

CAPITAL IMPROVEMENT PROGRAM LEADERSHIP | VALUE | INNOVATION



APPROVED FY 2012 - 2021

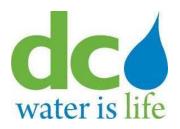
Adopted January 3, 2013

Allen Y. Lew, Chairman of the Board

George S. Hawkins, General Manager

Yvette Downs, Acting Chief Financial Officer





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(As of January 3, 2013)

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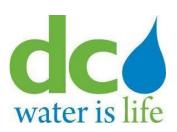
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ACKNOWLEDGEMENTS

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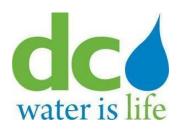
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Finance and Budget Department

Temi Abosede

Gail Alexander-Reeves

Kofi Anim

Javed Awan

Anil Bansal

Jessica Belle

Val Blinkoff

Deborah Cole

Yvette Downs

Annie Fulton-George

Michael Goddard

Rodea Hines

Robert Hunt

Michelle Hunter

Stacey Johnson

Easmon Kaneh

Syed Khalil

William Lake

Reginald Lipscomb

James Myers

Lola Oyeyem

Quang Phami

Yvonne Reid

Sylvia Riley

Suzette Stona

Hoa Truong

Ngozi Ugwu

Pade Zuokemefa

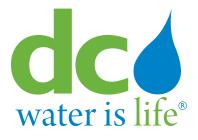
The Finance and Budget Department would like to extend its appreciation to all the departmental staff members whose hard work and dedication helped make this document possible.

TABLE OF CONTENTS

Section I. Letter of Fransmittal	
Introduction and Summary	I-2
Section II. Capital Program Overview and Summary Information	
Capital Improvement Program – Uses, by Service Area	II-2
Capital Improvement Program Overview	
Historical and Projected Capital Spending	
FY 2012 – FY 2021 Capital Improvement Plan – Disbursements Basis	
FY 2012 – FY 2021 Capital Improvement Plan – Lifetime Budgets	
FY 2012 – FY 2021 (FY 2014) Capital Authority Request	
FY 2012 – FY 2021 Sources of Capital Financing	
List of New Capital Projects	
List of Closed / Dropped Capital Projects	
Appendix – Capital Projects-Project Names and Page Numbers	
, appointment of the contraction	
Section III. Wastewater Treatment Service Area	
Service Area Overview	III-2
Wastewater Treatment Area Project Sheets	
Appendix – Wastewater Projects-Project Names and Page Numbers	
Section IV. Sanitary Sewer Service Area	
Service Area Overview	IV-2
Sanitary Sewer Service Area Project Sheets	
Appendix – Sanitary Sewer Projects-Project Names and Page Numbers	
Section V. Combined Sewer Overflow Service Area	
Service Area Overview	V-2
Combined Sewer Overflow Area Project Sheets	
Appendix – Combined Sewer Overflow Projects-Project Names and Page Numbers	

TABLE OF CONTENTS

Section VI. Stormwater Service Area	
Service Area Overview	VI-2
Service Area Overview	VI-5
Appendix – Stormwater Projects-Project Names and Page Numbers	VI-47
Section VII. Water Service Area	
Service Area Overview	VII-2
Water Service Area Project Sheets	VII-8
Automated Meter Reading Project Sheets	VII-99
Appendix – Water Service Projects-Project Names and Page Numbers	VII-102
Section VIII. Washington Aqueduct	
Service Area Overview	VIII-2
Service Area Overview	VIII-5
Section IX. Capital Equipment Service Area	
Service Area Overview	IX-2
List of Closed Capital Equipment Projects	IX-7
List of Closed Capital Equipment Projects	IX-8
Capital Equipment Project Sheets	IX-11
Appendix – Capital Equipment Projects-Project Names and Page Numbers	IX-90



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

SECTION I
INTRODUCTION

APPROVED FY 2012 - 2021





FY 2012 - FY 2021 CAPITAL IMPROVEMENT PROGRAM LETTER OF TRANSMITTAL

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

January 3, 2013

Mr. Allen Lew, 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 January 3, 2013. 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.

As shown in the table on the next page, this approved budget includes: \$3.8 billion for our FY 2012 – FY 2021 CIP (10-year disbursement budget); \$8.4 billion for lifetime budget; and \$557.1 million for new Capital Authority request. This budget reflects the continuation of major capital asset investment in programs and projects that will improve the condition of our local waterways, create clean energy and reduce operating costs in future years. The CIP includes all mandated projects as well as rehabilitation of assets required to meet permit and other regulatory requirements and all service needs. Further, the plan includes a five-year Asset Management Program with \$20 million of funding in the Wastewater, Water and Sewer Service Areas. The purpose of this project is to fully leverage technology to operate, maintain, upgrade and dispose of assets to achieve the greatest efficiencies as well as asset cycle value. Also included in the CIP plan is \$40 million for the Green Infrastructure Demonstration (Project LJ) in the CSO-LTCP Service Area. This funding was previously included in the Potomac and Rock Creek Tunnel Projects. The disbursements for this project have been accelerated in anticipation of modifications

currently under discussion for the CSO-LTCP. These modifications will define the framework under which our green infrastructure projects may advance and help us understand the practicality and efficacy of green infrastructure for CSO control.

Capital Improvement Program (CIP) Budget	
(\$000's)	

			Capital Authority
Program Area	10-Year Disbursements	Lifetime Budget	Request
Wastewater Treatment	1,368,481	2,733,742	49,419
Sanitary Sewer	383,770	924,498	35,233
Combined Sewer Overflow	1,288,559	2,812,315	379,603
Stormwater	15,984	63,168	0
Water System	589,219	1,615,971	73,839
Washington Aqueduct (DC Water Share)	107,144	203,138	11,192
Capital Equipment	96,022	96,022	7,750
Total	3,849,179	8,448,854	557,036

There are a number of fairly significant additions/modifications to the Water Service Area outlined in this year's CIP. First, DC Water is in the process of upgrading the automated meter reading (AMR) equipment as part of our preventative maintenance program for the Meter Read Transmission Units and Data Collection Units (MTUs and DCUs). These units collect approximately 260,000 meter readings per day and are an essential asset to our billing process. The upgrade allows DC Water to move to the current version of AMR software in addition to providing two-way communication between the meter transmitting units (MTUs) and the data collection units (DCUs). The two-way nature of the communication will allow DC Water to retrieve information from any meter or group of meters at any time, which will help with a number of operations functions, including leak detection, meter status, and billing. It will also help provide data to consider other rate designs, such as demand rates, seasonal rates, and minimum usage rate.

As was noted last year, activity at the Blue Plains site location will continue at unprecedented levels for the next few years. Disbursements over the next three years will equate to \$1.7 billion or 44% of the ten year plan. Of this amount more than 50%

will be associated with four projects; Project CY – Anacostia River Tunnel; Project E9 – Nitrogen Removal Facilities; Project EG- Wet Weather Peak Mitigation – Blue Plains Tunnel; and Project XA – New Digestion Facilities.

