will be issued to identify the location of projects

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% 5,070,000 **FY2010 Approved Life Budget** 0.00% EPA/Fed -FY2011 Revised/FY2012 Approved Life Budget 8,935,000 WSSC -0.00% Increase/(Decrease) to Approved Life Budget: 3,865,000 water is life Fairfax -0.00% Loudoun/PI -0.00% FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019 Disbursements** Pre FY 2011 Budget 0 0 0 0 0 4.398 2.069 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Commitments Pre FY 2011 Budget 0 0 0 0 0 0 0 0 0 8,935

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

DG - FY2015 - DWS Water Projects

Managing Department:

Water Services

EPMC: DETS

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2015 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. Job numbers will be issued to identify the location of projects

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

get	4,775,000
get	9,180,000
get:	4,405,000
4.5	

Phase

Design:

Project Completion:

Construction:

Budget 0 0 0 0 4,460 2,165 0 0	0 0
Commitments Pre FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY	Post FY 2019
Budget 0 0 0 0 9,180 0 0	0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2015

Jun 2016

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

DY - FY2016 - DWS Water Projects

Managing Department:

Water Services

EPMC: DETS

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2016 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. Job numbers will be issued to identify the location of projects

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

get 🗀	5,375,000
get 🗀	9,295,000
jet: 🗀	3,920,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	4,595	2,448	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	9,295	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2016

Jun 2017

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

FK - FY2017 - DWS Water Projects

Managing Department:

Water Services

EPMC: DETS

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2017 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. Job numbers will be issued to identify the location of projects

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

5,545,000
9,412,000
3,867,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	5,988	1,089	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY_2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	9,412	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2017

Feb 2018

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

GS - FY2018 - DWS Water Projects

Managing Department:

Water Services

EPMC: DETS

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2018 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. Job numbers will be issued to identify the 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

jet	5,720,000
jet	9,535,000
et:	3,815,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	_ 0	0	0	0	0	0	6,181	1,105	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	9,535	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2018

Feb 2019

Service Area Title:

Water Service Area

Program Title:

Water On-Going Projects

Activity Group/Project Title

HY - FY2019 - DWS Water Projects

Managing Department:

Water Services

EPMC: DETS

Priority:

Good Engineering, High pay back, Mission / Function

Project Description:

This project is for the FY2019 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. Job numbers will be issued to identify the 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

0
9,660,000
9,660,000

NEW

Phase

Design:

Project

Construction:

Completion:

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019 6.563	Post FY 2019 560
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	0	9,660	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2018

Dec 2019

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

AY - Upgrades to Ft. Reno Pumping Station

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Potential Failure/Ability to continue meeting permit requirement

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



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

10,807,294 10,807,294 1: 0

Phase

Design:

Project

Construction:

Completion:

Disbursements	Pre FY 2011
Budget	1,383
Commitments	Pre FY 2011
Budget	1,574

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
822	3,480	175	0	0	0	0	0	0
FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
9,233	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

n

0

Start Date

Jun 2009

Apr 2011

Jun 2013

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

DU - Water System Laboratory Facilities

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

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% 0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

0

0

0

0

0

616,131 616,131

Start Date

Dec 2011 May 2013

Oct 2014

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011
Budget	166
Commitments	Pre FY 2011
Budget	166

166 (projected disbursements do not include contingencies)

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 15 44 205 13 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 60 390 0 0

Post FY 2019 0 0

Post FY 2019

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

F8 - 16th & Alaska Avenue Pumping Station Upgrades

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project
Completion: Jan 2014

Start Date

Mar 2011

Jul 2012

Phase

Design:

Construction:

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 variable frequency drives (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:

No significant O&M cost impact.

Effective Funding by User (percent):

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

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

4,380,000 4,380,000 0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019 Disbursements** Pre FY 2011 **Budget** 0 95 307 2.118 280 0 0 0 Commitments Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Budget 0 430 3,890 60 0 0 0 0 0 0 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

FC - Water Fac Instrumentation Upgrades

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Completion: Feb 2014

Start Date

Apr 2011

Aug 2012

Phase

Design:

Construction:

Project Description:

This project is to install redundant instrumentation at facilities that contain critical operation sensors to improve reliability and reduce emergency maintenance. This project provides for the installation of redundant instruments, communications conduits and power conduits, digital input/output signals, analog instrumentation items, and redundant SCADA system start-up and testing.

Impact on Operations:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

t	660,000
t	660,000
t:	0

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	12	38	288	87	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	90	570	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

FD - Water Fac Security System Upgrades

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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.

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/Pl - 0.00%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et 🗀	1,430,000
et	1,880,000
et:	450,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	3	33	309	535	300	56	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	120	1,760	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2011

Jun 2012

Nov 2015

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

FH - Discharge Piping Bryant Street Pumping Station

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Completion:

Construction:

Phase

Design:

Sep 2014

Start Date

Jun 2009

Apr 2011

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:

No significant O&M cost impact.

Effective Funding by User (percent):

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

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

7,000,000 12,940,000 5,940,000

Disbursements	Pre FY 2011
Budget	478
Commitments	Pre FY 2011
Budget	655

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
356	1,872	3,581	1,973	0	0	0	0	0	0
FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
12,285	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

FJ - Parking Ramp Rehabilitation - Bryant Street PS

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Potential Failure/Ability to continue meeting permit requirement

Project Description:

This project is for the rehabilitation of the parking deck bridge ramp connecting to the rooftop parking area over the Meter Shop and Warehouse building that is severely deteriorated

Impact on Operations:

No significant O&M cost impact.

Effective Funding by User (percent):

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



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t	420,000
et	420,000
t:	0

Start Date

Jul 2009

Apr 2010

Oct 2011

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2011 244	FY 2011 85	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 385	FY 2011 35	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

HD - Conversion of Anacostia PS to Customer Service

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

Project Description:

This project will relocate the customer service group which is currently located at a commercial office building at 810 First Street NW, in downtown, Washington, DC, with an annual cost of the rent of approximately \$900,000 to \$1,000,000. The old Anacostia Pump Station is vacant and unused, having been replaced by a more modern Pump Station on the other end of the site. Renovation cost for converting this old, unused structure will pay for itself in six years.

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%

water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t	0
t	5,980,500
t;	5,980,500

NEW

Phase

Design:

Project Completion:

Construction:

doun/PI - 0.00%

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	892	2,144	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget		5,981			_		_	_	_	_	_

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2010

Sep 2011

Nov 2012

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

HE - New Parking Structure & Building Modications @ Bryant St PS

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

Project Description:

This project will construction a parking deck at the top of McMillian Drive, over the existing surface parking lot to address the lack of sufficient parking and accommodate the addition of new, large service trucks and personnel. Bryant Street Pump Station office areas and adjacent meter/warehouse building to be converted as the main location for consolidated Water Services and Sewer Services departments. This consolidation will allow for the cross-training of all supervisory and field personnel; consolidation of administrative groups into one central location and will allow DC Water to create three field service area locations to better serve its customers. Work to include adaptive re-use of all current office space in main pump station building to house all administrative personnel from sewer services and water services; creation of a Central Sector Water and Sewer Investigation and Repair Satellite Crew; reorganization of meter/warehouse building to receive water quality personnel currently located at Ft Reno; reorganization of meter services storage and office areas and redesign of warehouse 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%

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

13,546,000 13,546,000

Start Date

Jan 2016

Feb 2017

Aug 2018

Phase

Design:

Project Completion:

Construction:

moreage. (Beereage) to Approved Ene Budget.

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	980	2,720	6,172	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	2,060	11,486	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

HF - New Maintenance Facility at Fort Reno

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

Completion:

Jun 2017 Construction: **Project**

Phase

Design:

Jul 2018

Start Date

Sep 2016

Project Description:

This project will demolish existing structures at Fort Reno to construct a necessary building to create a new satellite site for location of a new Water and Sewer Investigation, and Repair Satellite Crew (Western Sector) facility. In addition to demolition, the work will include the construction of a new 3,000 s.f. one-story building to accommodate supervisory offices, field crew lockers and meeting room, storage of jobrelated materials; and storage of two large vacuum trucks, which are required to be housed inside a heated building during cold weather.

Impact on Operations:

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

Effective Funding by User (percent): DC -100.00% FY2010 Approved Life Budget EPA/Fed -0.00% FY2011 Revised/FY2012 Approved Life Budget 2,966,000 0.00% WSSC -Increase/(Decrease) to Approved Life Budget: water is life 2,966,000 Fairfax -0.00% 0.00% **NEW** Loudoun/PI -**Disbursements** Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019 Budget** O n 0 n 0 21 0 681 1,291 0 Commitments FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Pre FY 2011 **Budget** 0 0 0 0 0 0 359 2,607 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

HV - Bryant St Pump Station - Spill Header Flow Contol

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

Project Description:

This project is to install seven actuated spillover pressure regulating valves (PRVs) with flowmeter capabilities to replace the existing manually operated PRVs that control spillover flow into the low service area.

Impact on Operations:

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

Effective Funding by User (percent):

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

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

960,000 960.000

Start Date

Apr 2013

Sep 2014

Feb 2016

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	14	48	452	131	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	80	880	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

M6 - WPFA1- Rehab. Bryant St. Pump Sta.

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

Project Completion:

0

Phase

Design:

Construction:

Dec 2013

Start Date

Mar 1999

Mar 2002

Project Description:

This project is to rehabilitate and upgrade the Bryant Street Pumping Station and the warehouse and shops building to meet current code requirements and maintain the reliability of the water distribution system. Project includes refurbishing 11 high lift pumps and replacing 11 electric motors mechanically coupled to the pumps; architectural improvements to the building; complete replacement of the heating, cooling and ventilating equipment; site improvements, dewatering, hydraulic loops; replacement of water mains at the site; and cathodic protection for a 48-inch steel water main. Also included in this project is the SCADA for the water distribution system installed by DC Water IT services.

Impact on Operations:

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

Effective Funding by User (percent):

DC -70.20% EPA/Fed -29.80% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%

Disbursements

water is life

FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

et 🗀	62,455,925
et 🗀	62,455,925
t:	0

0

Budget Commitments Budget

58,018 Pre FY 2011 60,217

Pre FY 2011

604 746 595 1,645

0 0

O

450

0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0

Post FY 2019 Post FY 2019

0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Pumping Facilities

Activity Group/Project Title

M7 - WPFA3 - Replacement of Anacostia Pump Sta.

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

High Profile, Good Neighbor Policy

Project

Completion: Dec 2011

Start Date

Apr 2004 Mar 2007

Phase

Design:

Construction:

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 in the operating budget.

Effective Funding by User (percent):

DC - 45.91% EPA/Fed - 54.09% WSSC - 0.00% Fairfax - 0.00% Loudoun/PI - 0.00%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	38,536,830
et 🗀	32,536,830
et:	-6,000,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	31,053	385	84	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	31,753	784	0	- 0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

R1 - FY2000 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion:

Phase

Design:

Construction:

Jun 2010

Start Date

Project Description:

This project is for the FY2000 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 coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

1,311,300 1,259,221 -52.079

CLOSED

0

0

0.00% Loudoun/PI -

Disbursements Pre FY 2011 **Budget** 1,259 Commitments Pre FY 2011 Budget 1,259

0 0 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Ω 0

0 0 0 0 0

0

0

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 0 0 0 0

Post FY 2019

Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

R2 - FY2001 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion: Oct 2010

Start Date

Phase

Design:

Project

Construction:

Project Description:

This project is for the FY2001 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 coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

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/Pl - 0.00%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	1,266,616
et	1,078,874
et:	-187,742

doun/PI - 0.00% CLOSED

Disbursements Budget	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget Commitments	1,079 Pre FY 2011	0 FY 2011	0 FY 2012	0 FY 2013	0 FY 2014	0 FY 2015	0 FY 2016	0 FY 2017	0 FY 2018	0 FY 2019	Post FY 2019
Budget	1,079	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

R3 - FY2002 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion:

Phase

Design:

Project

Construction:

Oct 2010

Start Date

Project Description:

This project is for the FY2002 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 coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

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%

water is life

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

2,600,814 2,550,092 t: -50,722

Loudoun/Pi - 0.00% CLOSED

Disbursements Budget	Pre FY 2011 2,550	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 2,550	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

R4 - FY2003 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: EPMC2

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion:

Start Date

Jun 2010

Phase

Design:

Project

Construction:

Project Description:

This project is for the FY2003 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 coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

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%

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t 4,284,816 t 4,241,277 t: -43,539

CLOSED

Disbursements Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Budget 4,241 0 0 0 0 0 0 0 Commitments FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Pre FY 2011 **Budget** 0 0 0 0 0 4,241 0 0 0 0 Ω

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

R5 - FY2004 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Construction: **Project** Oct 2010 Completion:

Start Date

Phase

Design:

Project Description:

This project is for the FY2004 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 coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent): DC -100.00% FY2010 Approved Life Budget 641,393 EPA/Fed -0.00% FY2011 Revised/FY2012 Approved Life Budget 653,266 0.00% WSSC -Increase/(Decrease) to Approved Life Budget: 11,873 water is life 0.00% Fairfax -**CLOSED** 0.00% Loudoun/PI -FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019 Disbursements** Pre FY 2011 Budget O O 0 0 0 n 653 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Commitments Pre FY 2011 Budget 0 0 0 0 0 0 0 0 653 0 0 (dollars in thousands) (projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

R6 - FY2005 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion: Jun 2010

Start Date

Phase

Design:

Project

Construction:

Project Description:

This project is for the FY2005 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 coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

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%

dC water is life

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

et	415,000
jet	452,844
et:	37,844
,	

CLOSED

Loudoun/PI - 0.00%

Disbursements Budget	Pre FY 2011 453	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	453	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

R7 - FY2006 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: EPMC2

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion:

Construction:

Phase

Design:

Jun 2010

Start Date

Project Description:

This project is for the FY2006 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 coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	383,742
et	38,532
et:	-345,210

doun/PI - 0.00% CLOSED

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	39	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	39	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

R8 - FY2007 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: EPMC2

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion: Jun 2010

Phase

Design:

Construction:

Start Date

Project Description:

This project is for the FY2007 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 coordination minimizes public inconvenience caused by construction work and saves DC Water the paying cost. Job numbers will be issued to identify the location of projects.

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% 0.00% WSSC -Fairfax -0.00% 0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

8,917,688 4,214,954 -4,702,734

CLOSED

Disbursements Budget	Pre FY 2011 4,215	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 4,215	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

R9 - FY2008 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: EPMC2

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion:

Phase

Design:

Construction:

Jun 2010

Start Date

Project Description:

This project is for the FY2008 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 coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2010 Approved Life Budge FY2011 Revised/FY2012 Approved Life Budge Increase/(Decrease) to Approved Life Budget

t	2,288,722
et 🗀	265,061
t:	-2,023,661

CLOSED

Loudoun/PI -

Disbursements Budget	Pre FY 2011 265	FY 2011	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 265	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

AS - FY2009 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: EPMC2

Priority:

Board Policy. DC Water's commitment to outside agencies

Project Description:

This project is for the FY2009 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 minimizes public inconvenience caused by construction work and save DC Water the paving cost. Job numbers will be issued to identify the location of projects.

n

0

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% 0.00% Fairfax -0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

0

0

0

0

1,542,151 92,152 -1,449,999

0

0

Start Date

Sep 2011

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Disbursements Budget** 0 0 92 Commitments FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Pre FY 2011 **Budget** 0 92 0

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

0

0

O

0

O

0

Phase

Design:

Project Completion:

Construction:

O

0

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

B0 - FY2010 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: EPMC2

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion: May 2013

Start Date

Phase

Design:

Construction:

Project Description:

This project is for the FY2010 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. Budget was transferred from other projects to provide a consolidated activity area from which to fund FY 2010 MOU settlement.

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%

water is life

FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

et	1,380,000
et 🗀	17,171,132
et:	15,791,132

Disbursements Budget	Pre FY 2011 10,410	FY 2011 1,217	FY 2012 451	FY 2013 93	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 14,258	FY 2011 2,913	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

BN - FY2011 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project
Completion: Se

Phase

Design:

Construction:

Sep 2013

Start Date

Project Description:

This project is for the FY2011 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% water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

1,650,000 et 8,650,000 et: 7,000,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	1,081	1,255	1,248	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	8,650	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

CJ - FY2012 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Completion: Sep

Phase

Design:

Project

Construction:

Sep 2014

Start Date

Project Description:

This project is for the FY2012 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% dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

1,700,000 6,275,000 2 4,575,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	706	1,407	1,414	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	6,275	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

CM - FY2013 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion:

Construction:

Phase

Design:

Sep 2013

Start Date

Project Description:

This project is for the FY2013 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:

The project will result in increased operations and maintenance costs related to the tunnel, pumping station 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):

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



FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

et	1,700,000
et	6,000,000
t:	4,300,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	4,362	0	0	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	6,000	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

D9 - FY2014 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion:

Construction:

Phase

Design:

Sep 2014

Start Date

Project Description:

This project is for the FY2014 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 in the operating budget.

Effective Funding by User (percent):

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

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

1,750,000 6,300,000 4,550,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Budget	0	0	0	0	4,619	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Budget	0	0	0	0	6,300	0	0	0	0	0

FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** 0 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

DH - FY2015 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

agencies Completion:

Phase

Design:

Project

Construction:

Sep 2015

Start Date

Project Description:

This project is for the FY2015 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 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%



FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

et	1,805,000
et	6,600,000
et:	4,795,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	4,871	0	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	6,600	0	- 0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

DV - FY2016 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Completion: Sep 2016

Start Date

Phase

Design:

Construction:

Project Description:

This project is for the FY2016 annual program of water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Public Works. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the 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% 0.00% EPA/Fed -WSSC -0.00% Fairfax -0.00% Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

1,805,000 7,000,000 5,195,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	5,149	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	7,000	0	0	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title FL - FY2017 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project

Phase

Design:

Construction:

Completion: Sep 2017

Start Date

Project Description:

This project is for the FY2017 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:

No significant O&M cost impact.

Effective Funding by User (percent):

DC -100.00% EPA/Fed -0.00% 0.00% WSSC -

0.00% Fairfax -

0.00% Loudoun/PI -

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

1,860,000 7,300,000 5,440,000

Disbursements Budget	Pre FY 2011	FY 2011 0	FY 2012 0	FY 2013 0	FY_2014 0	FY 2015 0	FY 2016 0	FY 2017 5,388	FY 2018 0	FY 2019 0	Post FY 2019
Commitments Budget	Pre FY 2011 0	FY 2011 0	FY 2012 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 7,300	FY 2018 0	FY 2019 0	Post FY 2019 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

GT - FY2018 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project

Phase

Design:

Construction:

Completion: Sep 2018

Start Date

Project Description:

This project is for the FY2018 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%

wate	er is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

1,920,000 7,750,000 5,830,000

FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 **Post FY 2019** Pre FY 2011 Disbursements Budget 0 0 0 0 6,006 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 Commitments **Post FY 2019** Pre FY 2011 Budget 0 0 0 0 0 0 0 7,750 0 0 0

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

DDOT Water Projects

Activity Group/Project Title

HZ - FY2019 - DDOT Water Projects

Managing Department:

DC Dept. of Transportation

EPMC: DETS

Priority:

Board Policy, DC Water's commitment to outside agencies

Project Description:

This project is for the FY2019 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%

0.00%

dc water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

t 0 t 8,000,000 :: 8,000,000

Phase

Design:

Project Completion:

Construction:

Loudoun/PI - 0.00% NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	0	6,090	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	0	8,000	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2019

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Storage Facilities

Activity Group/Project Title

FA - Water Storage Facility Upgrades

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Health Safety

Project Description:

This project includes replacing the expansion joint material within the Fort Stanton Reservoir No. 2 concrete floor slab to minimize the current leakage and repairing the damage caused by an embankment failure near Fort Stanton Reservoir No. 2. The budget increase is due to increased scope of work which includes installation of impermeable membranes over three underground water storage reservoirs, that was approved by EPA, and the installation of the membrane in the Soldier's Home Reservoir as recommended in the approved Water System Facilities Plan Update (June 2009).

Impact on Operations:

This project will reduce water loss, thus slowing the growth in water purchase costs.

Effective Funding by User (percent):

DC - 91.96%
EPA/Fed - 8.04%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%

dC water is life

FY2010 Approved Life Budget
FY2011 Revised/FY2012 Approved Life Budget
Increase/(Decrease) to Approved Life Budget:

9,740,000 t 20,240,000 :: 10,500,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	621	1,614	224	761	1,284	983	488	601	1,691	3,244	3,189
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,800	880	3,880	0	1,040	0	2,015	9,625	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2008

Jan 2010

Feb 2021

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Storage Facilities

Activity Group/Project Title

HW - Rehabilitation of Elevated Water Tanks

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

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% 0.00% WSSC -0.00% Fairfax -

Loudoun/PI -

0.00%

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

7,000,000 7,000,000

Start Date

Apr 2019

Sep 2020

Feb 2024

Phase

Design:

Project Completion:

Construction:

NEW

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	0	115	6,214
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	0	0	0	0	0	0	0	0	0	580	6,420

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Storage Facilities

Activity Group/Project Title MA - St. Elizabeth Water Tank

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

High Profile, Good Neighbor Policy

Project Completion:

Phase

Design:

Construction:

May 2015

Start Date

Oct 2010

Sep 2012

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. The budget increase is to fund additional required enhancements to the tank exterior and other mitigation measurements to construct the proposed water storage tank in the St. Elizabeth's complex.

Impact on Operations:

New tank will require periodic (10 to 15 year) maintenance involving painting.

Effective Funding by User (percent):

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

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

16,681,184 21,481,184 4,800,000

Disbursements	Pre FY 2011			FY 2013			FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,596	893	799	3,406	6,509	2,156	0	0	0	0	0
Commitments Budget	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Storage Facilities

Activity Group/Project Title MQ - 878A1 - 2MG 4th High Storage Tank

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Project

Phase

Design:

Construction:

Completion:

Aug 2018

Start Date Jun 2015

Nov 2016

Priority:

Good Engineering, Low, M&F over long term

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 painting (10 to 15 years) causing an increase on the operating budget.

Effective Funding by User (percent):

DC -EPA/Fed -

100.00% 0.00%

water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

7,915,558 7,915,558

Fairfax -

WSSC -

0.00% 0.00%

Loudoun/PI -

0.00%

Disbursements	Pre FY 2011
Budget	191
Commitments	Pre FY 2011
Budget	191

FY 201	FY 2012	FY 2011
	0	0
FY 201	FY 2012	FY 2011
	0	0

Y 2013	FY 2014	FY 2015
0	59	134
Y 2013	FY 2014	FY 2015

<u>15</u>	FY 2016	FY 2017	FY 2018	FY 2019
34	329	2,079	2,644	0
15	FY 2016	FY 2017	FY 2018	FY 2019
00	0	6,800	0	0

2,64	4	0
FY 201	<u>8</u>	FY 2019
	0	0

(0
Post F	<u> 2019</u>
	0

Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Water Storage Facilities

Activity Group/Project Title MR - 5MG 2nd High Reservoir

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, Low, M&F over long term

Project Description:

This project includes the siting and feasibility study, design and construction of a 5.0 million gallon 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 maintenance causing some increase in the operating budget.

Effective Funding by User (percent):

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

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget

t	15,225,000
t 🗀	15,225,000
t:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	77	70	226	647	2,682	5,951	1,021	0	0	0	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	100	200	1,105	0	13,820	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Jul 2012

Dec 2013

Dec 2015

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Service Area Program Mgmt

Activity Group/Project Title

ME - Water System Program Management Services

Managing Department:

Engineering and Technical Services

EPMC: EPMC2

Priority:

Good Engineering, High pay back, Mission / Function

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:

The impacts to operations are identified with each project. There are no impacts to operations from program management.

Effective Funding by User (percent):

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



FY2010 Approved Life Budget

FY2011 Revised/FY2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

et	51,106,826
et	51,106,826
et:	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6,440	3,963	3,779	3,170	3,187	3,890	3,854	3,856	3,905	3,930	2,740
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	26,407	0	0	0	0	24,700	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2020

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Water Lead Program

Activity Group/Project Title

BW - Lead Service Replacement Program

Managing Department:

Water Services

EPMC: EPMC6

Priority:

Board Policy, DC Water's commitment to outside agencies

Design: Construction: **Project** Completion:

Phase

Aug 2027

Start Date

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 FY2004 and will continue in conjuction with scheduled water main replacement and DDOT road work (new FY2009 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 in the operating budget.

Effective Funding by User (percent):

DC -93.65% EPA/Fed -6.35% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00% water is life

FY2010 Approved Life Budget FY2011 Revised/FY2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

200,000,000 191,000,000 -9,000,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	133,145	3,323	2,320	2,593	2,902	2,926	2,906	2,816	3,006	21	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY_2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	141,233	11,592	4,214	4,966	5,277	5,402	5,881	6,147	6,288	0	0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Metering

Activity Group/Project Title:

EM1 Future Meter Replacements

Managing Department:

Customer Service

EPMC:

Priority:

Good Utility Practice

Project Description:

Project to fund ongoing meter and related equipment replacements and upgrades beyond the AMR program. This Project does not include meters being replaced as part of the Lead service line replacement program. In prior years this project was shown in the AMR budget.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Life Budget
FY 2012 Proposed Life Budget

idget ____

Phase

Design:

Project Completion:

Construction:

19,321,254

Start Date

Increase/(Decrease) to Approved Life Budget:

1,319,254

18,002,000

1	_0	u	ot	u	n/	P	I	-

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	3,360	2,419	2,802	1,366	1,395	1,419	1,443	1,676	1,708	1,732	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	3,361	2,419	2,802	1,366	1,395	1,419	1,443	1,676	1,708	1,732	

(projected disbursements do not include contingencies)

Service Area Title:

Water Service Area

Program Title:

Metering

Activity Group/Project Title:

EM2 Automated Meter Reading Project

Managing Department:

Customer Service

EPMC:

Priority:

Good Utility Practice

Project Description:

DC Water is replacing all meters with meters that automatically transmit consumption data via radio and cellular technology. This has improved the accuracy of meter reads to over 99.9 percent, and the labor needed for meter reading has been substantially reduced. By the end of FY 2008 a substantial amount of this project has been completed (approximately 120,000 meters had been installed, or 98.9% of the project). This project will be completed over the next two years.

Impact on Operations:

The cost of a single meter read will be reduced from approximately \$3 in FY 2002 to approximately \$1.13 when the program is fully implemented.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Life Budget FY 2012 Proposed Life Budget

Phase

Design:

Project Completion:

Construction:

et 41,112,878

Increase/(Decrease) to Approved Life Budget:

81,878

41,031,000

Start Date

3/4/2002

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	40,913	200	0	0	0	0	0	0	0	0	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	40,913	200	0	0	0	0	0	0	0	0	
(noisected dishursements do not include contingencies)											



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2010-2019







Washington Aqueduct

dewater.com

WASHINGTON AQUEDUCT

The Washington Aqueduct, managed by the U.S. Army Corps of Engineers, provides wholesale water treatment services to DC Water and its partners in Northern Virginia, Arlington County and Falls Church. DC Water purchases approximately 73.73 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan treatment plants, and thus is responsible for 73.73 percent of the Aqueduct's operating and capital costs. Under federal legislation and a memorandum of understanding enacted in 1997, DC Water and its Northern Virginia partners have a much greater role in oversight of the Aqueduct's operations and its capital improvement program.

The proposed lifetime budget for DC Water's share of Washington Aqueduct projects totals \$203 million or \$16.4 million more than last year's 10-year plan of \$186.6 million. This change is due primarily to an increase in infrastructure projects at the Aqueduct.

The Aqueduct CIP is broken into seven primary areas with specific Projects under each area:

Basin Waste Recovery/Residuals Disposal - \$86.4 Million

(project pages VIII-5)

The residual project is the single largest project in the Aqueduct's CIP. In 2003, the EPA issued a revised NPDES permit to the Aqueduct and entered into a Federal Facilities Compliance Agreement (the federal agency equivalent of an Administrative Order) that requires the Aqueduct to have a new process in operation by Dec 31, 2010; because of schedule delays the Aqueduct is seeking a time extension for the completion of this project. The Aqueduct selected a process to meet the Compliance Agreement, which dewaters the residuals on site and trucks them off-site for disposal. The major contract was awarded in FY 2008 and construction is underway and the projected completion date is Oct 2011.

Dalecarlia Pumping Station Improvements - \$7.5 Million

(project pages VIII-6)

Beginning in FY2011, the Aqueduct will start a series of initiatives at Dalecarlia Pumping Station aimed at modernizing and upgrading the facility. These initiatives include: fire protection system improvements (FY 2011- FY 2012); building renovation (FY 2011 - FY 2012); overhead crane replacements (FY 2012 - FY 2014) elevator replacements (FY 2013 - FY 2015); mechanical upgrades (FY 2016- FY 2018); SCADA upgrades (FY 2017 - FY 2019); valve and piping replacement (FY 2018 - FY 2019).

Cabin John Bridge Repairs - \$.9 Million

(project pages VIII-7)

Scheduled in FY 2015 through FY 2017 are future improvements including parapet and additional roadway repairs. The most recent improvements to the bridge were completed in FY 2001.

McMillian Water Treatment Plant Improvements - \$ 28 Million

The immediate focus for the Aqueduct will be on current projects including the transformer/switchgear building renovation, fire protection system improvements, chemical building renovations, east shaft pumping station pumping station renovation and sample line replacement. Future major projects include: sedimentation improvements (FY 2012 - FY 2013); boat dock/chemical storage building renovation (FY 2014 - FY 2016); chemical building renovations (FY 2011 - FY 2012; FY 2016 - FY 2018); clearwell maintenance & improvements – north (FY 2012 - FY 2013; FY 2019); clearwell maintenance & improvements – south (FY 2015 – FY 2016); GIS system (FY 2017 – FY 2019); roof replacements (FY 2016 - FY 2018); SCADA upgrade (FY 2017 - FY 2019); instrumentation improvements starts in FY 2015; process improvements (FY 2017 – FY 2019); sample line replacement (FY 2011); EASA building demolition (FY 2013 – FY 2015); and roadway repairs (FY 2017 – FY 2019).

<u>Appurtenant Transmission & Storage Facility - \$33.4 Million</u>

(project pages VIII-9)

This project area covers improvements to the Aqueduct's major transmission mains, storage facilities and outlying structures. Current major projects include: Little Falls Pumping Station motor control upgrades (FY 2011 - FY 2012); Warehoused No. 6 Improvements; and reservoir maintenance & improvements - 1st high. Future projects include: Little Falls Pumping Station HVAC Upgrades (FY2012 - FY 2014); reservoir maintenance & improvements - 2nd & 3rd high (FY 2016 - FY 2017, FY 2014 - FY 2015); transmission main improvements (FY2012 - FY 2014); city tunnel repairs (FY 2019); conduit repairs (FY 2015 - FY 2019); cross connection structure upgrade (FY2015 - FY 2017); great falls intake building improvements (FY 2016 - FY 2018); Little Falls Pumping Station crane overhaul (FY 2014 - FY 2016); SCADA upgrades (FY 2017 - FY 2019); Champlain street building renovation (FY 2017 - FY 2018); Rock Creek Blow-Off Valve Replacements starts in FY 2019; Sluice Gate Replacements starts in FY 2019; and Warehouse No. 8 Improvements (FY 2015 - FY 2016).