This year we broke ground on our Northeast Boundary Neighborhood Protection Project an infrastructure initiative that will mitigate historic flooding and sewer backups in the Bloomingdale and LeDroit Park neighborhoods. The Northeast Boundary Neighborhood Protection Project will be built in three steps. Each step of the initiative will provide incremental improvements to mitigate flooding and additional costs will be reimbursed by the DC government. It will reduce the pressure on the undersized section of the Northeast Boundary Trunk Sewer that serves Bloomingdale and LeDroit Park by doing the following

- 1) Adding 6 million gallons of stormwater storage from two stormwater lines that run east and west of the McMillan site, using existing and new facilities on the site itself. (Estimated completion Spring 2014)
- Adding 6 million gallons of stormwater and wastewater storage from a combined sewer line that runs west of the Washington Aqueduct McMillan treatment plant, in a new tunnel under First Street NW (Estimated completion Spring 2016)
- 3) Re-aligning the Northeast Boundary section of the Clean Rivers Project, and accelerating construction of this section to reduce risk and provide more certain delivery of flood relief to Bloomingdale and LeDroit Park (Estimated completion accelerated from 2025 to 2022)

Acknowledgements

Finally, we want to thank our General Manager, George S. Hawkins and both our former Chairman of the Board, William H. Walker, and Chief Financial Officer Olu Adebo for their vision and leadership as we worked on the development and ultimate 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 its aging infrastructure. We also want to acknowledge all of the support from the hard working and dedicated professionals of DC Water for the thoroughness, hard work and long hours required to develop this capital plan for Board presentation, review and adoption. With this blueprint going 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.

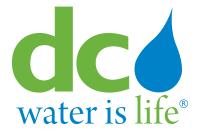
Sincerely,

Yvette Downs

Acting Chief Financial Officer

Leonard Benson

Chief Engineer



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

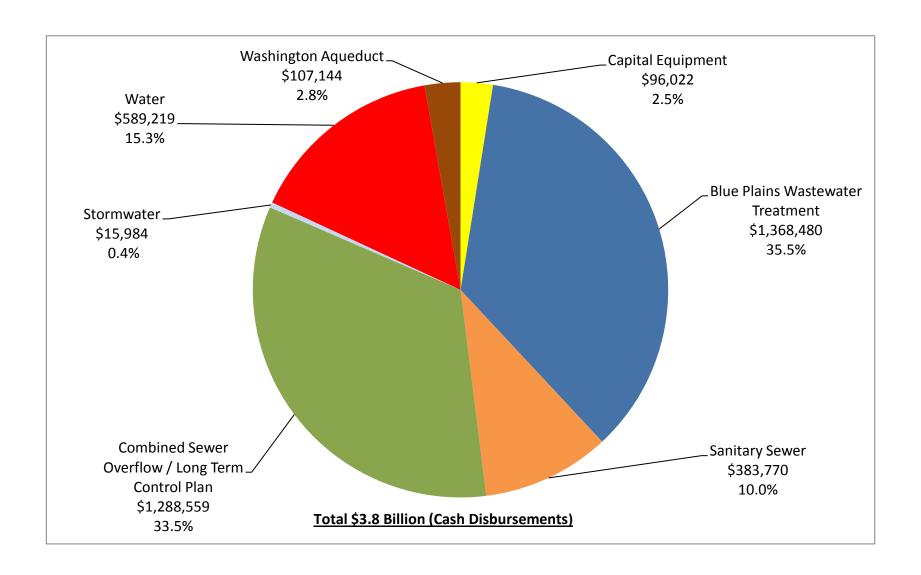
SECTION II

CAPITAL IMPROVEMENT PROJECTS OVERVIEW

APPROVED FY 2012 - 2021



FY 2012 - FY 2021 Capital Improvement Program (\$ in 000's)



FY 2012 – FY 2021 CAPITAL IMPROVEMENT PROGRAM OVERVIEW

District of Columbia Water and Sewer Authority's ("DC Water") ten-year capital improvement program (CIP) totals \$3.8 billion (on a cash disbursements basis), approximately the same amount as the past few years. Lifetime budgets increased in all service areas (with the exception of the Washington Aqueduct and Capital Equipment) in the aggregate amount of \$429.5 million resulting in a total lifetime budget of \$8.4 billion. The Congressional Capital Authority request is \$557 million.

While all mandates and immediate critical needs are incorporated into this ten-year plan, there is approximately \$850 million in projects which have been identified as prudent asset re-investments for DC Water, but have not been prioritized for inclusion within the current 10-year planning period. In addition, disbursements for existing projects have been accelerated in anticipation of modifications currently under discussion for the Combined Sewer Overflow Long-Term Control Plan (CSO-LTCP). These proposed changes (DC Clean Rivers Green Infrastructure) are discussed in more detail within this section and throughout this CIP document and contribute to an increase in the CSO-LTCP service area of \$104 million. This increase is offset slightly by a decrease in the Sanitary Sewer Service Area of \$74 million. All other service areas remain relatively level to the previous year.

The following summarizes major projects and changes in each service area. 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 increased by \$57 million driven primarily by the Solids Processing Projects. There were increases of \$10.8 and \$15.1 in the Liquid Processing and Plantwide Projects, respectively. These increases were mainly offset with a decrease in the Enhanced Nitrogen Removal facilities of \$21.9 million. Included in the increases in the Plantwide Projects is \$10 million for the development and implementation of an Asset Management Program for the Wastewater Treatment Service Area. With regards to the Solids Processing Area, the Digestion Project (Project XA) experienced an increase in the Lifetime Budget of \$39.3 million related to the combined heat and power and final dewatering portions of this project. Also, the Gravity Thickeners Upgrade Project experienced an increase of \$15.7 million.

As indicated above, this area continues to reflect the implementation of the Biosolids Management Plan including the costs of construction of the Combined Heat and Power Facility (CHP), Main Process Train (Digesters and thermal hydrolysis process) and Final Dewatering Facilities, with estimated completion in late FY 2014. The benefits of this plan include production of a Class A biosolids product which can be more widely beneficially reused at reduced costs; reduction in the carbon footprint relative to the existing lime stabilization process; and, the on-site production of electricity with an estimated net of 10MW 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 significant projects that are underway include Secondary Treatment Facility Upgrades/Enhanced Nitrogen Removal North (Project BI) projected to start construction in FY 2013 and Filtrate Treatment Facilities (Project EE), currently in design with construction anticipated to start in FY 2014.

COMBINED SEWER OVERLFOW

The lifetime budget for the Combined Sewer Service Overflow (CSO) Service Area has increased by \$137 million to \$2.8 billion, which includes the twenty-year DC Clean Rivers Project (CSO Long Term Control Plan). The current ten-year disbursement budget has an increase of approximately \$104 million over last year's budget. This increase is the result of a number of items. First, are the addition of FY 2021 and the deletion of FY 2011 from the ten year plan. Second, is the increase in the estimated cost of the Anacostia River Tunnel included in the previously identified lifetime budget. Third, is the addition of a demonstration project entitled DC Clean Rivers Green Infrastructure (Project LJ). This project as planned would install large-scale demonstration controls in the Potomac and Rock Creek watersheds to understand and evaluate the practicality and efficacy for green infrastructure in use of CSO control. Final installation will depend upon a detailed and thorough discussion with EPA and outreach to all stakeholders along the way to ensure that the overall aims of reduced overflows in the Potomac and Rock Creek watersheds can be accomplished. This project has been funded in the short term from amounts previously included in the Potomac and Rock Creek Tunnel Projects. Spending on this project has been accelerated to the near term as compared with the out year's spending for referenced tunnels.

During Fiscal Year 2013 another of the more significant contracts since the Authority was created will be awarded under the DC Clean Rivers and Enhanced Nitrogen Removal Projects for construction of the tunnel dewatering pump station and enhanced clarification facility at Blue Plains. This will be the second major contract that will support the reduction of sewer overflows as well as the enhanced nitrogen removal processes required by the recent permit limitations for the Blue Plains Wastewater Treatment plant. As has been noted over the past few years there are additional risks and contingencies associated with the 20-year DC Clean Rivers Project that exist and need to be evaluated over time. For instance, recent flooding in Bloomingdale has warranted a review of the time frame anticipated for the Northeast Boundary tunnel work included within the Anacostia River Tunnel portion of the DC Clean Rivers Program. A task force designated by the Mayor of the District of Columbia recently made several recommendations that would accelerate that work and thus impact disbursement assumptions. Those recommendations are under review and have not been included within this ten-year planning window, but will be incorporated as further decisions, impacts and funding availability are determined in future budget cycles. 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 continuing to update the budget projections when certain milestones have been reached.

STORMWATER

The lifetime budget for the Stormwater Service Area is \$63.2 million, an increase of \$4.7 million from last year primarily as a result of increased funding for Storm Sewer Rehabilitation, Project IE, for \$4.8 million. 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. Under the current MS4 permit issued to the DC government, DC Water is responsible for the inspection, repair and cleaning of stormwater outfall structures, stormwater catch basins (annually), and clearing of blockages as necessary from storm sewer lines in DC public space. 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.

SANITARY SEWER

Many 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 sewer 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 17,000 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 \$69.3 million resulting in a lifetime budget of \$924.5 million. The proposed 10-year CIP reflects spending at just over \$383 million of which more than fifty percent relates to the Sanitary Interceptor/Trunk Force Sewers. There is approximately \$330 million related to above referenced - - and already identified - - projects in the lifetime budget for this service area. The remaining amounts (about \$200 million) will be included in future requests as they are analyzed and prioritized with all other funding needed for all service areas.

Also, there are approximately \$180 million in sanitary collection sewer projects identified in the 10-year Capital Improvement Plan that transmit some flow from our wholesale customers. These are projects in planning or design exclusive of projects already under construction. D.C. Water has implemented a new hydraulic model to determine our wholesale customer's share of these projects. Accordingly, in calendar 2011 we reached a preliminary agreement that for FY 2012 and forward that their share of these projects would reflect the new model; prior to this agreement this portion was previously identified in the CIP as assigned to the District of Columbia ratepayers as a placeholder. The suburban share of these projects is consistent with the 1985 Inter Municipal Agreement (IMA) as well as the proposed new 2012 IMA.

WATER

The lifetime budget for the Water Service Area (including Meter Replacement / AMR installation/CIS) is \$1.6 billion, an increase of \$163.4 million from last year's CIP. The reduction in the lifetime budget for DDOT Water Projects (\$53.4 million) reflects the transition beginning in FY 2014 of these projects to the Water Distribution Systems program area. This was done to provide flexibility in the replacement of the watermain distribution system. If for any reason DDOT's activities are reduced, DC Water can continue with its goal with regard to the replacement of distribution mains. Also, this years' increase includes a new program beginning in FY 2015 for the replacement of existing AMR installations as well as for the procurement and installation of a new Customer Information System (CIS) beginning in FY 2013.

The water service area CIP includes a majority of the projects recommended in the 2009 Water Facilities Plan Update. Major water projects include construction of pump station upgrades; new storage facilities; water main replacements, rehabilitations and extensions; fire hydrant replacements; and valve replacements.

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 a little less than 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 remains at \$203.1 million. The budget reflects the prioritized need for infrastructure improvements over the next ten years.

CAPITAL EQUIPMENT

DC Water's Capital Equipment budget totals approximately \$96 million for the FY 2012 – FY 2021 plan, a decrease of approximately \$2.3 million compared to the last ten-year plan. Approximately thirty eight percent of spending in the capital equipment area is on major information technology projects, including the document management system (\$2.8 million) and the infrastructure upgrades (\$6.6 million). DC Water continues its commitment to scheduled replacement of its vehicle fleet with a ten year budget of \$15.6 million, representing about sixteen percent of the ten-year plan. Finally, maintenance of large equipment totals \$22.7 million or about twenty four percent of the ten-year plan. Other equipment including pumps, valves and meters necessary for maintenance (including that of the District's public fire system) totals \$9.5 million.

The revised FY 2013 budget is \$18.4 million or \$3.1 million more than the currently approved budget. This variance is primarily attributable to increases in budgets for Fleet Management and Maintenance Services.

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 and 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' Environmental Quality & Sewerage Services, Water Quality and Water Services, Finance & Budget and DC Retail Water and Sewer Rates Committees in October. The Committees complete their review from October through December. The operating budgets, capital improvement program, and ten-year financial plan are then forwarded to the full Board for its consideration in late winter; usually January.

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 2014 request totals \$557 million, and reflects the following:

- Remaining authority from prior years' appropriations;
- Projected commitments in FY 2013 and FY 2014;
- Planned FY 2015 and FY 2016 commitments, to ensure adequate authority exists, in the event that any projects are accelerated.
- Risk allowance associated with the construction of the Blue Plains Tunnel, the Anacostia River Tunnel components for the Clean Rivers project, and projects related to flood-mitigation efforts in the Bloomingdale neighborhood of Washington, D.C.

Due to the timing of the Congressional appropriations process, authority requests must be made well in advance of commitment execution. Including projected FY 2015 and FY 2016 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 generally 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 Enhanced 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 pay back, 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.

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.

Lifetime 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.

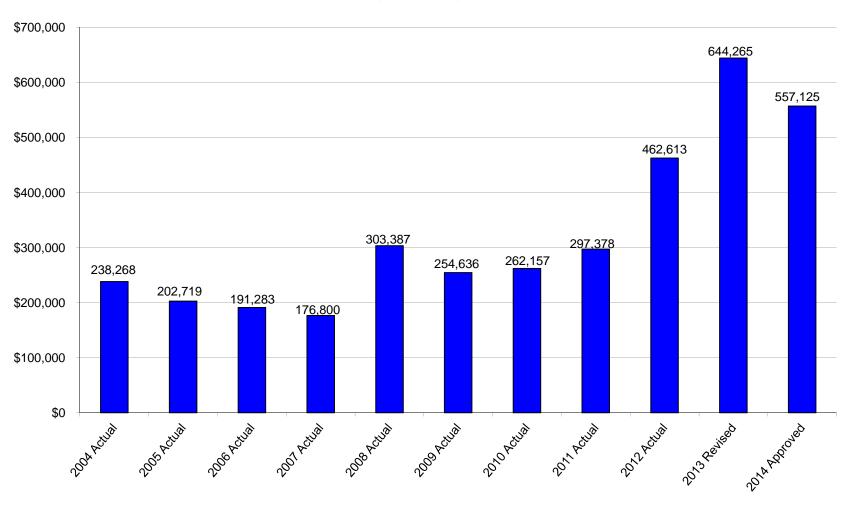
Disbursements / Commitments Budgets – projected disbursements and commitments for various projects are shown by fiscal year in which they are anticipated. Commitments budgets are based on total project budgets, which reflect the fully loaded, anticipated costs of a project, including project contingencies. 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 2004 - FY 2014 (\$ in 000's)



FY 2012 - FY 2021 PROJECTED CAPITAL IMPROVEMENT PLAN (CIP) - DISBURSEMENTS BASIS (\$ in 000's)