<u>Dalecarlia Water Treatment Plant Improvements - \$44.8 Million</u>

(project pages VIII-10)

Dalecarlia WTP will continue to improve its infrastructure with current projects including the sample line replacements, Maintenance Building Renovation, Fire Protection System Improvements and Intake Building Renovation. Future projects include: visitors center exhibits (FY 2013 – FY 2015);administration building improvements (FY 2015 - FY 2017); basin no. 3 & no. 4 flocculation/sedimentation improvements (FY2018 - FY 2019); carbon facility tank renovations (FY 2014 -FY 2016); chemical building electrical upgrades (FY 2013 - FY 2015); clearwell maintenance & improvements – 15 & 30 MG (FY 2013 – FY 2014, FY 2017 – FY 2018); east filter building renovation phase II (FY 2013- FY 2015); GIS System (FY 2017 - FY 2019); intake building renovation (FY 2012 – FY 2014); roadway improvements (FY 2017 - FY 2019); roof replacements (FY 2016 - FY 2018); SCADA Upgrades (FY 2017 – FY 2019); south connection building renovation (FY 2015 - FY 2016); wash water tank renovations (FY 2015 - FY 2017); west filter building improvements (FY 2015 - FY 2017); and instrumentation improvements will start in FY 2016.

<u>Alternate Treatment Methods - \$1.8 Million</u>

In FY2015 Aqueduct will begin the 30 MG clearwell mixing improvements project, while future projects include Georgetown mixing improvements starts in FY 2018.

Financing of Aqueduct Capital Projects

The U.S. Army Corps of Engineers in accordance with Federal procurement regulations require 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 Corps/U.S. Treasury account to be drawn down by Washington Aqueduct during the execution of the project through completion with no interest to DC Water. Over the last few years, extensive discussions with the U.S. Office of Management and Budget (OMB) and the Corps resulted in a proposal in the President's FY2006 and FY2007 budgets that would allow Aqueduct customers to deposit funds for any projects required by their 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 Corps 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 of the Senate 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, taxable commercial paper, or providing the Corps with a bank line of credit. In the past, some of these options have not been viewed favorably by the U.S. Treasury, but we will continue to educate and work with Congressional staff, federal agencies and the Corps on this critical issue.

Service Area Title:

Washington Aqueduct

Program Title:

Washington Aqueduct

Activity Group/Project Title:

WAD121 Basin Waste Recovery

Managing Department:

EPMC:

Priority:

Federal Facilities Compliance Agreement

Phase Start Date Design: Construction: 10/1/2007 Project Completion: 10/1/2011

Project Description:

Under the Aqueduct's NPDES permit and a related FFCA (the federal agency equivalent of an administrative order), the Aqueduct is required to remove 85 percent of incoming sediments, rather than periodically discharging them to the Potomac River. The FFCA requires that the new process be in place by Dec. 31, 2010; because of schedule delays the Aqueduct is seeking time extension on the completion of this project. The Aqueduct is implementing a plan it developed to build new residuals processing facilities at the Dalecarlia treatment plant. The construction started in April 2008, with completion expected in 2011.

Impact on Operations:

The estimated increase to the Washington Aqueduct Operating budget due to the Residual Facilities is in the range of \$2.2 to \$4.0 million. We anticipate future cost increases in areas of personnel, building maintenance, chemicals, electricity and contract disposal. The major portion of the increase will be in the areas of electrical consumption and contract trucking for disposal. Funding is included in FY 2011.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

Budget

Loudoun/PI -

water is lite

FY 2011 Approved Life Budget FY 2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

93,949,635 86,481,590 -7,468,045

Disbursements

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

4,045 1,995

Commitments Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

4,045 1,995

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Washington Aqueduct

Program Title:

Priority:

Washington Aqueduct

Good Engineering Practices

Activity Group/Project Title:

WAD122 Dalecarlia Pumping Station

Managing Department:

EPMC:

Project

Phase

Design:

Completion:

Construction:

10/1/2017

Start Date

10/1/2010

Project Description:

The Dalecarlia Pumping Station was built over forty years ago and beginning in FY2011, the Aqueduct will start a series of initiatives at Dalecarlia Pumping Station aimed at modernizing and upgrading the facility. These initiatives include: fire protection system improvements (FY 2011- FY 2012); building renovation (FY 2011 - FY 2012); overhead crane replacements (FY 2012 - FY 2014) elevator replacements (FY 2013 - FY 2015); mechanical upgrades (FY 2016- FY 2018); SCADA upgrades (FY 2017 - FY 2019); and valve and piping replacement (FY 2018 - FY 2019).

Impact on Operations:

Improvements to the Dalecarlia pumping station are not expected to have significant impact on operating costs.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

FY 2011 Approved Life Budget FY 2012 Approved Life Budget

8,753,739 7.559.511 -1,194,228

Increase/(Decrease) to Approved Life Budget:

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,297	627	1,917	295	700	442	147	332	1,401	811	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,297	627	1,917	295	700	442	147	332	1,401	811	

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Washington Aqueduct

Program Title:

Washington Aqueduct

Activity Group/Project Title:

WAD123 Cabin John Bridge

Managing Department:

EPMC:

Priority:

Good Engineering Practices

Project Description:

This project includes roadway and parapet repairs to the historic Cabin John Bridge. The bridge is over 140 years old and carries a nine foot conduit that runs from Great Falls to the Dalecarlia Reservoir. The most recent improvements to the bridge were completed in 2001. Future improvements scheduled for FY 2015 through FY 2017 are additional roadway and parapet repairs.

Impact on Operations:

Improvements to the Cabin John Bridge are not expected to have a significant impact on operating costs.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

Budget

water is life

FY 2011 Approved Life Budget FY 2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

Phase

Design:

Project Completion:

Construction:

921.625 112.685

Start Date

10/1/2010

10/1/2015

Loudoun/PI -

Disbursements

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017

184

147

FY 2018 FY 2019 590

Post FY 2019

808,940

Commitments Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017

147

184 590 FY 2018 FY 2019

Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Washington Aqueduct

Program Title:

Priority:

Washington Aqueduct

Activity Group/Project Title:

WAD126 McMillian WTP Improvements

Managing Department:

EPMC:

Good Engineering Practices

Project Description:

The McMillan Water Treatment Plant was originally built in 1905 and was replaced in 1985 by a 120 MGD rapid-sand filtration facility, located in Northwest Washington adjacent to DC Water's Bryant Street pumping station. The immediate focus for the Aqueduct will be on current projects including the transformer/switchgear building renovation, fire protection system improvements, chemical building renovations, east shaft pumping station pumping station renovation and sample line replacement. Future major projects include: sedimentation improvements (FY 2012 - FY 2013); boat dock/chemical storage building renovation (FY 2014 - FY 2016); chemical building renovations (FY 2011 - FY 2012; FY 2016 - FY 2018); clearwell maintenance & improvements - north (FY 2012 - FY 2013; FY 2019); clearwell maintenance & improvements south (FY 2015 - FY 2016); GIS system (FY 2017 - FY 2019); roof replacements (FY 2016 - FY 2018); SCADA upgrade (FY 2017 - FY 2019); instrumentation improvements starts in FY 2015; process improvements (FY 2017 - FY 2019); sample line replacement (FY 2011); EASA building demolition (FY 2013 – FY 2015); and roadway repairs (FY 2017 – FY 2019).

Impact on Operations:

Improvements to the McMillian WTP are not expected to have a significant impact on operating costs.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Life Budget

FY 2012 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

Phase

Design:

Project Completion:

Construction:

28,033,651 2.180.445

25,853,206

Start Date

10/1/2007

10/1/2017

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,531	1,471	2,986	5,898	590	1,526	1,364	885	2,728	3,392	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	2,531	1,472	2,986	5,898	590	1,526	1,264	885	2,728	3,392	

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Washington Aqueduct

Program Title:

Washington Aqueduct

Activity Group/Project Title:

WAD127 Appurtenant Transmission and Storage Facilities

Managing Department:

EPMC:

Priority:

Good Engineering Practices

Project Description:

Raw water is taken from Great Falls on the Potomac River into two raw water conduits. Raw water is also taken at the Little Falls Pumping Station on the Potomac. Both discharge into the Dalecarlia Reservoir. This project area covers improvements to the Aqueduct's major transmission mains, storage facilities and outlying structures. Current major projects include: Little Falls Pumping Station motor control upgrades (FY 2011 - FY 2012); Warehoused No. 6 Improvements; and reservoir maintenance & improvements - 1st high. Future projects include: Little Falls Pumping Station HVAC Upgrades (FY2012 - FY 2014); reservoir maintenance & improvements - 2nd & 3rd high (FY 2016 - FY 2017, FY 2014 - FY 2015); transmission main improvements (FY2012 - FY 2014); city tunnel repairs (FY 2019); conduit repairs (FY 2015 – FY 2019); cross connection structure upgrade (FY2015 – FY 2017); great falls intake building improvements (FY 2016 – FY 2018); Little Falls Pumping Station crane overhaul (FY 2014 - FY 2016); SCADA upgrades (FY 2017 - FY 2019); Champlain street building renovation (FY 2017 - FY 2018); Rock Creek Blow-Off Valve Replacements starts in FY 2019; Sluice Gate Replacements starts in FY 2019; and Warehouse No. 8 Improvements (FY 2015 - FY 2016).

Impact on Operations:

Improvements to the appurtenant transmission and storage facility are not expected to have a significant impact on operating costs.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

Loudoun/PI -

FY 2011 Approved Life Budget FY 2012 Approved Life Budget

Phase

Design:

Project Completion:

Construction:

22.026.793 33,479,065

11,452,272

Start Date

10/1/2010

10/1/2017

water is life Increase/(Decrease) to Approved Life Budget:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	147	5,397	4,092	2,138	1,880	1,806	4,166	5,309	1,880	2,728	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	148	5,397	4,092	2,138	1,880	1,806	4,166	5,309	1,880	2,728	

(projected disbursements do not include contingencies)

Service Area Title:

Washington Aqueduct

Program Title:

Washington Aqueduct

Activity Group/Project Title:

WAD128 Dalecarlia WTP improvements

Managing Department:

EPMC:

Priority:

Good Engineering Practices

Phase **Start Date** Design: Construction: 10/1/2007

Project

Completion:

10/1/2017

Project Description:

The existing rapid-sand filtration Dalecarlia Water Treatment Plant was built in 1928, with significant improvements made over time, bringing total plant capacity to 220 MGD. Dalecarlia WTP will continue to improve its infrastructure with current projects including the sample line replacements, Maintenance Building Renovation, Fire Protection System Improvements and Intake Building Renovation. Future projects include: visitors center exhibits (FY 2013 – FY 2015);administration building improvements (FY 2015 - FY 2017); basin no. 3 & no. 4 flocculation/sedimentation improvements (FY2018 - FY 2019); carbon facility tank renovations (FY 2014 -FY 2016); chemical building electrical upgrades (FY 2013 - FY 2015); clearwell maintenance & improvements - 15 & 30 MG (FY 2013 - FY 2014, FY 2017 - FY 2018); east filter building renovation phase II (FY 2013- FY 2015); GIS System (FY 2017 - FY 2019); intake building renovation (FY 2012 - FY 2014); maintenance building renovation (FY 2012 - FY 2014); roadway improvements (FY 2017 - FY 2019); roof replacements (FY 2016 - FY 2018); SCADA Upgrades (FY 2017 - FY 2019); south connection building renovation (FY 2015 - FY 2016); wash water tank renovations (FY 2015 -FY 2017); west filter building improvements (FY 2015 - FY 2017); and instrumentation improvements will start in FY 2016.

Impact on Operations:

Improvements to the Dalecarlia WTP are not expected to have a significant impact on operating costs

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

FY 2011 Approved Life Budget FY 2012 Approved Life Budget Increase/(Decrease) to Approved Life Budget:

35,349,547 44,849,953 9.500.406

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	4,089	958	1,475	2,322	7,631	7,004	4,999	4,534	4,939	3,723	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	4,089	958	1,475	2,322	7,631	7,004	4,999	4,534	4,940	3,723	

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Washington Aqueduct

Program Title:

Washington Aqueduct

Activity Group/Project Title:

WAD130 Alternate Treatment Methods

Managing Department:

EPMC:

Priority:

Good Engineering Practices

Project Description:

The Aqueduct undertakes various studies and pilot projects to optimize plant treatment and model the potential impact of future regulatory changes on plant operations. In FY2015 Aqueduct will begin the 30 MG clearwell mixing improvements project, while future projects include Georgetown mixing improvements starts in FY 2018.

Impact on Operations:

Depending on study results and application to existing and future treatment methods, operating costs could increase or decrease.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Life Budget FY 2012 Approved Life Budget

1.812.395 Increase/(Decrease) to Approved Life Budget: 426.214

Start Date

10/1/2008

10/1/2017

Phase

Design:

Project Completion:

Construction:

Loudoun/PI -

Disbursements Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

479

295 369

Post FY 2019

1,386,181

Commitments Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017

147 479

147

FY 2018 FY 2019 295 369

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM APPROVED FY 2010-2019







SECTION IX

Capital Equipment

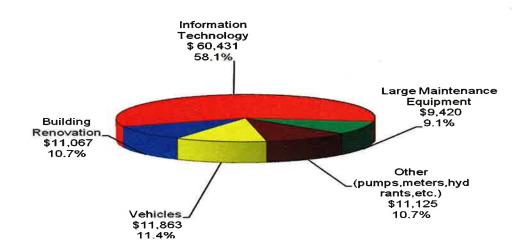
dcwater.com

CAPITAL EQUIPMENT

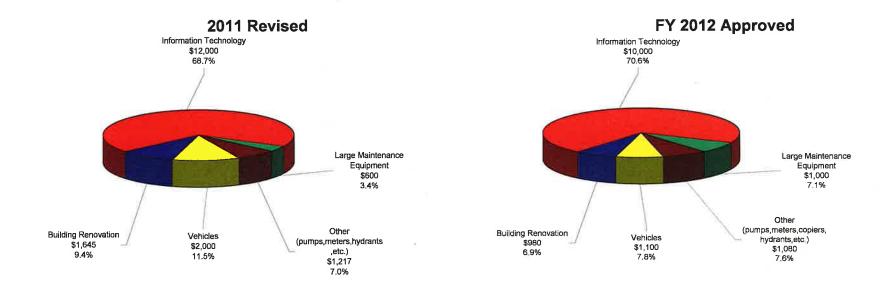
DC Water's Capital Equipment disbursements budget totals approximately \$103.9 million for FY 2010 – FY 2019 plan, an increase of approximately \$5 million compared to the last ten-year plan. Approximately fifty-eight percent of spending in the capital equipment area is on major information technology projects, including the document management system (budget of \$3.7 million) and the asset management system (budget of \$7.4 million). DC Water continues its commitment to scheduled replacement of its vehicle fleet with a budget of \$11.9 million, representing more than eleven percent of the Capital Equipment disbursement budget. Finally, maintenance of large equipment totals \$9.4 million, or nine percent of the ten-year plan. Other equipment including hydrant and valve equipment necessary for the maintenance of the District's public fire system totals \$11.1 million.

The revised FY 2011 budget at \$17.5 million is \$4.2 million more than the FY 2011 approved budget. This variance is primarily attributable to increases in disbursement budgets for Information Technology.

CAPITAL EQUIPMENT DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES FY 2010 – FY 2019 (\$ in 000's)



CAPITAL EQUIPMENT DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES FY 2011 Revised vs. FY 2012 Approved (\$ in 000's)



FY 2011 Revised = \$17,462 FY 2012 Approved = \$14,160

Equipment Purchases

Equipment purchases are made by the Departments of Wastewater Treatment, Water Services, Sewer Services, Customer Service, Fleet Management, Facilities, Security, Information Technology, and Maintenance Services. Amounts shown below are 10-year disbursement totals.

Department of Wastewater Treatment - \$0.7 million

Capital equipment expenditures for this department are for laboratory equipment purchases to maintain a certified laboratory.

Department of Water Services - \$7.5 million

The Department of Water Services is responsible for replacing deteriorated or damaged fire hydrants, water system valves, and system appurtenances. These purchases are separate from Capital Improvement Program activities for the systematic replacement of valves; rather they are for interim replacement of these items as individual needs are encountered by field crews. Activities in the FY 2011 revised and FY 2012 proposed budgets largely remain the same as those carried out by the department in previous years for fire hydrant and Water service replacements.

Department of Sewer Services - \$2.9 million

This department is responsible for replacing catch basins, manhole covers and frames, and rehabilitating regulators and outfall gates. The FY 2010 - 2019 budget plan reflects a major thrust for buying Flow Meter Sensors, Catch Basin Tops and Sewer Cleaning and Repair Equipment as well as an FY2011 temporary requirement for an emergency generator.