	FY 2012	FY 2013	FY 2014								Total
Wastewater Treatment	Actual	Revised	Approved	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY '12 -'21
Limited December Decimate	#00.044	#00.004	#40.400	#40 00 7	644.00 5	640 505	£44.000	CO 404	#4.500	6440	¢404 507
Liquid Processing Projects Plantwide Projects	\$22,311 17,060	\$23,884 27,128	\$16,403 15,590	\$18,067 10,545	\$14,085 6,298	\$13,505 6,708	\$11,903 13,671	\$9,421 7,505	\$1,596 3,152	\$412 1,807	\$131,587 109,463
Solids Processing Projects	95,923	159,690	128,116	44,194	12,305	10,389	3,531	7,505 80	3, I32 -	1,007	454,228
Enhanced Nitrogen Removal Facilities	95,925	159,090	120,110	44, 194	12,303	10,369	3,331	00	-	-	454,220
(formerly BTN - Total Nitrogen Program)	118,011	147,842	107,728	107,687	80,855	70,077	30,673	1,890	2,540	5,901	673,202
Sub-total	253,305	358,543	267,836	180,493	113,542	100,679	59,777	18,896	7,289	8,120	1,368,480
Sanitary Sewer	200,000	000,040	207,000	100,430	110,042	100,013	00,777	10,030	1,203	0,120	1,000,400
Sanitary Collection Sewers	1,386	858	6,694	11,466	8,289	4,094	5,666	6,735	6,912	7,088	59,187
Sanitary On-Going Projects	7,169	10,544	9,292	6,612	6,562	6,948	7,169	7,604	8,163	8,123	78,186
Sanitary Pumping Facilities	189	679	347	241	-	-	-	-	-	-	1,455
Sanitary Sewer Projects Program Management	5,108	4,229	4,906	4,570	4,160	5,351	5,191	4,218	3,891	3,540	45,164
Sanitary Interceptor/Trunk Force Sewers	9,931	12,774	20,897	20,282	29,447	29,596	24,997	19,702	16,654	15,498	199,778
Sub-total	23,783	29,084	42,136	43,170	48,458	45,989	43,023	38,259	35,620	34,249	383,770
Combined Sewer Overflow / Long Term Control Plan	ŕ	•	ŕ	·	•	•	•	•	•	•	•
CSO Program Management	1,812	1,634	1,968	1,444	1,077	1,394	1,903	2,319	1,844	1,418	16,812
Combined Sewer Projects:Nine Minimum Controls	4,932	2,844	1,491	, 41	_	_	_	_	_	, <u>-</u>	9,308
Combined Sewer Projects:Others	4,034	6,111		26,437	40,820	15,348	11,161	8,600	11,226	21,340	
•		0,111	15,975	20,437	40,620	15,346	11,101	0,000	11,220	21,340	161,053
D.C. Clean Rivers Project (aka Long-Term Control F	•										
Anacostia Tunnel	101,880	150,900	126,261	164,914	138,414	87,570	42,109	48,666	76,184	58,914	995,812
Potomac Tunnel	-	1,793	6,561	14,279	13,857	7,000	7,963	11,072	11,432	24,364	98,321
Rock Creek Tunnel	-	227	89	-	222	732	757	1,348	1,926	1,952	7,253
Sub-total	112,658	163,509	152,345	207,115	194,390	112,044	63,893	72,005	102,612	107,988	1,288,559
<u>Stormwater</u>											
Stormwater Local Drainage	-	28	115	67	209	160	152	158	151	126	1,166
Stormwater On-Going Program	1,192	812	436	390	452	407	421	458	456	467	5,492
Stormwater Pumping Facilities	-										-
DDOT Stormwater Program	-	2	8	18	32	29	30	16	-	-	136
Stormwater Research and Program Management	337	289	237	140	119	140	192	234	186	143	2,017
Stormwater Trunk/Force Sewers	1,786	2,120	2,883	337	47		-	_			7,173
Sub-total	3,315	3,252	3,680	952	859	736	795	866	793	736	15,984
<u>Water</u>	00.000	05.445	00.005	00.000	04.000	04.040	04.050	04.007	44.000	40.000	0.40.040
Water Distribution Systems	22,020	25,445	39,605	36,632	31,269	34,343	34,256	34,287	44,823	40,936	343,616
Water On-Going Projects	7,361	10,321	8,074	6,807	5,676	6,633	5,768	6,326	6,057	6,066	69,089
Water Pumping Facilities	2,425	3,226	4,359	2,610	5,191	3,023	6,219	-	8	36	27,099
DDOT Water Projects	3,577 1,146	5,791 1,353	1,971 3,667	789 7,028	- 8,192	- 7,677	3,766	- 2,799	- 1 750	- 1,226	12,128
Water Storage Facilities Water Projects Program Management	4,188	4,332	3,007 4,721	5,064	3,970		3,780	3,318	1,750 3,232	3,122	38,604 39,456
Water Lead Program	1,927	4,332 1,860	1,373	1,051	3,970 1,792	3,929 1,764	1,893	2,002	3,232 1,967	3,122	39,456 15,630
Meter Replacement /AMR Installation	1,927	8,529	3,071	4,153	4,242	4,394	4,283	4,318	4,339	4,360	43,597
Sub-total	44,553	60,858	66,841	64,133	60,332	61,763	59,765	53,051	62,176	55,745	589,219
oub-total	44,000	00,000	00,041	04,100	00,002	01,700	03,700	33,031	02,170	00,740	003,213
Washington Aqueduct	11,286	10,598	10,744	11,016	11,280	11,588	10,891	10,323	9,842	9,576	107,144
Capital Equipment	13,713	18,422	13,543	9,529	6,998	7,133	7,211	6,531	6,481	6,461	96,022
Total FY 2014 DC Water CIP	\$462,613	\$644,265	\$557,125	\$516,408	\$435,861	\$339,931	\$245,355	\$199,930	\$224,813	\$222,876	\$3,849,178

	FY 2013 Approved	FY 2013 Revised / FY 2014 Approved	Variance
Wastewater Treatment			
Liquid Processing Projects	622,106	632,948	10,842
Plantwide Projects	345,887	360,994	15,107
Solids Processing Projects	719,537	772,912	53,375
Enhanced Nitrogen Removal Facilities			
(formerly BTN - Total Nitrogen Program)	988,778	966,888	(21,890)
Sub-total	2,676,308	2,733,742	57,434
Sanitary Sewer			
Sanitary Collection Sewers	133,906	162,656	28,750
Sanitary On-Going Projects	159,677	173,757	14,080
Sanitary Pumping Facilities	25,898	30,458	4,560
Sanitary Sewer Projects Program Management	103,135	91,086	(12,049)
Sanitary Interceptor/Trunk Force Sewers	432,583	485,644	53,061
Sub-total	855,199	943,601	88,402
Combined Sewer Overflow			
CSO Program Management	55,239	55,239	-
Combined Sewer Projects: Nine Minimum Controls	213,888	213,388	(500)
Combined Sewer Projects: Others	244,844	320,823	75,979
D.C. Clean Rivers Project (aka Long-Term Control Plan)			
Anacostia Tunnel	1,672,282	1,714,720	42,438
Potomac Tunnel	418,700	423,700	5,000
Rock Creek Tunnel	70,342	65,342	(5,000)
Sub-total	2,675,295	2,793,212	117,917
Stormwater			
Stormwater Extensions/Local Drainage	17,999	22,816	4,817
Stormwater On-Going Program	9,658	11,323	1,665
Stormwater Pumping Facilities	0	0	-
DDOT Stormwater Program	4,720	3,237	(1,483)
Stormwater Projects Program Management	10,630	10,630	-
Stormwater Trunk/Force Sewers	15,504	15,162	(342)
Sub-total	58,511	63,168	4,657

FY 2012 - FY 2021 Capital Improvement Plan

Project Lifetime Budgets by Service Area / Program (\$ 000's)

		FY 2013 Revised /	_
	FY 2013	FY 2014	
	Approved	Approved	Variance
Water			
Water Distribution Systems	695,720	857,178	161,458
Water Lead Program	191,040	191,040	0
Water On-Going Projects	117,541	127,879	10,338
Water Pumping Facilities	161,372	155,908	(5,464)
DDOT Water Projects	91,538	38,184	(53,354)
Water Storage Facilities	74,311	75,762	1,451 [°]
Water Projects Program Management	47,559	78,756	31,197
Meter Replacement /AMR Installation	73,534	91,264	17,730
Sub-total	1,452,615	1,615,971	163,356
Washington Aqueduct	203,138	203,138	0
Capital Equipment	98,307	96,022	(2,285)
Total DC Water CIP Lifetime (see notes)	8,019,373	8,448,854	429,481

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 2012 will be dropped from the CIP next year.