Department of Fleet Management - \$11.9 million

A major emphasis is placed on coordinating equipment purchases with the realigned needs of the Authority as Internal Improvement Plans implemented in prior years continue to be carried out over the next few years. The past few years have focused efforts on the larger equipment such as backhoes and dump trucks, to ensure that the critical equipment necessary to support the organizations responsibilities is available and in good, safe working order. This year's budget focuses on replacing many of the infrastructure vehicles within the organization, including ¾ ton pickup trucks, mid-size extended cab pickup trucks, 15-passenger vans, 3/4 ton cargo vans, crew utility vehicles, an emergency response vehicle and electric carts.

Department of Facilities - \$11.1 million

Capital equipment activities for this department include HVAC system and plumbing maintenance at various locations, fencing, landscaping, and fire suppression and detection systems. This year's budget primary focus will be on furniture and fixtures, HVAC at various locations, facilities improvements and photocopier purchase.

Department of Maintenance Services - \$8.5 million

This department is responsible for rehabilitating and replacing large process equipment at Blue Plains, including pumps, screens, variable frequency drives, and large motors. A major emphasis has been placed on the High Priority Rehab Program over the past several years, which ensures that large equipment will function properly until its scheduled replacement in the Capital Improvement Program. High Priority rehab includes work on the Gravity Thickener turn table and main drive units, pumps for Eastern Ave Pumping Station, a Water Clutch Assembly for the Westfalia centrifuge and the Grit Process Blower. They will also be supporting the Solids building conveyor system and lime lines while the Department of Engineering and Technical Services procures and implements the planned digester/cambi system that will reduce reliance on the lime process.

Department of Sewer and Water Pumping - \$0.9 million

This department is responsible for rehabilitating and replacing large process equipment outside of Blue Plains plant, including pumps, screens, variable frequency drives, and large motors. A major emphasis has been placed on the maintenance/repairs at pump stations, which ensures that large equipment will function properly until its scheduled replacement in the Capital Improvement Program.

Department of Information Technology - \$60.4 million

At DC Water, we focus all of our technology initiatives on improving both the quality of services we provide to our customers, organizational effectiveness while being responsive to the environment. We are receiving recognition in this area from several prestigious third parties including back to back CIO 100 awards for 2008, 2009 and 2010 as well as recognition of our work in the field of Geographic Information System (GIS) by Environmental Systems Research Institute (ESRI), a global leader in GIS solutions, for most innovative implementation of GIS in 2009.

In 2010 Computerworld Honors program recognized DC Water as 2010 Laureate as well as we were selected as a Finalist for the 21st century achievement award in the category of Environment, Energy & Agriculture. DC Water's case study was included into permanent research collections over 350 distinguished national archives, museums and institutions of higher learning for its work, "Platform for Spatio Temporal Analytics" as part of the Global Program Archives on six continents.

In 2010, the International Academy of the Visual Arts honored DC Water with W³ Silver Award, "Honoring creative excellence on the web" in the business category for our mobile website initiative completed in FY 2010.

We are leading a collaboration group for CIO's and IT executives within the utilities industry enabling us to reduce risk while employing innovation. These activities have situated us at the same table with numerous multi-national organizations and governmental entities providing truth to the statement that DC Water is a world class organization.

Our work during FY 2011 and our investments in technology over the next several years are further evidence of our commitment

Technology Strategic Plan – We continue to focus on implementing the Information Technology Strategic Plan, most recently revised in FY 2005. This Plan outlines a vision for the delivery of Information Technology services at DC Water, and a methodology for prioritization of all technology projects (which includes an assessment of cost savings and productivity growth). Information Technology investments include those that focus on improvements in information security, infrastructure and the use of Information Technology throughout DC Water to improve the delivery of services to our customers and operational efficiency.

In FY 2010, we focused our efforts on continuing to improve our operations by better integrating people and processes through technology and creating new business values through innovative solution. A few key examples of this effort that are already underway or will begin in the near future are:

Analytics Driven Asset Management" (ADAM)- A First of A Kind Project (FOAK) – In FY 2010, DC Water and International Business Machines Corporation ("IBM") embarked on a collaborative research project, First Of A Kind ("FOAK") project, <u>Analytics Driven Asset Management" (ADAM)</u> which leverages Automated Meter Reading (AMR) and our Total Enterprise Asset Management System (Teams-Maximo) data along with IBM's analytics tools to perform advanced trending and analysis of data. Over the course of the year, personnel from the Authority have collaborated with IBM to develop several beta products consisting of:

- Enhanced Work Management using Route Optimization;
- Predictive Maintenance Analytics to identify trends and patterns that can be acted on; and
- Water Usage Analytics, again, to identify trends and patterns that can be acted on.

It is anticipated that these products will allow the Authority to more effectively use TEAMS-Maximo data to perform trending and analysis and to more effectively plan and execute maintenance, repair and replacement of assets. In the area of water usage, it is anticipated that using this product along with AMR data will allow the Authority to identify faulty meters, incorrect billing, meter tampering and water loss, thus, resulting in a significant reduction of lost revenue. It is anticipated that DC Water will start testing the beta version of these tools in near future.

As a next step, DC Water, IBM: Research Arm, Global Business Services, Software Group will be collaborating on a new initiative, <u>ADAM Research Services (ARS)</u> to develop advanced analytics in support of DC Water strategic goals of reducing operational cost while improving the quality of service to the authority's customers. ARS initiative will focus on three potential tracks to create new business value:

- Dynamic Scheduling-ADAM Enhancements,
- Strategic Asset Replacement Planning, and
- Revenue/Usage Analysis and Optimization.

Website Enhancements – Continuing to build on the past success of our website, <u>www.dcwater.com</u>, multiple enhancements were implemented during FY 2010 to align with our new branding campaign. As part of the continuous website improvement cycle, a new general site design structure went live in mid-2010, which provides visitors streamlined access to information regarding DC Water and this generated an extremely positive response from our website audience. Additional improvements included online permit status check feature, integration of social media, eNewsletter and Board of Directors (BOD) eboardroom as part our green initiatives.

In addition we successfully launched a completely redesigned mobile version of the *dcwater.com*, consistent with industry best practices and in accordance with web standards. This keeps us at the technical forefront of the industry and allows flexibility and engagement with emerging technologies. This was the first of several exciting projects with the mobile user in mind.

Interactive Voice Response – DC Water's enhanced Interactive Voice Response system (IVR) provides our customers with multiple tools related to communication with the Authority, including the ability to pay their bill or report a problem. In FY 2010, enhancements to the IVR included interfacing with the DC Water new telephone system (VOIP) to improve Customer Service processes and reporting, as well as an outgoing call campaign for customers impacted by Lead Service Replacement service lines, reminding them about the service and to flush their lines.

Total Enterprise Asset Management System (TEAMS-Maximo) – During FY 2010 we successfully completed System upgrade from Maximo Version 5 to Version 7, offering many new features and functionality that will provide the Authority with enhanced asset management capabilities and will help to further streamline processes and increase personnel efficiencies while helping to provide better asset management and extend the useful life of assets.

 TEAMS-Maximo Supporting Fleet Management - In FY 2010, we completed the planning phase for the integration of fleet management into TEAMS-Maximo which will increase staff and contractor efficiency, reduce fleet cost-of-ownership, extend the life of assets and allow for performance evaluation, trending and analysis. We will continue pursuing the implementation in FY 2011.

- TEAMS-Maximo Supporting Tracking Private Backflow Prevention Assemblies DC Water's Cross-Connection Control Program is a regulated program under the DC code with a primary goal to protect district residents and DC Water's distribution system from accidental and intentional cross contamination. An essential component of the regulatory program is the ability to track the installation and testing of backflow prevention assemblies (BPA's) in every commercial building in the District. In FY 2010, we completed the integration of this functionality in Teams-Maximo to accommodate the tracking of BPA's and the annual testing of these assemblies.
- TEAMS-Maximo Enhanced Integration with GIS In FY 2010, we enhanced the system integration between Maximo and GIS. In the future this will enhance the ability of Water Services and Sewer Services to plan and execute investigations and repairs as work in the same proximity will be shown graphically on a map. This will result in more investigations and repairs being completed per day. Also, map-based work assignment routing will be deployed to increase field staff efficiency and allow more maintenance to be performed per day.
- Permitting Application Tracking System (PATS-Maximo) During FY 2010 we successfully implemented functionality to allow customers to monitor the progress and status of their permit applications on-line using DC Water's website. Also, customers can view the scheduled completion date of the application review and can view design review comments that pertain to their application. This helps to provide customers useful and timely information regarding their permit applications while reducing the number of phone calls received by DC Water from customers inquiring about the status of projects. Internally, this will increase personnel efficiency as less time will be spent on the phone with customers and less time will be spent researching the status of applications. This is part of DC Water's continuing initiative to better communicate with customers.

Enterprise Geographical Information System (GIS) – DC Water's GIS is a valuable tool that enables employees to look-up information, via the intranet, on our infrastructure; e.g., the exact location of the infrastructure, corresponding street and premise data. GIS has improved organizational effectiveness, asset reliability, and customer satisfaction, having completed the last phase of the creation of the enterprise datasets for water, sewer and customer information in 2009, In FY 2010 to we leveraged the investment in that data and started building vertical applications that would further increase the operational efficiency of the organization.

Automated Meter Reading (AMR) dashboard - AMR dashboard is a prime example how information from various enterprise
systems can be combined to provide a dramatically different view of the data that can lend itself to a better understanding of
end-user consumption and provide opportunities to improve how we perform our daily operations.

Every day, data is extracted from the Automated Meter Reading (AMR) database and matched with the premise dataset in GIS which corresponds to the location of all our customers. The AMR Dashboard presents this matching of information to the user along with a monthly overview of the overall performance of the AMR reads. The operational efficiency comes when this information is used by the Meter Operations group. By targeting incidents in the same locale, the DC Water technicians are able to save fuel, time and costs while proactively responding to potential issues before they can have an impact on customer service and on the bottom line. In addition to improving performance, our application provides an online GIS based dashboard with direct interfaces to customer information in the AMR system allowing field workers and management to track progress daily and over time and identify any issues that may reach beyond single customer impacts. While use of this system has only just started, the return on investment has already been felt across the organization, and continued modifications are being planned.

Impervious Area Charge System (IACS-Multi-Tier) – Implemented in FY 2009, the Impervious Area Charge System, and a GIS-based application used to assess an Impervious Area Charge (IAC) billed to the customers to recover the cost of the CSO Long Term Control Plan costs.

In early FY 2010, we commenced the implementation of the multi-tier rate structure for residential customers. This project required that the Impervious Area database be converted to account for the new multi-tier rate structure along with modifications to the IAB System tools and to the eCIS System. Training and Customer Outreach activities were also included in this 9 month effort that was successfully implemented at the turn of the fiscal year.

In 2010, CIO Magazine honored DC Water as, "One of top 100 innovative organizations that uses IT effectively to create significant business value" for our creative use of GIS technology.

Enterprise Records and Document Management System (KnowledgeLink-ERDMS) – The DC Water Knowledgelink initiative was initiated to assist the Authority with lifecycle management of documents. We commenced phased implementation of the system across the enterprise through departmental/work-group projects in FY2008. In FY 2009, as part of enterprise-wide implementation of KnowledgeLink with Document Libraries included: Customer Service, Biosolids Program, Risk Management, Fleet Management, Safety and Security, and Water Quality.

In FY-2010 we embarked the implementation of a single electronic document repository (PATS-eLibrary) for Permit Application Documents, with integration to our Permit Application Tracking System (PATS-Maximo), used to manage and track permit applications and related activities; and compatibility for planned integration with the GIS system. PATS-elibrary- library went live early FY 2010.

Key benefits of the PATs-elibrary include:

- Single Repository for Permit Application Documents, All documents associated with Permit Applications will be stored in a single repository, reducing the risks of duplicate copies or missed documents and thus decreasing storage costs and increasing operational reliability.
- <u>Multiple Easy Document Retrieval Options</u>, Documents can be quickly and easily located and retrieved in a number of different ways.
- Markup Tools for Electronic Plan Review, Markup tools incorporated in the EDM System allow plans to be reviewed, redlined and approved in electronic format.
- Integrated Indexing And Automated Filing of Documents, Indexing of documents will utilize lookups to the PATS-Maximo and GIS systems where possible, based on the Maximo record Number. Retrieving data from the single System of Record is a best practice that eliminates redundant data entry and reduces data quality errors. Once documents are indexed and verified in a new Quality Control process, they will be automatically released and filed in the appropriate location in the Document Library, with a consistent naming convention for ease of use.

Supervisory Control and Data Acquisition (SCADA) – In FY 2007, the Authority embarked on an initiative to replace its 20 years old Data Acquisition (DAQ) SCADA. Our main objectives were to address reliability concerns, improve operational efficiency and securing sensitive data.

In FY 2009, we successfully completed the implementation of a State-of-the -Art SCADA solution supported by a unique and innovative self healing, fault tolerant, media independent and highly secured architecture for real time transmission of command and control data. The Authority can control and monitor all remote nodes without compromising security. In FY 2010, we completed the integration of SCADA system with facilities coming online as part 2010 CIP as well as integration of Control system and Office network Interconnect offering opportunity to share information to all DC Water users without compromising security.

In FY 2009, CIO magazine named DC Water to its annual list of Top 100 organizations that exemplify the highest level of operational and strategic excellence in Information Technology (IT). DC Water was selected for the CIO award based on First-of-Its-Kind communication and control network infrastructure to support Supervisory Control and Data Acquisition (SCADA) system.

Information Security Program – We have completed a comprehensive Risk Management process for the identification, analysis, and management of business risk according to information asset value. Under the guidance of our Information Security Strategic Plan (2009-2013) we initiated the process to overhaul information security management efforts which included revising the <u>risk management process</u>, the Incident Response Plan, and the Asset Identification Plan. Asset Identification effort reflected on IT's new asset-based approach to risk management linking <u>all</u> information assets to operational functions, business processes, and ultimately strategic goals. Based on the output of these efforts, <u>preparedness plans</u> were revised and the current <u>Disaster Recovery Plan (DRP)</u> was completed in 2010.

The current Disaster Recovery Plan represents the Authority's plan for mitigating risk resulting from unexpected events as well as anticipated events with a low probability but high impact. The primary objectives of this plan are to:

- Identify critical information assets that support critical business processes.
- Identify significant threats to those assets.
- Describe the preparedness requirements to swiftly and efficiently respond to a disaster.
- Define a coherent approach to managing response and recovery activities in response to a disaster to avoid confusion, and reduce error, and ultimately mitigate business impact.
- Develop strategies for recovering damaged assets and/or transferring critical business operations to an alternate location.
- Establish business continuity plans to support the Authority's enterprise-wide Continuity of Operations Plan (COOP) in the event that critical mission capabilities are disabled or degraded.
- Identify critical resources both internal (DC Water) and external (3rd party) necessary to restore critical information assets.
- Recommend additional measures (controls) to augment the Authority's risk management efforts that protect our critical information assets.

The focus of the new revised Disaster Recovery Plan has shifted radically from the previous version to reflect the use of distributed architectures for critical information systems in keeping with our proactive, preventive philosophy for assuring reliability of information systems and services

Field Service Management System (Mobile Computing) – Another major initiative in FY2010 was to deploy GIS to the field crews on a mobile platform. This project aims to outfit the maintenance vehicles with GPS/ RFID/ Communication capability that would act as the foundation for all the field computing initiatives that DC Water has envisioned for the maintenance crews.

An obvious candidate for improving the operational efficiency and the environmental stewardship of the organization is to replace the paper maps used daily by the crews with an electronic version based on the Enterprise Asset Data. So, as was done for the office staff with the GIS Viewer, a generic Mobile GIS viewer was developed on the field computers.

The initial version of the application provides the field workers with the ability to view all the data currently available in the GIS Enterprise database along with the Engineering Records documents currently available in the EMAPS system (As-Builts, Foreman Plats, etc). With the integration with the GPS data from the communication framework, these tools have proved to be an incredible asset for the field workforce.