² These budgets do not include inhouse labor costs, estimated to be in the \$9 to \$10 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 2014 Capital Authority Request (\$ 000's)

Fiscal Year 2014 *Capital Authority Request

Service Areas

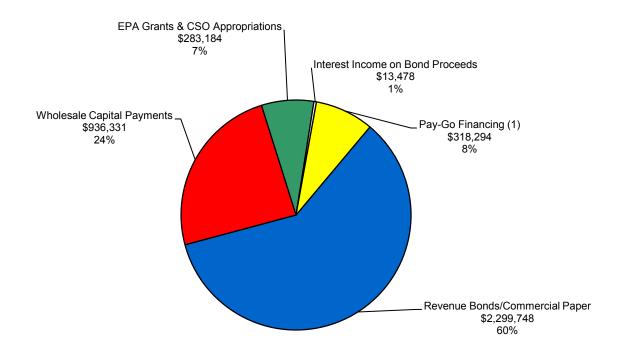
Blue Plains Wastewater Treatment		\$49,419
Sanitary Sewer System		35,233
Combined Sewer Overflow	1,2	379,603
Stormwater		0
Water System		73,839
Washington Aqueduct (DC Water s	hare)	11,192
Capital Equipment		<u>7,750</u>
To	otal	\$ <u>557,036</u>

The authority request includes a 24 month look-ahead, i.e., it also takes into account projected commitments for FY 2015 and FY 2016.

¹ Includes Special Risk Allowance of \$74 million for the D.C. Clean Rivers Project (aka Long Term Control Plan - "LTCP"), although not part of this Project's Lifetime Budget.

² Includes allowance of \$150 million in anticipation of advancement of the NE Boundary Tunnels and other activities in an effort to mitigate flooding issues in the Bloomingdale neighborhood of Washington, D.C.

FY 2012 - 2021 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 125.5 million operating and maintenance reserve, approximately \$125.5 million in FY 2013. These transfers reduce the amount of new debt issuance.

List of New Projects

Project I.D.	Project Title	Service Area	Budgeted Cost
JT	Combined Sewer Rehabilitation 4	Combined Sewer Overflow	\$27,602,000
LJ	DC Clean Rivers Green Infrastructures	Combined Sewer Overflow	40,000,000
JR	Large Sewer Rehabilitation 10	Sanitary Sewer	16,175,500
JS	Small Local Sewer Rehabilitation 10	Sanitary Sewer	13,910,000
JU	Sanitary Sewer Rehabilitation 4	Sanitary Sewer	4,565,000
LK	Large Sewer Rehabilitation 11	Sanitary Sewer	16,055,000
LL	Small Local Sewer Rehabilitation 11	Sanitary Sewer	16,055,000
LN	FY2021 - DSS Sanitary Sewer Projects	Sanitary Sewer	12,945,000
LR	Sanitary Sewer Asset Management	Sanitary Sewer	5,000,000
JH	FY2020 - DSS Storm Sewer Projects	Stormwater	820,000
LO	FY2021 - DSS Storm Sewer Projects	Stormwater	845,000
J6	Deammonification Project	Wastewater	1,483,000
LC	Effluent Disinfection Upgrades	Wastewater	770,000
LM	ENR Program Management	Wastewater	32,751,235
LP	Wastewater Asset Management Tech Support	Wastewater	10,000,000
LS	Misc. Facilities Projects FY2013	Wastewater	1,350,000
JZ	Large Dia Water Main Repl 3, 4, & 5	Water	63,710,000
KA	Large Valve Repl Contracts 20, 21, & 22	Water	17,610,000
KE	Small Dia Water Main Rehab18	Water	46,340,000
KV	Water Program Mgt. Services 2F	Water	30,610,000
KW	FY2021 - DWS Water Projects	Water	10,255,000
LQ	Water Service Area Asset Management	Water	5,000,000
EM6	AMR - Billing Systerm	Water / AMR	8,000,000
			\$381,851,735
EW6	CIPP Trenchless Equipment	Capital Equipment	\$375,000
EW7	Appliances	Capital Equipment	50,000
EW8	Membrane Diffuser, Mechanical/Electrical	Capital Equipment	1,066,000
PE1	Actuators	Capital Equipment	1,859,000
PE2	Flow Meters	Capital Equipment	1,044,000
PE3	PLCs	Capital Equipment	2,193,000
PE4	Digesters - Major Equipment Replacement	Capital Equipment	1,564,000
			\$8,151,000

List of Closed / Dropped Projects

Project I D	Project Title	Service Area	Cost at Completion
Project I.D.		Service Area	Completion
Closed Projec		NA	67.046.707
AQ	FY2009 - DWS Water Projects	Water	\$7,916,787
D4	Small Valve Replacements 5	Water	757,191
FJ	Parking Ramp Rehab - Bryant St. PS	Water	409,672
MK	24" Wtrmain Ft. Stanton Res to MLK AVE	Water	16,365,329
QM	Small Valve Replacements - Contract 4	Water	2,830,723
D9	FY2014 - DDOT Water Projects	Water	6,300,000
DH	FY2015 - DDOT Water Projects	Water	6,600,000
DV	FY2016 - DDOT Water Projects	Water	7,000,000
FL	FY2017 - DDOT Water Projects	Water	7,300,000
GT	FY2018 - DDOT Water Projects	Water	7,750,000
HZ	FY2019 - DDOT Water Projects	Water	8,000,000
J8	FY2020 - DDOT Water Projects	Water	10,400,000
CI	O Street - Facility Projects	Combined Sewer Overflow	612,704
		_	\$82,242,406
Dropped Proje	<u>ects</u>		
P1	FY2000 - DDOT STORMWATER PROJECTS	Stormwater	\$409,709
P2	FY2001 - DDOT STORMWATER PROJECTS	Stormwater	607,789
P3	FY2002 - DDOT STORMWATER PROJECTS	Stormwater	119,639
P4	FY2003 - DDOT STORMWATER PROJECTS	Stormwater	-
H1 AS	MWCOG Budget Items FY2009 - DDOT Water Projects	Wastewater Water	39,499 92,152
MT	Small Diameter Watermain Rehab. (1)	Water	92,152 11,653,488
MY	Elim. Dead Ends (Contract 3 & 4)	Water	7,693,453
		_ _	\$20,615,729