Telephone System Upgrade – In FY 2010, DC Water completed the implementation of our next generation telephone system (VOIP) to replace the aging legacy phone system. The new Alcatel-Lucent solution will utilize a single infrastructure for voice, data, and video offering greater mobility, advance applications in the areas of customer service and safety as well as system redundancy. Advance applications provide real time agent reporting, skills based routing and advanced agent supervision via Customer Contact application.

Over the next two years, we will continue to focus our efforts on the Board's Strategic Plan to ensure that our use of technology ensures even better service to our customers.

Capital Equipment Technology Projects

In addition to carrying out infrastructure and communication related technology projects, such as Web Development and Network Renewal, the Department of Information Technology is also responsible for planning and implementing enterprise systems throughout the Authority in partnership with the respective operating departments. The most significant efforts underway within the Enterprise Projects are as follows:

Total Enterprise Asset Management System (TEAMS-Maximo-GIS) - \$7.3 million

The TEAMS is a major DC Water-wide undertaking, which began in FY 2004. This project was originally planned to be a water and sewer infrastructure asset management system and has since expanded to integrate the Permitting Application Tracking System, water quality, work order management etc. This system now encompasses the entire organization which will integrate with other enterprise technology solutions already in place or underway at DC Water (such as customer information and billing, financial management systems, AMR, SCADA etc.)

Radios - \$2.1 million

DC Water will be upgrading the current Blue Plains plant radio system. Presently the plant radio system is an analog system which is over twenty years old. DC Water's current license of 450 MHz utilized by this system is due to expire by 2012.

Document Management System -\$ 3.7 million

DC Water embarked on the Enterprise Records and Document Management System (ERDMS) in FY 2004. We will continue with enterprise-wide implementation of KnowledgeLink with Document Libraries throughout the Authority. The 24 x 7-accessible and searchable online Document Libraries enable quick and easy search and retrieval of records, as well as protecting the safety, security and integrity of the loaded documents.

Enterprise Resource Planner (ERP) System - \$3.2 million

In 2000, DC Water implemented its Financial System and in 2001 implemented its Customer Information System. When these systems were implemented DC Water made a decision, based on organizational readiness and the solutions available at that time, not to go with ERP (Enterprise Resource Program....this program allows software systems to interface) System, but to utilize the option of selecting "best-of-breed" systems. In the past 10 years, DC Water as an industry has matured to a different level, and based on the organizational readiness-- and the solutions now available-- DC Water will phase in an ERP System. Money slated for the system is a preliminary estimate. Upon completion of business requirements and RFP process for the Phase I (Customer Information system), the budget will be adjusted accordingly

Automated Meter Reading (AMR) - \$2.0 million

AMR was established at the Authority in 2002, and by 2008 the initial software and top-level hardware (Data Collection Units, Network Connection Console) was obsolete and required upgrade to current technology. Implementation of the latest version of software and hardware allows for improvement in Customer Service, reduction in troubleshooting processes, and greater reporting functionality. Upgrading the application, hardware, and underlying operating systems allows DC Water to take advantage of increased security capabilities, as well as improves system redundancy, business continuity, and disaster recovery services.

AMR supports DC Water's commitment to its customers by providing efficiencies in the cost of services and in the provision of information concerning water use. This is achieved through implementation of state-of-the-art software and hardware systems as well as a secure communications framework. Efficiencies have been gained by reducing personnel required for manual intervention with individual meters and by providing information internally to focus on critical business processes. Provision of interfaces provide information directly to customer billing system, High Usage Notification Systems (HUNA), and both internal and external-AMR Graph, which allows a customer to view their most recent year of usage on a daily basis.

CIP Portfolio Manager System - \$.2 million

This is part of a recommendation from Independent Budget Review. DC Water will embark on an initiative to implement Enterprise Portfolio Management System for CIP related projects.

Route Optimization System - \$.2 million

The proposed project consist of acquiring, configuring and implementing technology that would build on top of existing DC Water Enterprise Systems couple with our joint research work with IBM to optimize routes and schedules of the Authority's maintenance, customer service and inspection crews. By optimizing the performance of each vehicle operation, the Authority will able to improve customer service satisfaction, reduce labor and maintenance costs and operate in a more sustainable manner with potentially less vehicles. Overall the cost saving will result in stabilization of the operating budget minimizing the risk of having to reduce essential services or increase the rates.

Supervisory Control and Data Acquisition (SCADA) System - \$2.0 million

In FY 2007, the Authority embarked on an initiative to replace its 20 years old Data Acquistion (DAQ) SCADA. Our main objectives were to address reliability concerns, improve operational efficiency and securing sensitive data. DC Water plans to continue with the integration of SCADA system with facilities coming online as part of CIP as well as technology refresh as part of system lifecycle management.

Energy Management Information System - \$.6 million

DC Water is deploying an energy management initiative, including a full system audit, which is "developing a plan to implement cost-effective energy savings measures for its facilities and identify carbon footprint reduction opportunities". Successful implementation and management of the defined information system will allow DC Water the ability to better manage total energy use, as well as identify and implement operational strategies that will control load factors, peak load needs and reduce inefficiencies. Ready access to the data also allows DC Water an ability to adjust amounts and timing of energy use to conserve electricity as well as costs. Additionally, DC Water may use the information system to coordinate with energy providers to arrange improved purchasing and rate schedules. Money slated for the system is a preliminary estimate for gathering system requirements as well as pilot implementation for water and sewer pumping stations. Upon completion of business requirements, the budget will be adjusted accordingly.

Customer Information and Billing System - \$.5 million

The Customer Information Billing system was implemented in June 2001. Continued updates and enhancements to the system are scheduled throughout the life of the 10-year disbursement plan.

Redundant Data Center - \$2.0 million

In keeping with the Information Technology Strategic Plan, DC Water has been creating a Redundant Data Center. This facility, complete with uninterrupted power supply and system backup capability, when completed, will provide the ability to seamlessly transition without data loss and with minimal down time.

Network System Renewal- \$6.5 million

A 4-year replacement plan has been developed for Network infrastructure equipment, as well as Intel servers and Enterprise SUN servers for Asset Management, GIS, Document management. The following upgrades will take place to support this plan: Purchase additional servers to further standardize server technology, upgrade backbone routers, access switches, and log monitoring products and consulting services for technology implementation.

Field Services Management System – \$2.0 million

DC Water plans to deploy TEAMS-Maximo-GIS to the field staff by deploying mobile terminals in the vehicles to support Water Services and Sewer Services investigation, maintenance and repair operations. This will help DC Water capture information regarding work on the infrastructure more timely and more accurately and will provide critical data to the field so that personnel can make more informed and better decisions regarding the work. Also, field captured data will provide more complete information to office staff for trending and analysis

Notes:

- 1. Capital equipment is defined by a purchase price greater than \$5,000 and an item that has a useful life of more than three years, or will extend the life of an asset by more than three years. Capital equipment expenditures fall into two broad categories: equipment purchases and ongoing projects. Purchases include items such as fire hydrants, catch basin components, water meters, vehicles, and computers. Budgets for equipment purchases are closed out at the end of each fiscal year. Ongoing projects extend over multiple years and are largely technology-related.
- 2. On the project pages that follow, lifetime budgets prior to FY 2011 reflect only FY 2010 actual disbursements, for projects of an 'on-going' nature, such as Desktop Replacements, High Priority Rehab, and vehicle purchases. On 'One-time' projects such as Asset Management, Document Management, and the Redundant Data Center, the disbursements reflect all of the spending on the effort since it began, while the Commitment budget reflects all of the anticipated spending required to complete the project and place it into service. Additionally, out year budgets show only spending expected through FY 2019. This is due to the generally annual nature of purchases and projects occurring in the Capital Equipment service area of DC Water's capital program.

FY 2010 - FY 2019 CAPITAL EQUIPMENT BUDGET DISBURSEMENTS BASIS (\$ in 000's)

Equipment Type	FY 2010 Actuals	FY 2011 Revised	FY 2012 Approved	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY '10 - FY '19 Total	Project Sheet Ref.	Project Sheet Budget
Wastewater Treatment													
Safety Equipment	\$6	\$15	\$16	\$17	\$18	\$19	\$20	\$21	\$22	\$23	\$175	EB5	
General Equipment	7	16	16	16	16	16	16	16	16	16	151	EB5	
Lab Equipment	10	24	25	26	27	29	30	32	33	35	272	EB5	
Metering & Recording Devices	4	9	9	10	10	11	12	12	13	13	103	EB5	\$701
Total	\$27	\$64	\$67	\$69	\$72	\$74	\$77	\$80	\$ 84	\$87	\$701		
Water Services													
Water Service Replacement	\$96	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$2,436	EA2	\$2,436
System Valve Replacements	108	225	225	225	225	225	225	225	225	225	2,133	EW1	\$2,133
Fire Hydrant Replacements	216	300	300	300	300	300	300	300	300	300	2,916	EX8	2,916
Total	\$420	\$785	\$785	\$785	\$785	\$785	\$785	\$785	\$785	\$785	\$7,485		_,
Sewer Services													
Sewer Pipes/Fittings	\$15	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$285	EA4	
Sewer Inspection Equipment	190	-	-	-	40	-	06		1781	*	40	EA4	
Manhole Covers/Frames	17	33	33	33	33	33	33	33	33	33	314	EA4	
Regulator and Gate Rehabilitation	5	10	10	10	10	10	10	10	10	10	95	EA4	
Sewer Cleaning and Repair Equipmer	28	55	55	55	55	55	55	55	55	55	523	EA4	
Portable Pumps	15	15	15	75	20	20	20	20	75	20	295	EA4	
Flow Meters/Sensor Replacements	26	25	25	50	75	75	75	100	100	100	651	EA4	
Catch Basin Tops/Frames/Covers	31	60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	571	EA4	
Safety Equipment (shoring)	3 = 3	20	-	*	_10	-	I H	-	(*)	10	40	EA4	\$2,814
100 W Emergency Generator & Load C	Center	120	4	*	30 ,	(4)	H	340		\$0	120	ES4	\$120
Total	\$137	\$368	\$228	\$313	\$333	\$283	\$283	\$308	\$363	\$318	\$2,934		
Fleet Management													
Vehicles	\$1,063	\$2,000	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$11,863	EB6	\$11,863
Total	\$1,063	\$2,000	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$11,863		
	•												
Safety and Security													
Modular Hazardous Mat. Storage Bldç	\$6_	\$0	\$0	\$0_	\$0	\$0	\$0	\$0	\$0	\$0	\$6	EO0	\$6
Total	\$6	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6		

FY 2010 - FY 2019 CAPITAL EQUIPMENT BUDGET DISBURSEMENTS BASIS (\$ in 000's)

Facilities		FY 2010	FY 2011	FY 2012								FY '10 - FY '19	Project Sheet	Project Sheet
FIVAC at Various Locations \$225 \$225 \$150 \$150 \$150 \$150 \$150 \$150 \$150 \$170 \$150 \$1725 EF3 F75 F75 F75 F75 F75 F87	Equipment Type				FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019			Budget
FIVAC at Various Locations \$225 \$225 \$150 \$150 \$150 \$150 \$150 \$150 \$150 \$170 \$150 \$1725 EF3 F75 F75 F75 F75 F75 F87	Facilities													
Photocopier Purchase 100 175 200 700 100 200 100 700 100 2,475 EF5		\$225	\$225	\$225	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$1,725	EF3	1,725
VASA-wide fire suppress/detection			,		700	100	100	200	100	700	100	2,475	EF5	\$2,475
Elevator - various locations - - 300 - - - 300 EF8	WASA-wide fire suppress/detection	25	25	25	25	25	25	25	25	25	25	250	EF7	\$250
Furniture and Fixtures	• • • • • • • • • • • • • • • • • • • •	2		42	300	-	8	2	2=3	=	300	600	EF8	600
Furniture and Fixtures	Plumbing at Various Locations	36	50	50	25	25	50	25	25	25	50	361	EX6	
Rollup Doors 18	•	143	885	200	200	200	200	200	200	200	200	2,628	EX6	
Rollup Doors 36 60 50 50 50 120 75 75 75 150 741 EX6 EX6 WASA-wide Fencing 18 25 30 32 34 37 40 41 43 45 345 EX6	Facilities Improvements	143	200	200	200	200	200	200	200	200	200	1,943	EX6	
Total \$725	·	36	60	50	50	50	120	75	75	75	150	741	EX6	
Information Technology	WASA-wide Fencing	18	25	30	32	34	37	40	41	43	45	345	EX6	\$6,017
Desktop Replacements \$592 \$576 \$576 \$576 \$576 \$576 \$576 \$576 \$576 \$576 \$576 \$576 \$576 \$576 \$575 \$559 \$559 \$559 \$559 \$559 \$5574 \$EA6 \$Cable Renewal \$133 \$150 \$175 \$:-	\$725	\$1,645	\$980	\$1,682	\$784	\$882	\$915	\$816	\$1,418	\$1,220	\$11,067		,
Desktop Replacements	Information Tachnology													
Cable Renewal 133 150 175 175 175 175 175 175 175 175 175 1,683 EA7 Telephone System Renewal/Replacer 308 500 300 331 100 100 100 100 100 100 2,039 EA8 Software Applications/Licenses 88 217 200 130 130 130 130 130 130 130 130 1415 EB1 Messaging (Email) Services 6 300 100 25 50 225 10 10 10 50 50 826 EB2 Windows 2003 Migration/ Upgrade 23 247 30 30 30 30 30 30 30 30 30 30 510 EB3 Radios 76 430 1,000 475 30 30 30 30 30 30 30 30 30 2,161 EB4 Redundant Data Center 173 60 300 500 60 60 500 200 60 60 1,973 EB8 Network System Renewal 600 752 750 663 600 765 600 600 600 600 600 600 6,530 EC4 Audio Visual System - IT 9 50 60 30 60 25 30 60 60 60 60 60 600 600 600 600 600 6		\$502	\$576	\$576	\$576	\$562	\$565	\$550	\$559	\$559	\$559	\$5.674	EA6	\$5,674
Telephone System Renewal/Replacer 308 500 300 331 100 100 100 100 100 100 2,039 EA8 Software Applications/Licenses 88 217 200 130 130 130 130 130 130 130 130 130 1		*				•		,				. ,		1,683
Software Applications/Licenses 88 217 200 130 130 130 130 130 130 1,415 EB1 Messaging (Email) Services 6 300 100 25 50 225 10 10 50 50 826 EB2 Windows 2003 Migration/ Upgrade 23 247 30 <td></td> <td>•</td> <td></td> <td>2,039</td>												•		2,039
Messaging (Email) Services 6 300 100 25 50 225 10 10 50 826 EB2 Windows 2003 Migration/ Upgrade 23 247 30 20 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 60 444 EC6 10 10 10 10 10 10 10 10 10 10 10 10 10 10<												•	_	1,415
Windows 2003 Migration / Upgrade 23 247 30 30 30 30 30 30 30 30 30 30 30 30 30												•		826
Radios 76 430 1,000 475 30 30 30 30 30 30 30 30 30 30 30 30 30														510
Redundant Data Center 173 60 300 500 60 60 500 200 60 60 60 1,973 EB8 Network System Renewal 600 752 750 663 600 765 600 600 600 600 6,530 EC4 Audio Visual System - IT 9 50 60 30 60 25 30 60 60 60 444 EC6 Interactive Voice Response 6 98 75 <t< td=""><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2,161</td></t<>	•													2,161
Network System Renewal 600 752 750 663 600 765 600 600 600 600 6,530 EC4 Audio Visual System - IT 9 50 60 30 60 25 30 60 60 60 444 EC6 Interactive Voice Response 6 98 75 <td></td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td>1,973</td>				•								•		1,973
Audio Visual System - IT 9 50 60 30 60 25 30 60 60 60 60 444 EC6 Interactive Voice Response 6 98 75 75 75 75 75 75 75 75 75 75 75 704 EC7 EMAP Phases I and II 20 20 ED1 SQL Upgrade 110 255 10 10 10 10 10 10 10 10 10 10 10 10 445 EG1 Enterprise File System Archiving 54 200 110 100 150 10 10 150 10 10 10 804 EG2 Network Storage System Renewal 158 125 425 425 525 125 125 125 125 125 125 125 2,283 EG3 ERP System 63 300 1,000 1,000 1,800 3,163 EG4 Succession Planning 6 50 50 566 EH2 AMR Enhancements 184 900 100 100 100 100 100 200 100 100 100 1												•		6,530
Interactive Voice Response 6 98 75 75 75 75 75 75 75 75 75 75 704 EC7 EMAP Phases I and II 20 20 ED1 SQL Upgrade 110 255 10 10 10 10 10 10 10 10 10 10 10 10 10	-												-	444
EMAP Phases I and II 20	•													704
SQL Upgrade 110 255 10	·				_					-				20
Enterprise File System Archiving 54 200 110 100 150 10 10 150 10 10 804 EG2 Network Storage System Renewal 158 125 425 425 525 125 125 125 125 125 125 125 2,283 EG3 ERP System 63 300 1,000 1,800 3,163 EG4 Succession Planning 6 50 56 EH2 AMR Enhancements 184 900 100 100 100 100 200 100 100 100 100 1					10	10	10	10	10	10	10			445
Network Storage System Renewal 158 125 425 425 525 1														804
ERP System 63 300 1,000 1,800 -														2,283
Succession Planning 6 50 -										-		•	EG4	3,163
AMR Enhancements 184 900 100 100 100 100 200 100 100 100 100 1					.,000	2	_	2	<u>u</u>	_	2	•	EH2	56
E Contract/Procurement Mgt System 13 100 200 50 50 50 50 - - - 563 EP3 Network Systems Security 9 300 100 50 30 50 30 50 30 50 699 ET1 Intranet 27 464 150 75 </td <td>•</td> <td></td> <td></td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>200</td> <td>100</td> <td>100</td> <td>100</td> <td>1.984</td> <td></td> <td>1,984</td>	•			100	100	100	100	200	100	100	100	1.984		1,984
Network Systems Security 9 300 100 50 30 50 30 50 699 ET1 Intranet 27 464 150 75												•	EP3	563
Intranet 27 464 150 75 75 75 75 75 75 75 75 75 75 75 75 75										30	50			699
		=												1,166
	Handheld Inventory	53	150	100	50	50	50	50	50	50	50	653	ET5	653
Enterprise Backup Solution 71 383 300 100 100 450 100 450 100 2,154 ET7	•											2,154		2,154
Video Conferencing 1 20 50 70 200 10 10 200 10 581 ET8						200	10	10	10	200	10	581	ET8	581
Field Services Mgmt System (Automai 500 350 300 500 50 50 50 50 50 50 1,950 ET9	9	_												1,950
Web-Site Development 110 250 200 275 75 75 75 75 75 75 75 75 1,285 EX7												•		1,285
Financial Management System 159 592 100 100 951 EZ1	·							99		200			EZ1	951

FY 2010 - FY 2019 CAPITAL EQUIPMENT BUDGET DISBURSEMENTS BASIS (\$ in 000's)

	FY 2010	FY 2011	FY 2012								FY '10 - FY '19	Project Sheet	Project Sheet
Equipment Type	Actuals	Revised	Approved	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Total	Ref.	Budget
Customer Information & Billing System	\$128	\$237	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$515	EZ2	515
Payroll/HR System	92	52	30	30	30	30	30	30	30	30	384	EZ4	384
Document Management System	356	788	618	713	493	100	100	300	100	100	3,668	EZ8	3,668
Asset Management System (Maximo +GIS	1,400	1,533	1,350	1,578	835	85	85	85	85	85	7,121	EZ9	
Fleet Management System-	-	200	50			7	7.	0.70			250	EZ9	7,371
Automated Security - Visitor Access S	13	170		*	653	: :		:::		3.5	13	EY3	13
Web EOC	6	30			•	•			3	-	6	EY4	6
Oracle Upgrade	5		150	120	<u> </u>	200	2		200	•	675	EY5	675
AutoCAD	3	7	7	18	96	-	2	-	-	-	35	EO1	35
AutoCAD Lite	3	6	6	26		(A)	=	3.46	-	543	41	EO2	41
CIP Planner	64	150		3.53	3.00	: •	1.00		*	(* .)	214	EO3	214
Sewer and Water Gem	44	-		S#3	3.5	S#8		(**	*	9=0	44	EO4	44
IBM Watson Research	19	-	250	250	3.57	3.5					519	EO5	519
Optimization- Pilot: Daily Fleet Operation	38	150	-		· 1					-	188	EO6	188
Water and Sewer SCADA	13	300	300	200	150	300	150	150	300	150	2,013	EO7	2,013
Board e-book	55	25	2	7=3	940	848	<u>=</u>	~	2	-	80	EO8	80
Permits Relocation	13	105	-	196	343	200	9	848	4	823	118	EO9	\$118
Energy Management	16	200	150	200	(*)	(m)					550	EQ1	550
MAXIMO SCADA Integration	-	100	150	150	:*:	::=0		æ:			400	EK1	400
CS-Leak Detection		100	50		8.5	(- 8		S=1		-	150	EK2	150
Safety System-	-	100	-	(7)	1.71						100	EK3	100
Performance Dashboard	2	50	-	-	-		-				50	EK4	50
Civil 3D	¥	14	14	-	150	125	100	100	€	2	503	EK5	503
SS-Jet Cleaning	¥	14	14	3548	820	245	-	923		540	28	EK6	28
DETS-Scanner/Printer	IX.	50			300	196	*	: <u>*</u>		∞	50	EK7	50
Total	\$5,804	\$12,000	\$10,000	\$10,000	\$4,945	\$4,075	\$3,480	\$3,479	\$3,759	\$2,889	\$60,431	et:	
Maintenance Services													
Major Pump Rebuild/Replacement	\$495	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$3,195	EC1	3,195
Large Electric Motors	300	200	200	200	200	200	200	200	200	200	2,100	EC2	2,100
High Priority Rehab Program	×		-		180	366	*	96	×		_,	EC3	-,
Centrifuge Rebuild / Replace	-	-	400	400	400	400	400	400	400	400	3,200	EM4	3,200
Total	\$795	\$500	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$8,495	*	•
Sewer and Water Pumping													
Major Pump Rebuild/Replacement	\$0	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$900	EI1	\$900
Large Electric Motors	25		-	¥.00	↓ 100	ψ.00 *	4100	φ100	4100	Ψ100	25	EI2	25
Total	\$25	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$925	e	
Total Capital Equipment	\$9,001	\$17,462	\$14,160	\$14,949	\$9,019	\$8,199	\$7,640	\$7,568	\$8,509	\$7,399	\$103,906	<u>s</u>	

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EB5 Laboratory Metering and Recording Equipment

Managing Department:

Wastewater Treatment

EPMC:

Priority:

Good Utility Practice

Project Description:

Annually occurring purchase of laboratory equipment and metering devices,

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -



FY 2011 Approved Budget
FY 2012 Approved Budget
Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

302,000 701,000 399,000

Start Date

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	27	64	67	69	72	74	77	80	84	87	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	27	64	67	69	72	74	77	80	84	87	
(projected disbursements do not include contingencies) (dollars in thousands)											

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EA2 Water Service Replacement

Managing Department:

Water Services

EPMC:

Project

Phase

Design:

Construction:

Completion:

Priority:

Good Utility Practice

Project Description:

Annual maintenance of main and water service lines

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget
Increase/(Decrease) to Approved Budget:

2,808,000 2,436,000 -372,000

Start Date

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	96	260	260	260	260	260	260	260	260	260	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	96	260	260	260	260	260	260	260	260	260	

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EW1 System Valve Replacement

Managing Department:

Water Services

EPMC:

Priority:

Good Utility Practice

Project Description:

Annual program for system valve replacement.

Impact on Operations:

This project will have no effect on the operating budget

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget
Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

2,214,000 2,133,000 -81,000

Start Date

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	108	225	225	225	225	225	225	225	225	225	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	108	225	225	225	225	225	225	225	225	225	
(projected disbursements do not include contingencies) (dollars in thousands)											

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EX8 Fire Hydrant Replacement

Managing Department:

Water Services

EPMC:

Project

Phase

Design:

Construction:

Completion:

Priority:

Good Utility Practice

Project Description:

Annually occurring fire hydrant, valve, and service line rehab and replacement. Also, Lab Equipment and Flow Monitors and Water Service Replacement.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

2,948,000 et 2,916,000 t: -32,000

Start Date

Increase/(Decrease) to Approved Budget:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	216	300	300	300	300	300	300	300	300	300	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget 216 300 300 300 300 300 300 300 300 300											
(projected disbursements do not include contingencies) (dollars in thousands											rs in thousands)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EA4 Sewer Service Utility Equipment

Managing Department:

Sewer Services

EPMC:

Priority:

Good Utility Practice

Project Description:

Annual rehab and replacement of catch basins, and manholes.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dC water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

Phase

Design:

Project Completion:

Construction:

Increase/(Decrease) to Approved Budget:

2,631,000

Start Date

183,000

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_	v	u	u	v	u		"			_

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	137	248	228	313	333	283	283	308	363	318	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	137	248	228	313	333	283	283	308	363	318	

(dollars in thousands)

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

ES4 100W Emergency Generator & Load Center

Managing Department:

EPMC:

Phase **Start Date** Design: Construction: Project Completion:

Priority:

Project Description:

This project will simulate conditions that the generator will face, therfore ensuring their availability during storm events

Impact on Operations:

This project will have no impact on the operating budget.

Funding	by User	(percent):
----------------	---------	------------

DC -

100.00%

EPA -

WSSC -

Fairfax -

Budget

Budget

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

120,000

Loudoun/PI -

Disbursements

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

120

NEW

Post FY 2019

Commitments

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EB6 Vehicle Purchases

Managing Department:

Fleet Services

EPMC:

Project Completion:

Phase

Design:

Construction:

Priority:

Good Utility Practice

Project Description:

Annually occurring DC Water-wide vehicle and equipment purchases.

Impact on Operations:

Newer vehicles should result in lower operating costs.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -



FY 2011 Approved Budget

FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

13,699,000 11,863,000 -1,836,000

Start Date

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,063	2,000	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,063	2,000	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	
(projected disbursements do not include contingencies) (dollars in thousands)											

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EO0 Modular Hazardous Material Storage Bldg.

Managing Department:

Safety and Security

EPMC:

Project

Phase

Design:

Construction:

Completion:

Priority:

Good Utility Practice

Project Description:

This building is utilized for storing hazardous materials.

Impact on Operations:

This project will have no effect on the operating budget.

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Budget

Loudoun/PI -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

Disbursements

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017

Pre FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Commitments Budget

FY 2018 FY 2019

Post FY 2019

0

50,000

6,000

-44,000

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EF3 HVAC at Various Locations

Managing Department:

Facilities

EPMC:

Project

Phase

Design:

Construction:

Completion:

Priority:

Good Utility Practice

Project Description:

Annual program to repair and replace HVAC equipment within DC Water.

Facilities maintains the heating, ventilation and air conditioning of both manned and un-manned structures within the purview of the DC Water system, much of which is necessary to ensure optimal operating conditions for the equipment maintained therein.

This program covers HVAC equipment which requires repairs or replacements outside of the normal renovation cycles of the structures in which they are located.

Impact on Operations:

This project will have no impact on the operating budget

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget **FY 2012 Approved Budget**

Increase/(Decrease) to Approved Budget:

1,725,000 640,000

1,085,000

Start Date

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	225	225	225	150	150	150	150	150	150	150	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	225	225	225	150	150	150	150	150	150	150	

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EF5 Photocopier Purchase

Managing Department:

Facilities

EPMC:

Priority:

Good Utility Practice

Project Description:

This project provides annual funding for the assessment and replacements of copier equipment.

Impact on Operations:

This project will have no impact on opertating budget

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget

FY 2012 Approved Budget Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

-190,000

2,665,000

Start Date

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	100	175	200	700	100	100	200	100	700	100	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	100	175	200	700	100	100	200	100	700	100	
(projected disbursemen						(dolla	rs in thousands)				

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EF7 WASA-wide fire supression/detection

Managing Department:

Facilities

EPMC:

Project Completion:

Phase

Design:

Construction:

Priority:

Good Utility Practice

Project Description:

This project will provide near-term, critical improvements to fire suppression systems in certain DC Water facilities.

Impact on Operations:

This project will have no effect on the operating budget

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

dC water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

927,000 250,000 -677,000

Start Date

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	25	25	25	25	25	25	25	25	25	25	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	25	25	25	25	25	25	25	25	25	25	
(projected disbursements do not include contingencies) (dollars in t											rs in thousands)

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EF8 Elevator Repairs

Managing Department:

Facilities

EPMC:

Design: Construction: Project Completion:

Start Date

Phase

Priority:

Good Utility Practice

Project Description:

One-time project to repair all elevators within the DC Water system that are in need of repair, but which are not within the purview of identified periodic renovation projects.

Impact on Operations:

This project will have no impact on opertating budget

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Budget

Budget

Loudoun/PI -

water is life

FY 2011 Approved Budget

FY 2012 Approved Budget Increase/(Decrease) to Approved Budget:

600,000 600,000

300

300

Disbursements

300

300

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017

FY 2018 FY 2019

Post FY 2019

Commitments

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EX6 Facilities Improvements

Managing Department:

Facilities

EPMC:

Project Completion:

Construction:

Phase

Design:

Priority:

Good Utility Practice

Project Description:

Annual program for maintenance of DC Water-wide facilities including HVAC replacement, elevator rehabs, plumbing, fencing and signage.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

3,774,000 6,017,000 2,243,000

Start Date

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	376	1,220	530	507	509	607	540	541	543	645	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	376	1,220	530	507	509	607	540	541	543	645	
(projected disbursements do not include contingencies) (dollars in thousands)											

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EA6 Desktop Replacements

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Life Cycle Management)

Project Description:

Annual replacement of computer equipment according to three-year plan, including physically securing these assets.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

dC water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

Phase

Design:

Project Completion:

Construction:

Increase/(Decrease) to Approved Budget:

:	5,804,000
:	5,674,000
:	-130,000

Start Date

Disbursements	Pre FY 2011	FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019	
Budget	592	576 576	576	562	565	550	559	559	559		
Commitments	Pre FY 2011	FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019	
Budget	592	576 576	576	562	565	550	559	559	559		
(projected disbursements do not include contingencies) (dollars in thousands)											

District of Columbia Water and Sewer Authority FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EA7 Cable Renewal

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Life Cycle Management)

Project Description:

Annual program for upgrading copper and fiber infrastructure.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

dc water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

Phase

Design:

Project Completion:

Construction:

1,683,000 139,000

Start Date

Increase/(Decrease) to Approved Budget:

1,544,000

Disbursements	Pre FY 2011	FY 2011 FY 2	012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019	
Budget	133	150	175	175	175	175	175	175	175	175		
Commitments	Pre FY 2011	FY 2011 FY 2	012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019	
Budget	133	150	175	175	175	175	175	175	175	175		
(projected disbursemen	(projected disbursements do not include contingencies) (dollars in thousands)											

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EA8 Telephone System Renewal

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Life Cycle Management)

Project Description:

Implementation of next generation telephone system and annual purchase of equipment and enhancements.

Impact on Operations:

Ongoing maintenance renewal and system support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

1,845,000 2,039,000 194,000

Start Date

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	308	500	300	331	100	100	100	100	100	100	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	308	500	300	331	100 -	100	100	100	100	100	
(projected disbursements do not include contingencies) (dollars in thousands)											

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EB1 Software Applications/Licenses

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Software Compliance Management)

Project Description:

Annual software license purchases to ensure compliance with applications needs, usage and standardization.

Impact on Operations:

Ongoing annual maintenance renewal cost.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

dC water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

Phase

Design:

Project Completion:

Construction:

1,535,000 1,415,000 1,415,000

Increase/(Decrease) to Approved Budget:

2018 FY 2019 Post FY 2019

Start Date

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	88	217	200	130	130	130	130	130	130	130	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	88	217	200	130	130	130	130	130	130	130	
(projected dishursemen	nte do not includo	contingenci	oe)							(dolla	rs in thousands)

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EB2 Messaging Services

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice

Project Description:

Enhancements to current version of e-mail system and future upgrades.