CAPITAL PROJECTS

	FROJECT MAINE AND FAGE NOWIDERS	
Project ID	Project Name	Page #
A2	Liquid Processing Program Management	III-8
A4	Sanitary Interceptor/Trunk/Force Sewers	IV-47
A5	Georgetown West Relief Sewer (Sec 1)	VI-5
A7	Supplemental Environmental Projects	V-7
A9	FY2010 - DSS Sanitary Sewer Projects	IV-25
AF	FY2010 - DWS Water Projects	VII-51
Al	FY2008 - DWS Water Projects	VII-49
AK	WSSC Interconnections	VII-8
AL	Plantwide Project Program Management	III-28
AM	Solids Processing Program Management	III-56
AN	FY2010 - DSS Storm Sewer Projects	VI-15
AO	FY2009 - DSS Storm Sewer Projects	VI-14
AP	FY2009 - DSS Sanitary Sewer Projects	IV-24
AQ	FY2009 - DWS Water Projects	VII-50
AR	FY2009 - DDOT STORMWATER PROJECTS	VI-34
AS	FY2009 - DDOT Water Projects	VII-78
AT	Stormwater Program Management	VI-45
AU	Sanitary Sewer Program Management	IV-44
AV	CSO Program Management	V-5
AY	Upgrades to Ft. Reno Pumping Station	VII-63
AZ	COF Renovations	III-29
B0	B0 FY2010 - DDOT Water Projects	VII-79
B3	B3 FY2010 - DDOT Stormwater Projects	VI-35
ВА	WASA Low Impact Development Projects	V-8
BB	Potomac Pumping Station Rehab	V-9

CAPITAL PROJECTS

	FROJECT NAIVIE AND FAGE NOIVIDERS	
Project ID	Project Name	Page #
BD	FY2011 - DSS Storm Sewer Projects	VI-16
BE	FY2011 - DWS Water Projects	VII-52
BF	FY2011 - DSS Sanitary Sewer Projects	IV-26
BG	Dual Purpose Rehabilitation	III-9
ВН	Rock Creek CSO Projects	V-10
BI	Enhanced Nitrogen Removal (ENR)	III-66
BK	CSO Nine Minimum Control Projects	V-11
BM	FY2011 - DDOT Stormwater Projects	VI-36
BN	FY2011 - DDOT Water Projects	VII-80
ВО	Future Stormwater Projects	VI-46
BP	Grit Chamber Facilities Phase II	III-10
BQ	Primary Treatment Facilities Ph II	III-11
BR	Nitrification/Denitrification Fac	III-12
ВТ	Filtration/Disinfection Fac PH II	III-13
BV	RWWPS No. 2 Upgrades	III-14
BW	Lead Service Replacement Program	VII-98
BX	Gravity Thickener Upgrades Ph II	III-57
BY	Additional Chemical Systems PH III	II-30
BZ	Large Valve Repl. (Contracts 8 & 9)	VII-9
C1	FY2001 - DSS Storm Sewer Project	VI-9
C4	FY2004- DSS Storm Sewer Project	VI-10
C6	FY2006- DSS Storm Sewer Project	VI-11
C7	FY2007- DSS Storm Sewer Project	VI-12
C8	FY2008 - DSS Storm Sewer Project	VI-13
C9	Large Diameter Water Mains 1	VII-10

CAPITAL PROJECTS

Project ID	Project Name	Page #
СВ	FY2012 - DDOT Stormwater Projects	VI-37
CC	FY2012 - DWS Water Projects	VII-53
CD	FY2012 - DSS Storm Water Projects	VI-17
CE	FY2012 - DSS Sanitary Sewer Projects	IV-27
CH	Misc Facility Projects	III-31
CI	O Street - Facility Projects	V-12
CJ	FY2012 - DDOT WATER PROJECTS	VII-81
CK	WWTP Sampler Program	III-32
CL	FY2013 - DDOT Stormwater Projects	VI-38
CM	FY2013 - DDOT Water Projects	VII-82
CN	FY2013 - DSS Stormwater Projects	VI-18
CP	FY2013 - DWS Water Projects	VII-54
CQ	FY2013 - DSS Sanitary Projects	IV-28
CV	Laboratory Upgrades	III-33
CW	Perimeter Security at Blue Plains	III-34
CX	Sewer Facilities Security Upgrades	IV-38
CY	Anacostia LTCP Projects	V-32
CZ	Potomac LTCP Projects	V-33
D2	Outfall Sewer Rehabiliation	V-13
D4	Small Valve Replacements 5	VII-11
D5	FY2014 - DWS Water Projects	VII-55
D6	FY2014 - DSS Sanitary Sewer Projects	IV-29
D7	FY2014 - DSS Stormwater Projects	VI-19
D8	FY2014 - DDOT Stormwater Projects	VI-39
D9	FY2014 - DDOT Water Projects	VII-83

CAPITAL PROJECTS

Project ID	Project Name	Page #
DA	DWT Research / Pilot Projects	III-15
DD	O Street Development Effort	V-14
DE	Small Diameter Water Main Rehab 12	VII-12
DF	Rehab 24 Steel Main - Rock Creek	VII-13
DG	FY2015 - DWS Water Projects	VII-56
DH	FY2015 - DDOT Water Projects	VII-84
DI	FY2015 - DSS Sanitary Sewer Projects	IV-30
DJ	FY2015 - DSS Stormwater Projects	VI-20
DK	FY2015 - DDOT Stormwater Projects	VI-40
DL	Citywide Fire Hydrant Program	VII-14
DM	UAMI Relief Sewer	IV-48
DN	Sewer Inspection Program	IV-45
DP	Chemical Building Enhancements	III-35
DQ	Non-OEM PLC Interfaces/Replacements	III-36
DR	Low Area Trunk Sewer Rehabilitation	IV-49
DS	New Headquarters Building	V-15
DT	FY2016 - DDOT Stormwater Projects	VI-41
DU	Water System Laboratory Facilities	VII-64
DV	FY2016 - DDOT Water Projects	VII-85
DW	FY2016 - DSS Sanitary Projects	IV-31
DX	FY2016 - DSS Stormwater Projects	VI-21
DY	FY2016 - DWS Water Projects	VII-57
DZ	Rock Creek CSS LTCP Project	V-34
E8	Enchance Clarification Facilities	III-67
E9	Nitrogen Removal Facilities	III-68

CAPITAL PROJECTS

Project ID	Project Name	Page #
EA2	Water Service Replacement Equipment	IX-11
EA4	Sewer Services	IX-12
EA6	Desktop Replacement Systems	IX-13
EA7	Cable Renewal	IX-14
EA8	Telephone Renewal	IX-15
EB1	Software Applications	IX-16
EB2	Lotus Infrasturcture Upgrade (Messaging Services)	IX-17
EB3	Windows NT Migration	IX-18
EB4	Radio Equipment	IX-19
EB6	Fleet Management	IX-20
EB8	Redundant Data Center	IX-21
EC1	Pump Repairs/Replacement	IX-22
EC2	Large Electric Motors	IX-23
EC3	High Priority Rehab Program	IX-24
EC4	Network System Renewal	IX-25
EC6	Audio Visual System	IX-26
EC7	Interactive Voice Response	IX-27
ED8	Maximo Support for Wastewater	IX-28
ED9	Lab Equipment for New Laboratory	IX-29
EE	Centrate Treatment Facilities	III-69
EF3	HVAC at Various Locations	IX-30
EF5	Photocopier Purchase	IX-31
EF7	WASA-Wide Fire Suppression System	IX-32
EF8	Canal Street Elevator Renovation	IX-33
EG	Wet Weather Peak Mitigation (aka Blue Plains Tun	d e l}70