Impact on Operations:

Ongoing annual maintenance renewal and technical support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dCd water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

Phase

Design:

Project Completion:

Construction:

Increase/(Decrease) to Approved Budget:

655,000
826,000

Start Date

171,000

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6	300	100	25	50	225	10	10	50	50	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6	300	100	25	50	225	10	10	50	50	
(avainated dishussassass	.40 .40	4:	;)							(-1-11-	i- 4h

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EB3 Windows Migration

Managing Department:

Information Technology

EPMC:

Project

Phase

Design:

Construction:

Completion:

Priority:

IT Best Practice

Project Description:

Windows server migration/upgrade based on 4-year life cycle.

Impact on Operations:

Ongoing annual maintenance renewal and technical support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -Loudoun/PI - water is life

FY 2011 Approved Budget FY 2012 Approved Budget

431,000 510,000 Increase/(Decrease) to Approved Budget: 79,000

Start Date

Disbursements					FY 2014					FY 2019	Post FY 2019
Budget	23	247	30	30	30	30	30	30	30	30	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	23	247	30	30	30	30	30	30	30	30	
(nniected dishursements do not include contingencies)											

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EB4 Radios

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Life Cycle Management)

Project Description:

Radio system upgrade to next generation digital radio system and annual system enhancements.

Impact on Operations:

Ongoing annual maintenance renewal and City-Wide radio fee.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -



FY 2011 Approved Budget
FY 2012 Approved Budget
Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

1,720,000 2,161,000 441,000

Start Date

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	76	430	1,000	475	30	30	30	30	30	30	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	76	430	1,000	475	30	30	30	30	30	30	
(projected disbursemer	nts do not include	contingenc	ies)							(dolla	rs in thousands)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EB8 Redundant Data Center

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Disater Recovery/Business Continuity)

Project Description:

Implementation of plan to ensure data redundancy for DC Water's mission critical systems.

Impact on Operations:

Ongoing annual maintenance renewal and system support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

dC water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

Phase

Design:

Project Completion:

Construction:

1,973,000 -294,000

2,267,000

Start Date

Increase/(Decrease) to Approved Budget:

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	173	60	300	500	60	60	500	200	60	60	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	173	60	300	500	60	60	500	200	60	60	

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EC4 Network System Renewal

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Life Cycle Management)

Project Description:

Ongoing replacement of servers as they reach the end of useful life and go out of maintenance.

Impact on Operations:

Ongoing annual maintenance renewal and system support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -



FY 2011 Approved Budget
FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

6,467,000

6,530,000

Start Date

Phase Design:

Project Completion:

Construction:

63,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	600	752	750	663	600	765	600	600	600	600	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	600	752	750	663	600	765	600	600	600	600	
(projected disbursemen	ts do not include	contingencie	es)							(dolla	rs in thousands)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EC6 Audio Video System

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Life Cycle Mangement)

Project Description:

Audio video system upgrades, primarily for Boardroom, to accommodate technology changes.

Impact on Operations:

Ongoing annual maintenance renewal and system support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -



FY 2011 Approved Budget
FY 2012 Approved Budget
Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

470,000 444,000 -26,000

Start Date

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	9	50	60	30	60	25	30	60	60	60	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	9	50	60	30	.60	25	30	60	60	60	92
(projected disbursemen	ts do not include	contingencie	es)							(dolla	rs in thousands)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EC7 Interactive Voice Response

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Life Cycle Mangement)

Project Description:

Upgrade of current electronic voice response system that allows outbound calling, call recording, and computer and telephone integration.

Impact on Operations:

Ongoing annual maintenance renewal and system support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

Phase

Design:

Project Completion:

Construction:

FY 2012 Approved Budget 704,000
Increase/(Decrease) to Approved Budget: 385,000

319,000

Start Date

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6	98	75	75	75	75	75	75	75	75	
Commitments	Pre FY 2011	FY 2011 I	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	6	98	75	75	75	75	75	75	75	75	
(projected disbursemen	ts do not include	contingencie	es)							(dolla	rs in thousands)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

ED1 Electronic Maps

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

Vectorization of as-built drawings for Department of Engineering and Technical Services. This project is being coordinated with DC Water's new asset management system.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget **FY 2012 Approved Budget**

Phase

Design:

Project Completion:

Construction:

20,000

Start Date

4/1/2003

9/30/2010

Increase/(Decrease) to Approved Budget:

Loudoun/Pi -

Disbursements

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017

FY 2018 FY 2019

Post FY 2019

194,000

-174,000

Commitments

Budget

20

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

Budget 20 (projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EG1 SQL Update

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Life Cycle Management)

Project Description:

SQL server upgrade from SQL server 2000 to SQL server 2005.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

445,000 -49,000

494,000

Start Date

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	110	255	10	10	10	10	10	10	10	10	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	110	255	10	10	10	10	10	10	10	10	

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EG2 Enterprise File System Archiving

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice

Project Description:

Enterprise archival system for shared files.

Impact on Operations:

Ongoing annual maintenance and system technical support.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

Phase

Design:

Project Completion:

Construction:

700,000 804,000 Increase/(Decrease) to Approved Budget: 104,000

Start Date

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	54	200	110	100	150	10	10	150	10	10	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	54	200	110	100	150	10	10	150	10	10	
(projected disbursemen	ts do not include	contingenci	ies)							(dolla	rs in thousands)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EG3 Network Storage System Renewal

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Life Cycle Management)

Project Description:

Enterprise centralized storage data system

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

Phase

Design:

Project Completion:

Construction:

2,463,000 2,283,000 Increase/(Decrease) to Approved Budget: -180,000

Start Date

Disbursements	Pre FY 2011	FY 2011 F	Y 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	158	125	425	425	525	125	125	125	125	125	
Commitments	Pre FY 2011	FY 2011 F	Y 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	158	125	425	425	525	125	125	125	125	125	
(projected disburseme	ents do not include	contingencies	s)							(dolla	rs in thousands)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EG4 ERP System

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice

Project Description:

System upgrade for financial management system and customer information system and convergence

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

water is life

1,000

FY 2011 Approved Budget FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

-787,000

Post FY 2019

3,950,000

3,163,000

Start Date

Disbursements Budget

Commitments

Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 1,000 63 300 1,800

300

1,800

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

(projected disbursements do not include contingencies)

63

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EH2 Succession Planning

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

This program provides support to executive and senior staff in fulfilling development needs

Impact on Operations:

This project will have no impact on operating budget

F	undin	g by	User	(percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

110,000 56,000 Increase/(Decrease) to Approved Budget: -54,000

Start Date

Loudoun/PI -

Disbursements

6

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Phase

Design:

Project Completion:

Construction:

Budget

50

Commitments Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Water Service Area

Program Title:

Metering

Activity Group/Project Title:

EM5 AMR System Enhancements

Managing Department:

Customer Service

EPMC:

Priority:

IT Best Practice (Life Cycle Management)

Project Description:

Project designed to update and maintain the 64 rooftop mounted Data Collection Units (DCU) that receive meter readings.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -



FY 2011 Approved Budget **FY 2012 Approved Budget**

Phase

Design:

Project Completion:

Construction:

1,125,000 1,984,000 Increase/(Decrease) to Approved Budget: 859,000

Start Date

Disbursements	Pre FY 2011	FY 2011 F	Y 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019	
Budget	184	900	100	100	100	100	200	100	100	100		
Commitments	Pre FY 2011	FY 2011 F	Y 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019	
Budget	184	900	100	100	100	100	200	100	100	100		
(projected disbursements do not include contingencies) (dollars in thousands)												

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Priority:

Capital Equipment

Activity Group/Project Title:

EP3 E Contract

Managing Department:

Information Technology

EPMC:

Phase Start Date
Design:
Construction:

Project Completion:

Good Utility Practice

Project Description:

Procurement is in need of streamlined computer-based Procurement sourcing and Contract maintenance functionality. Solution options are being investigated to identify a recommendation.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

400,000 563,000 163,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	13	100	200	50	50	50	50	50			
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	13	100	200	50	50	50	50	50			
(projected disbursements do not include contingencies) (dollars in thousands)											

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

ET1 Network Systems Security

Managing Department:

Information Technology

EPMC:

Priority:

IT Best Practice (Information Security)

Project Description:

Additional measures to secure the network entry points for all DC Water systems.

Impact on Operations:

Ongoing technical support will be required to support I.T. security.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -Loudoun/Pl -



FY 2011 Approved Budget

FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

et	429,000
et	699,000
t:	270,000

Start Date

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019	
Budget	9	300	100	50	30	50	30	50	30	50		
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019	
Budget	9	300	100	50	30	50	30	50	30	50		
(projected disbursements do not include contingencies) (dollars in thousands)												

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

ET2 Intranet

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

User needs analysis and enhanced inter-departmental document sharing.

Impact on Operations:

Ongoing annual system support.

Funding	by User	(percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -



FY 2011 Approved Budget FY 2012 Approved Budget

849,000 1,166,000 Increase/(Decrease) to Approved Budget: 317,000

Start Date

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011 F	Y 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	27	464	150	75	75	75	75	75	75	75	
Commitments	Pre FY 2011	FY 2011 F	Y 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	27	464	150	75	75	75	75	75	75	75	

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

ET5 Handheld Inventory

Managing Department:

Information Technology

EPMC:

Start Date Phase Design: 10/1/2005 Construction: 10/1/2006

Project

Completion:

9/30/2010

Priority:

Good Utility Practice

Project Description:

Provides real-time information and technical control, reducing paperwork and automating basic inventory processes.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget **FY 2012 Approved Budget** Increase/(Decrease) to Approved Budget:

579,000 653,000 74.000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	53	150	100	50	50	50	50	50	50	50	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	53	150	100	50	50	50	50	50	50	50	
(projected disbursements do not include contingencies) (dollars in thousands)											

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

ET7 Enterprise Backup Solution

Managing Department:

Information Technology

EPMC:

Phase **Start Date** Design: Construction: Project Completion:

Priority:

IT Best Practice

Project Description:

Periodic assessment and upgrade of entity-wide backup solutions which support the computer systems within DC Water.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

FY 2011 Approved Budget

FY 2012 Approved Budget

2,154,000 Increase/(Decrease) to Approved Budget: 554,000

1,600,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	71	383	300	100	100	450	100	100	450	100	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	71	383	300	100	100	450	100	100	450	100	
(noticeted dishursements do not include contingencies)											

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

ET8 Video Conferencing

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

Creation and maintenance of Video conferencing functionality at DC Water.

Impact on Operations:

Ongoing annual maintenance support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

FY 2012 Approved Budget 581,000
Increase/(Decrease) to Approved Budget: 301,000

280,000

Start Date

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2011	FY 2011 F	Y 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019	
Budget	1	20	50	70	200	10	10	10	200	10		
Commitments	Pre FY 2011	FY 2011 F	Y 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019	
Budget	1	20	50	70	200	10	10	10	200	10		
(projected disbursements do not include contingencies) (dollars in thousands)												

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

ET9 Field Services Management System

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project

Phase

Design:

Completion:

Construction:

Project Description:

Efficiency motivated effort to install computers in DC Water service vehicles, to streamline reporting, outstanding issue, and ticket closing efforts by field staff. Also, provide ability to assign priority jobs to crews in the field via the onboard computers, instead of relying on radio functionality.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

Loudoun/PI -

dC water is life

FY 2011 Approved Budget
FY 2012 Approved Budget
Increase/(Decrease) to Approved Budget:

 at
 3,035,000

 at
 1,959,000

 at:
 -1,076,000

Start Date

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	500	350	300	500	50	50	50	50	50	50	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	500	350	300	500	50	50	50	50	50	50	

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EX7 Web Site Development

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

Ongoing Website & Enhancements

Impact on Operations:

Ongoing annual system support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

(projected disbursements do not include contingencies)

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget **FY 2012 Approved Budget**

Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

1,285,000 96,000

1,189,000

Start Date

4/1/2001

09/30/2003

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	110	250	200	275	75	75	75	75	75	75	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	110	250	200	275	75	75	75	75	75	75	
(projected disbursements do not include contingencies)										(dolla	rs in thousands)

IX - 58

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EZ1 Financial Management System

Managing Department:

Information Technology

EPMC:

Project

Phase

Design:

Completion:

Construction:

9/30/2010

Start Date

10/1/2002

Priority:

IT Best Practice

Project Description:

In 2000, DC Water implemented its financial system and in 2001 implemented its Customer Information System. When these systems were implemented DC Water made a decision based on organizational readiness and the soultions available at that time, not to go with an ERP System, but to utilize the option of selecting "best-of-breed" systems. In the last 10 years, DC Water has matured to a different level and the industry has as well, and based on current systems assessment DC Water is in the process of procuring a ERP System.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

951,000 Increase/(Decrease) to Approved Budget: 145,000

Disbursements Budget	Pre FY 2011 159	FY 2011 F 592	Y 2012 100	FY 2013 100	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Commitments Budget	Pre FY 2011 159	FY 2011 F 592	Y 2012 100	FY 2013 100	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

806,000

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EZ2 Customer Information & Billing System

Managing Department:

Information Technology

EPMC:

Project

Phase

Design:

Construction:

Completion:

9/30/2012

Start Date

10/1/2000

Priority:

Good Utility Practice

Project Description:

This budget provides for ongoing system enhancements to provide new services to customers including automatic notification of high usage patterns, summary billing for customers with multiple accounts and new functionality to track lead service line replacement.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

dC water is life

FY 2011 Approved Budget
FY 2012 Approved Budget
Increase/(Decrease) to Approved Budget:

 et
 817,000

 et
 515,000

 et:
 -302,000

Loudoun/PI -

 Disbursements Budget
 Pre FY 2011 Pre FY 2011 Pre FY 2012 Pre FY 2013 Pre FY 2014 Pre FY 2014 Pre FY 2015 Pre FY 2014 Pre FY 2015 Pre FY 2015 Pre FY 2015 Pre FY 2015 Pre FY 2016 Pre FY 2016 Pre FY 2017 Pre FY 2018 Pre FY 2019 Pre FY 2016 Pre FY 2017 Pre FY 2018 Pre FY 2019 Pre FY 2016 Pre FY 2017 Pre FY 2018 Pre FY 2019 Pre FY 2017 Pre FY 2018 Pre FY 2019 Pre FY 2018 Pre FY 2019 Pre FY 2018 Pre FY 2019 Pre F

Budget 128 237 150

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EZ4 Payroll/HR System

Managing Department:

Information Technology

EPMC:

Phase **Start Date** Design: Construction: Project

Completion:

Priority:

IT Best Practice

Project Description:

Swipe card entry enhancement to payroll system and employee remote access to individual payroll information.

Impact on Operations:

This project will have no effect on the operating budget, however, due to ongoing system enhancements, the capital budget will maintain budgeted dollars.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

355,000 384,000 Increase/(Decrease) to Approved Budget: 29,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	92	52	30	30	30	30	30	30	30	30	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	92	52	30	30	30	30	30	30	30	30	
(projected disbursements do not include contingencies) (dollars in thousands)										rs in thousands)	

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EZ8 Document Management System

Managing Department:

Information Technology

EPMC:

Project

Phase

Design:

Completion:

Construction:

9/30/2011

Start Date

10/1/2002

Priority:

Good Utility Practice

Project Description:

This project will provide a centralized electronic source for all critical DC Water documents, allowing for better sharing among departments and transfer of information to future DC Water employees.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -



FY 2011 Approved Budget FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

3,668,000 1,416,000

2,252,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	356	788	618	713	493	100	100	300	100	100	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	356	788	618	713	493	100	100	300	100	100	
(projected disbursements do not include contingencies) (dollars in thou										rs in thousands)	

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EZ9 Water/Sewer Asset Management System/Fleet

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

A system to integrate existing customer information, maintenance management, process computer control system (PCCS)/supervisory control, data acquisition system (SCADA), and other systems, to assist DC Water in better managing our water and sewer infrastructure and allow better tracking of specific asset performance.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget
Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

7,371,000 at: 1,015,000

Start Date

10/1/2002

10/1/2004

9/30/2011

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,400	1,733	1,400	1,578	835	85	85	85	85	85	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	1,400	1,733	1,400	1,578	835	85	85	85	85	85	

(projected disbursements do not include contingencies)

(dollars in thousands)

6,356,000

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EY3 Automated Security-Visitor Access System

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

Standardize the visitor and access system for each of the major facilities.

Impact on Operations:

Ongoing annual maintenance and technical support cost.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

13,000 -87,000

Phase

Design:

Project Completion:

Construction:

Increase/(Decrease) to Approved Budget:

Disbursements **Budget**

13

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019 0

100,000

Commitments

Budget

Pre FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

11/1/2008

9/30/2011

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EY4 Web EOC

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

Crisis information management software that delivers real-time information to emergency responders.

Impact on Operations:

Ongoing annual license maintenance cost

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

Phase

Design:

Project Completion:

Construction:

6,000 -94,000

Start Date

10/1/2009

9/30/2011

Disbursements **Budget**

6

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

Commitments

Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

0

100,000

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EY5 Oracle Upgrade

Managing Department:

Information Technology

EPMC:

Phase Start Date
Design:
Construction:
Project

Completion:

Priority:

Good Utility Practice

Project Description:

Upgrade existing Oracle database environment to latest Oracle database environment; required for compatibility with existing and future Enterprise Application at DC Water.

Impact on Operations:

Ongoing annual license maintenance cost.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dC water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

675,000 235,000

440,000

Disbursements	Pre FY 2011	FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	5	150	120		200			200		0
Commitments	Pre FY 2011	FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	5	150	120		200			200		0
(projected disbursements do not include contingencies) (dollars in thousands)										

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EO1 AutoCAD

Managing Department:

Information Technology

EPMC:

Phase **Start Date** Design: Construction: **Project**

Completion:

Priority:

Good Utility Practice

Project Description:

This is software used to create and edit engineering drawings used in design and construction of DC Water projects.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

20,000 35,000 Increase/(Decrease) to Approved Budget: 15,000

Loudoun/PI -

Disbursements Budget	Pre FY 2011	FY 2011 7	FY 2012 7	FY 2013 18	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Commitments Budget	Pre FY 2011	FY 2011 7	FY 2012 7	FY 2013 18	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EO2 AutoCAD

Managing Department:

Information Technology

EPMC:

Phase Start Date Design: Construction: **Project** Completion:

Priority:

Good Utility Practice

Project Description:

This is software used to create and edit engineering drawings in the field as record documents for construction.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -



FY 2011 Approved Budget FY 2012 Approved Budget Increase/(Decrease) to Approved Budget

t [20,000
t [41,000
t: [21,000

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	3	6	6	26				(2)			0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	3	6	6	26							0
(projected disbursemen						(dolla	rs in thousands)				

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EO3 CIP Planner

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

This software is used by DETS to manage the DIP's elements, time, cost and contract management.

Impact on Operations:

This project will have no effect on the operating budget.

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

Phase

Design:

Project Completion:

Construction:

Increase/(Decrease) to Approved Budget:

510,000 214,000 -296,000

Start Date

Disbursements	Pre FY 2011	FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	64	150								0
Commitments	Pre FY 2011	FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	64	150								0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EO4 Sewer and Water Gem

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

This software is used by the Engineering Planning section to model the DC sewer system.

Impact on Operations:

This project will have no effect on the operating budget.

Funding	by User ((percent):
, ananig	Dy 0001	(PO. 00.10).

DC -

100.00%

EPA -

WSSC -

Fairfax -

Budget

Loudoun/PI -

water is life

FY 2011 Approved Budget **FY 2012 Approved Budget**

45,000 44,000 Increase/(Decrease) to Approved Budget: -1,000

FY 2018 FY 2019

Start Date

Phase

Design:

Project Completion:

Construction:

Disbursements

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Commitments Budget

(dollars in thousands)

Post FY 2019

Post FY 2019

0

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EO5 IBM Watson Research

Managing Department:

Information Technology

EPMC:

Phase **Start Date** Design: Construction: **Project** Completion:

Priority:

Good Utility Practice

Project Description:

This project is a collaboration between DC WATER and IBM with the goal of developing and applying data analytics technology to DC WATER Maximo data (work orders, asser defect reports, meter readings, etc) and other data (SCADA, etc).

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

150,000 519,000 369,000

Loudoun/PI -

Disbursements Budget	Pre FY 2011 19	FY 2011 FY 2012 250	FY 2013 250	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Commitments Budget	Pre FY 2011 19	FY 2011 FY 2012 250	FY 2013 250	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EO6 Optimization-Pilot: Daily Fleet

Managing Department:

Information Technology

EPMC:

Phase **Start Date** Design: Construction: Proiect Completion:

Priority:

Good Utility Practice

Project Description:

This proposed project consist of acquiring, configuring and implementing technology that would build on top of existing DC Water Enterprise Systems, extending the Geographical Information System (GIS) currently in place at DC Water to optimize routes and schedules of the Authority's maintenance, customer service and inspection crews.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget **FY 2012 Approved Budget** Increase/(Decrease) to Approved Budget:

400,000 188,000 -212,000

Loudoun/PI -

Disbursements Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 38

150

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

Commitments Budget

38 150

Post FY 2019 0

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EO7 Water and Sewer SCADA

Managing Department:

Information Technology

EPMC:

Project

Phase

Design:

Construction:

Completion:

Priority:

Good Utility Practice

Project Description:

In 2007 DC Water started SCADA project to support the business needs and improve operational efficiencies. A detailed plan for the system upkeep in line with technology advancements & replacing end of life equipment will be outlined. Equipment upgrade include communications and other ancillary devices.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

2,013,000 1,513,000

Start Date

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	13	300	300	200	150	300	150	150	300	150	0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	13	300	300	200	150	300	150	150	300	150	0
(projected disbursements do not include contingencies) (dollars in thousands)											

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EO8 Board e-book

Managing Department:

Information Technology

EPMC:

Phase Start Date
Design:
Construction:

Project
Completion:

Priority:

Good Utility Practice

Project Description:

This project will convert the current print media to eBook format.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

dc water is life

FY 2011 Approved Budget
FY 2012 Approved Budget
Increase/(Decrease) to Approved Budget:

60,000
80,000
20,000

Disbursements	Pre FY 2011	FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	55	25								0
Commitments	Pre FY 2011	FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	55	25								0
(projected disbursements do not include contingencies) (dollars in the										

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EO9 Permits Relocation

Managing Department:

Information Technology

EPMC:

Priority:

Good Utility Practice

Project Description:

This project will be utilized to facilitate the PERMITS department move to Downtown DC.

Impact on Operations:

This project will have no effect on the operating budget.

DC -

100.00%

EPA -

WSSC -

Fairfax -

Budget

Loudoun/PI -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget Increase/(Decrease) to Approved Budget:

105,000 118,000 13,000

Start Date

Disbursements

13 105

13

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

Commitments Budget

105

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Phase

Design:

Project Completion:

Construction:

Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EQ1 Energy Management

Managing Department:

Information Technology

EPMC:

Phase **Start Date** Design: Construction: **Project**

Completion:

Priority:

Good Utility Practice

Project Description:

This Project will be to develop a plan to implement cost-effective energy savings measures for its facilities and identify carbon footprint reduction opportunities.

Impact on Operations:

This project will result in operating efficiencies.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

150,000 550,000 Increase/(Decrease) to Approved Budget: 400,000

Loudoun/PI -

Disbursements Budget	Pre FY 2011	FY 2011 200	FY 2012 150	FY 2013 200	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Commitments Budget	Pre FY 2011	FY 2011 200	FY 2012 150	FY 2013 200	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EK1 MAXIMO SCADA Integration

Managing Department:

EPMC:

Phase Start Date Design: Construction: **Project** Completion:

Priority:

Project Description:

This project will expand SCADA non-connected assets such as rain quage, potomac interceptor to Maximo and move away from paper based inspections to e-inspections

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

400,000

Increase/(Decrease) to Approved Budget: NEW

Loudoun/PI -

Disbursements Budget

Commitments

Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 100 150

150

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 100 150 150

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2019

Post FY 2019

0

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EK2 CS-Leak Detection

Managing Department:

EPMC:

Phase Start Date Design: Construction: Project Completion:

Priority:

Project Description:

This is a pilot project and the objective of this project is to assess the feasibility of a leak detection system tied in some way into a network for correlation analysis and reporting

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

Budget

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

NEW

Loudoun/PI -Disbursements

100

100

50

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

150.000

Commitments Budget

50

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EK3 Safety System

Managing Department:

EPMC:

Phase **Start Date** Design: Construction: Project Completion:

Priority:

Project Description:

This project will make system accessible to all DC Water employees and contractors to easily report workplace safety incidents, observations, and track issue resolution status.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Budget

Budget

Loudoun/PI -



FY 2011 Approved Budget

FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

NEW

Disbursements

Commitments

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

100

100

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

Post FY 2019

0

100,000

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EK4 Performance Dashboard

Managing Department:

EPMC:

Phase Start Date Design: Construction: Project Completion:

Priority:

Project Description:

This project is an Initiative taken by the GM's office through the Performance Management Office for measuring performance across DC Water for different departments.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2011 Approved Budge FY 2012 Approved Budge Increase/(Decrease) to Approved Budge

et	
et	50,000
et:	

Disbursements Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

50

Post FY 2019

Commitments

Budget

Pre FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EK5 Civil 3D

Managing Department:

EPMC:

Phase Start Date
Design:
Construction:

Project
Completion:

Priority:

Project Description:

This is a software used to create and edit engineering drawings used in design and construction of DC Water projects. Users include both design and construction team members. The project is intended to primarily support the Engineering Department needs and will be managed by the department.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

503,000

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget		14	14		150	125	100	100			0
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget		14	14		150	125	100	100			0
(projected disbursements do not include contingencies) (dollars in thousands)											

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EK6 SS-Jet Cleaning

Managing Department:

EPMC:

Start Date Phase Design: Construction: Project Completion:

Priority:

Project Description:

This is a portable video inspection system that will enhance the application of the Jet-Vac Combination sewer cleaning machine. This equipment will give the Jet-Vac operator the ability to inspect and evaluate pipelines up to 18 inches for the removal of grease build up, root intrusion etc as part of the first responding crew. The project is intended for the Sewer Services Department needs.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC -

EPA -

WSSC -

Fairfax -

water is life

14

FY 2011 Approved Budget FY 2012 Approved Budget Increase/(Decrease) to Approved Budget:

28,000

Loudoun/PI -

Disbursements Budget

14 14

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019 0

Commitments Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019 0

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EK7 DETS-Scanner/Printer

Managing Department:

EPMC:

Phase Start Date Design: Construction: Project Completion:

Priority:

Project Description:

The project is intended for the Documents and Permits Office and Technical Information Center to support their special Scanning and Printing needs for Technical Drawings. The Engineering Department would be the primary user of the equipment bought herein.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Budget

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

50,000

Loudoun/PI -

Disbursements

50

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Post FY 2019

Commitments Budget

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 50

Post FY 2019

(projected disbursements do not include contingencies)

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EC1 Pump Repair and Replacement

Managing Department:

Maintenance Services

EPMC:

Project

Phase

Design:

Construction:

Completion:

Priority:

Good Utility Practice

Project Description:

Annual program for the repair and replacement of major pumps at Blue Plains.

In addition to addressing problems which arise during the year, FY10 will include rebuilds of Spent Wash Water Pumps, High Pressure Reclaimed Effluent Pumps, and Filter Influent Pumps. FY10 will include replacement of the Nitrification Return Sludge Pumps.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dC water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

3,195,000 -705,000

3,900,000

Start Date

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	495	300	300	300	300	300	300	300	300	300	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	495	300	300	300	300	300	300	300	300	300	
(projected disbursements do not include contingencies) (dollars in thousands)											

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EC2 Large Electric Motors

Managing Department:

Maintenance Services

EPMC:

Phase Start Date
Design:
Construction:
Project

Priority:

Good Utility Practice

Project Description:

Large motors periodically need to be completely rebuilt or replaced at DC Water facilities to maintain process systems and meet permit compliance. Repairs planned for FY 2010 include: Eddy Current Drivess, Filter Influent Pump Motors, Grit Pump Motors, Westfalia Centrifuge Motor, Spent Wash Water Pump Motor and Nitrification return Sludge Pump Motors.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

Completion:

2,100,000 -207.000

2,307,000

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	300	200	200	200	200	200	200	200	200	200	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget	300	200	200	200	200	200	200	200	200	200	

(projected disbursements do not include contingencies)

Capital Equipment Service Area Title: **Phase** Start Date Design: **Program Title:** Capital Equipment Construction: **Activity Group/Project Title:** EC3 High Priority Rehab Program **EPMC:** Maintenance Services **Managing Department:** Project Completion: **Good Utility Practice Priority:**

Project Description:

Major rebuild/replacement of critical process equipment at Blue Plains is needed in order to maintain permit compliance and provide water service to customers. Equipment includes, but is not limited to; Backflow Preventers, Rotamat Screens (Degrit), Dual Purpose Sedimentation Basin Gates, Gravity Thickener Collector, VFD's for Secondary Pumping and replace hanger bearing in solids processing conveyors.

Impact on Operations:

This project will have no effect on the operating budget.

<u>Funding</u>	by User (percent):	_
DC -	Joint Use - Indirect Cost	
EPA -		
WSSC -		
Fairfax -		water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

019 Post FY 2019

Commitments Budget <u>Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019</u>

Post FY 2019

746,000

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

EM4 Centrifuge Repair and Replacement

Managing Department:

Maintenance Services

EPMC:

Phase Start Date

Design:
Construction:

Project
Completion:

Priority:

Project Description:

Repair and replacement of Centrifuges at Blue Plains.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

dC water is life

FY 2011 Approved Budget

FY 2012 Approved Budget Increase/(Decrease) to Approved Budget:

3,200,000 2,600,000

600,000

Disbursements	Pre FY 2011	FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget		400	400	400	400	400	400	400	400	
Commitments	Pre FY 2011	FY 2011 FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget		400	400	400	400	400	400	400	400	
(projected disbursements do not include contingencies) (dollars in thousands)										

FY 2010 - 2019 Capital Improvement Program

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

El1 Major Pump Rebuild/Replacement

Managing Department:

Sewer and Water Pumping

EPMC:

- 1

Phase Design:

Project Completion:

Construction:

Priority:

Good Utility Practice

Project Description:

Annual program for the repair and replacement of Major Pumps at Blue Plains.

In addition to addressing problems which arise during the year, FY10 will include rebuilds of Spent Wash Water Pumps, High Pressure Reclaimed Effluent Pumps, and Filter Influent Pumps. FY10 will include replacement of the Nitrification Return Sludge Pumps.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

100.00%

EPA -

WSSC -

Fairfax -

dc water is life

FY 2011 Approved Budget

FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

900,000

2,400,000

Start Date

Loudoun/PI -

Disbursements	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget		100	100	100	100	100	100	100	100	100	
Commitments	Pre FY 2011	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Post FY 2019
Budget		100	100	100	100	100	100	100	100	100	

(projected disbursements do not include contingencies)

Service Area Title:

Capital Equipment

Program Title:

Capital Equipment

Activity Group/Project Title:

El2 Large Electric Motors

Managing Department:

Sewer and Water Pumping

EPMC:

Project

Phase

Design:

Construction:

Completion:

Priority:

Good Utility Practice

Project Description:

Large motors periodically need to be completely rebuilt or replaced at DC Water facilities to maintain process systems and meet permit compliance. Repairs planned for FY 2010 include: Eddy Current Drivess, Filter Influent Pump Motors, Grit Pump Motors, Westfalia Centrifuge Motor, Spent Wash Water Pump Motor and Nitrification return Sludge Pump Motors.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

EPA -

WSSC -

Fairfax -

water is life

FY 2011 Approved Budget FY 2012 Approved Budget

Increase/(Decrease) to Approved Budget:

25,000 -1.775.000

Post FY 2019

Post FY 2019

1,800,000

Start Date

Loudoun/PI -

Disbursements **Budget**

25

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Commitments

Pre FY 2011 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019

Budget

(dollars in thousands)

(projected disbursements do not include contingencies)