CAPITAL PROJECTS

Project ID	Project Name	Page #
EG1	SQL Upgrade	IX-34
EG2	Enterprise File System Archiving	IX-35
EG3	Network Storage System (ENT Service Upgrade)	IX-36
EG4	ERP System	IX-37
EG5	TV For Jet Machine	IX-38
EG6	Skimmer Boat Dock Piles	IX-39
EG7	Roofing	IX-40
EG8	Security Misc. Enhancements	IX-41
EG9	Valve Identification Program	IX-42
EH3	SCADA Upgrade - Phase II	IX-43
EH4	VOIP Upgrades (formerly Unified Communications)IX-44
EH5	Budget Tool	IX-45
EH6	Time & Attendance Clocks	IX-46
El	Plantwide Painting of Steel Pipes	III-37
El1	Major Pump Rebuilt/Replacement	IX-47
El2	Large Electric Motors (Sewer & Water Pumping)	IX-48
EJ	Potomac Pumping Station-Ph III Rehab	V-16
EK	Long Term Rehab-Main & O Pump Sta	V-17
EK1	MAXIMO SCADA Integration- I.T.	IX-49
EK2	CS-Leak Detection	IX-50
EK3	Safety System	IX-51
EK4	Enterprise Performance Dashboard	IX-52
EK5	Civil 3 D	IX-53
EL	Swirl Facility Rehabilitation	V-18
EM1	Future Meter Replacements	VI-99

CAPITAL PROJECTS

	PROJECT NAIVIE AND PAGE NOIVIBERS	
Project ID	Project Name	Page #
EM2	Automated Meter reading	VI-100
EM4	Centrifuge Rehabilitation	IX-54
EM5	AMR System Enhancements	IX-55
EM6	AUTOMATED METER READING-Billing System	VI-101
EN	WWTP - Central Fire Alarm System	III-38
EO1	AutoCAD	IX-56
EO2	AutoCAD Lite	IX-57
EO3	CIP Planner	IX-58
EO5	IBM Watson Research	IX-59
EO6	Optimization Pilot: Daily Fleet Operations	IX-60
EO7	Water and Sewer SCADA	IX-61
EO8	Board-eBook	IX-62
EO9	Permits relocation	IX-63
EP3	eProcurement System	IX-64
EQ	Potomac Pumping Station-PH IV Rehab	V-19
EQ1	Energy Management	IX-65
ES4	100 W Emergency Genertor & Load Center	IX-66
ET1	Network Systems Security	IX-67
ET2	Intranet	IX-68
ET5	Handheld Inventory	IX-69
ET7	Enterprise Backup Solution	IX-70
ET8	Video Conferencing	IX-71
ET9	Automated Despatch System	IX-72
EU	Sewer Lateral Rehab and Main Lining	IV-37
EV	Area Substation No. 6	III-58

CAPITAL PROJECTS

Project ID	Project Name	Page #
EW1	System Valve Replacements	IX-73
EW6	CIPP Trenchless Equipment	IX-74
EW7	Appliances	IX-75
EW8	Membrane Diffuser, Mechanical/Electrical	IX-76
EX6	WASA-wide Fencing	IX-77
EX7	Web Development	IX-78
EX8	Fire Hydrants/Valves	IX-79
EY5	Oracle Upgrade	IX-80
EZ1	Financial Management System	IX-81
EZ2	CIS System	IX-82
EZ4	Payroll/HR System	IX-83
EZ8	Document Imaging System	IX-84
EZ9	Infrastructure Asset Management System	IX-85
F1	Small Diameter Water Main Rehab 13	VII-15
F2	Small Diameter Water Main Rehab 14	VII-16
F6	Steel Water Main Rehab - Phase I	VII-17
F8	16th & Alaska Ave Pump Sta Upgrades	VII-65
FA	Water Storage Facility Upgrades	VII-90
FD	Water Fac Security System Upgrades	VII-66
FE	20 Low Service Main & PRV	VII-18
FF	WWTP Flood Protection	III-39
FG	Secondary Treatment Upgrades for TN	III-71
FH	Discharge Piping Bryant St. Pump Sta	VII-67
FJ	Parking Ramp Rehab - Bryant St. PS	VII-68
FK	FY2017 - DWS Water Projects	VII-58

CAPITAL PROJECTS

PROJECT NAIVIE AND PAGE NOIVIBERS						
Project ID	Project Name	Page #				
FL	FY2017 - DDOT Water Projects	VII-86				
FM	FY2017 - DDOT Stormwater Projects	VI-42				
FN	FY2017 - DSS Stormwater Projects	VI-22				
FP	FY2017 - DSS Sanitary Sewer Projects	IV-32				
FQ	Main & O St. PS Intermediate Upgrade	V-20				
FR	BP Tunnel Dewatering Pumping Sta	III-72				
FS	Div D - Bolling Overflow & Diversion	III-73				
FT	Steel Water Mains Rehab Phase II	VII-19				
FV	Rehabilitation of East Side Interceptor	IV-50				
FW	Rehab Piney Branch Trunk Sewer	IV-51				
FX	Rehab Northeast Boundary Sewer-PH 1	V-21				
FY	Rehab Upper Rock Creek Interceptor	IV-52				
FZ	Tiber Creek Sewer Lining -Ph 1	V-22				
G1	Small Local Sewer Rehab 1	IV-7				
G2	Sewer Structure Rehabilitation (1)	IV-53				
G4	Upper Potomac Intercept Sewer Rehab.	IV-54				
G5	Sewer Rehab Near Creek Beds	IV-55				
G6	Sanitary Sewers Under Buildings 1	IV-56				
G7	Combined Sewers Under Buildings	V-23				
G8	Small Local Sewer Rehab 2	IV-8				
G9	Small Local Sewer Rehab 3	IV-9				
GA	Small Local Sewer Rehab 4	IV-10				
GB	Small Local Sewer Rehab 5	IV-11				
GC	Small Local Sewer Rehab 6	IV-12				
GD	Small Local Sewer Rehab 7	IV-13				

CAPITAL PROJECTS

Project ID	Project Name	Page #
GE	Small Local Sewer Rehab 8	IV-14
GF	Small Local Sewer Rehab 9	IV-15
GG	Large Sewer Rehab 2	IV-57
GH	Large Sewer Rehab 3	IV-58
GI	Large Sewer Rehab 4	IV-59
GJ	Large Sewer Rehab 5	IV-60
GK	Large Sewer Rehab 6	IV-61
GL	Large Sewer Rehab 7	IV-62
GM	Large Sewer Rehab 8	IV-63
GN	Large Sewer Rehab 9	IV-64
GP	I & C & Elec - EPMC	III-40
GQ	Fire Hydrant Replacement Program - Phase II	VII-20
GR	Small Diameter Water Main Rehab. 15	VII-21
GS	FY2018 - DWS Water Projects	VII-59
GT	FY2018 - DDOT Water Projects	VII-87
GU	Crosstown Water Main Rehabilitation	VII-22
GX	Large Dia. Water Main Repl. II	VII-23
GY	Storm Sewer Rehab @ Various Location	VI-6
GZ	Sewer Instrumentation & Control	IV-39
H1	MWCOG Budget Items	III-41
H4	FY2018 - DDOT Stormwater Projects	VI-43
H5	FY2018 - DSS Stormwater Projects	VI-23
H6	FY2018 - DSS Sanitary Projects	IV-33
H7	Blue Plains Tunnel Site Preparation	III-74
H9	Blue Plains Capital Equipment	III-42

CAPITAL PROJECTS

PROJECT NAIVIE AND PAGE NOIVIDERS						
Project ID	ject ID Project Name					
HA	FY 2011 DWS Water Pumping	VII-69				
НВ	FY 2011 DSS Sewer Pumping	IV-40				
HC	New Warehouse Facility at Blue Plains	III-43				
HD	Conversion of Anacostia PS to Customer Service	VII-70				
HE	New Parking Structure & Building Modications @ B	VII-71				
HF	New Maintenance Facility at Fort Reno	VII-72				
HG	New Field Operations & Maintenance Facility	IV-65				
HH	New Fleet Management Facility	IV-66				
HJ	COF Renovations and Additions	III-44				
HK	CMF Renovations and Consolidation	III-45				
HL	DWT - Process and Operations Jobs	III-46				
HM	FY2019 - DSS Stormwater Projects	VI-24				
HN	FY2019 - DSS Sanitary Sewer Projects	IV-34				
HP	FY2019 - DDOT Stormwater Projects	VI-44				
HS	Rehabilitaion of Influent Sewers	IV-67				
HT	Rehabilitation of Anacostia Force Main	IV-68				
HU	Blue Plains Logisitics	III-47				
HV	Bryant St Pump Station - Spill Header Flow Contol	VII-73				
HW	Rehabilitation of Elevated Water Tanks	VII-91				
HX	Small Diameter Water Main Rehabilitation 16	VII-24				
HY	FY2019 - DWS Water Projects	VII-60				
HZ	FY2019 - DDOT Water Projects	VII-88				
11	Selective Sewer Separation & I/I Sewer Rehab.	IV-16				
12	Biosolids Loadout Crane Rehabilitation	III-59				
18	Large Valve Replacement (Contract 11-13)	VII-25				

CAPITAL PROJECTS

Project ID	Project Name	Page #
19	Sewer Rehab.10th-12th St, Bet. Penn	IV-17
IA	Large Valve Replacement (Contract 14-16)	VII-26
IB	Large Valve Replacement (Contract 17-19)	VII-27
IC	Electrical Monitoring Systems	III-48
ID	Storm Sewer Rehabilitation 2	VI-7
IE	Storm Sewer Rehabilitation 3	VI-8
IF	Sanitary Sewer Rehabilitation 2	IV-69
IG	Sanitary Sewer Rehabilitation 3	IV-70
IH	Combined Sewer Rehabilitation 2	V-24
IJ	Combined Sewer Rehabilitation 3	V-25
IK	Potomac Force Main Rehabilitation	IV-71
IL	Creekbed Sewer Rehabilitation 2	IV-72
IM	Creekbed Sewer Rehabilitation 3	IV-73
IN	Upper East Side Trunk Sewer Rehabilitation	IV-74
IP	Tiber Creek Trunk Sewer Rehabilitation	V-26
IX	Headworks HVAC Rehab	III-16
J0	B St/New Jersey Ave Trunk Sewer Reha	IV-75
J1	Oxon Run Sewer Rehabilitation	IV-76
J3	Sewer Upgrade - City Wide	IV-18
J6	Deammonification Project	III-17
J7	Small Diameter Water Main Rehabilitation 17	VII-28
J8	FY 2020 DDOT Water Projects	VII-89
JA	FY 2020- DWS Water Projects	VII-61
JB	Bryant Street PS Improvements - Phase II	VII-74
JH	FY2020 - DSS Storm Sewer Projects	VI-25

CAPITAL PROJECTS

Project ID	Project Name	Page #
JI	FY 2020- DSS Sanitary Sewer Projects	IV- 35
JJ	Bryant Street Power System Improvement Phase 3	VII-75
JQ	Hydraulic Protection Project	IV-77
JR	Large Sewer Rehabilitation 10	IV-78
JS	Small Local Sewer Rehabilitation 10	IV-19
JT	Combined Sewer Rehabilitation 4	V-27
JU	Sanitary Sewer Rehabilitation 4	IV-79
JY	I.T Data Center	III-49
JZ	Large Dia Water Main Repl 3, 4, & 5	VII-29
K1	Main & O St. Pump Stations	V-28
K2	CSO-Long Term Control Plan	V-6
K3	East Side Pumping Station	V-29
K4	Poplar Point Pumping Station	V-30
K5	Dry-Weather Overflow Elimination	V-31
KA	Large Valve Repl Contracts 20, 21, & 22	VII-30
KE	Small Dia Water Main Rehab18	VII-31
KV	Water Program Mgt. Services 2F	VII-95
KW	FY2021 - DWS Water Projects	VII-62
L3	Rock Creek Sewage Pumping Station	IV-41
L4	Upper Anacostia Sew. Pump. Station	IV-42
L5	Earl Place Sewage Pumping Station	IV43
LC	Effluent Disinfection Upgrades	III-18
LJ	DC Clean Rivers Green Infrastructures	V-35
LK	Large Sewer Rehabilitation 11	IV-80
LL	Small Local Sewer Rehabilitation 11	IV-20

CAPITAL PROJECTS

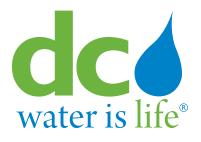
Project ID	Project Name	Page #
LM	ENR Program Management	III-75
LN	FY2021 - DSS Sanitary Sewer Projects	IV-36
LO	FY2021 - DSS Storm Sewer Projects	VI-26
LP	Wastewater Asset Management Tech Support	III-50
LQ	Water Service Area Asset Management	VII-96
LR	Sanitary Sewer Asset Management	IV-46
LS	Misc. Facilities Projects FY2013	III-51
M6	WPFA1- Rehab. Bryant St. Pump Sta.	VII-76
M7	WPFA3 - Replacement of Anacostia Pump Sta.	VII-77
MA	St. Elizabeth Water Tank	VII-92
ME	Water System Program Management Services	VII-97
MK	877A1 - 24 Wtrmain Ft. Stanton Res to MLK AVE	VII-32
MQ	878A1 - 2MG 4th High Storage Tank	VII-93
MR	5MG 2nd High Reservoir	VII-94
MT	Small Diameter Watermain Rehab. (1)	VII-33
MU	Small Diameter Watermain Rehab. (2)	VII-34
MV	Small Diameter Watermain Rehab. (3)	VII-35
MW	Small Diameter Watermain Rehab. (4)	VII-36
MX	Small Diameter Watermain Rehab. (5)	VII-37
MY	Elim. Dead Ends (Contract 3 & 4)	VII-38
N7	Potomac Sewer System Rehab.	IV-81
N8	Small Diameter Watermain Rehab. (6)	VII-39
N9	Small Diameter Watermain Rehab. (7)	VII-40
NA	863A1 - Clean & Line 20 4th High Wtrmain	VII-41
O0	Small Diameter Watermain Rehab. (8)	VII-42

CAPITAL PROJECTS

Project ID	Project Name	Page #
O1	Small Diameter Watermain Rehab. (9)	VII-43
O2	Small Diameter Watermain Rehab. (10)	VII-44
O3	930B5 -Cln & Line Wtrmains (13)	VII-45
P1	FY2000 - DDOT STORMWATER PROJECTS	VI-27
P2	FY2001 - DDOT STORMWATER PROJECTS	VI-28
P3	FY2002 - DDOT STORMWATER PROJECTS	VI-29
P4	FY2003 - DDOT STORMWATER PROJECTS	VI-30
P5	FY2004 - DDOT STORMWATER PROJECTS	VI-31
P8	FY2007 - DDOT STORMWATER PROJECTS	VI-32
P9	FY2008 - DDOT STORMWATER PROJECTS	VI-33
PE1	Actuators	IX-86
PE2	Flow Meters	IX-87
PE3	PLC's	IX-88
PE4	Digester's Major Equipment Replacement	IX-89
Q3	FY2003 - DSS Sanitary Sewer Project	IV-21
Q7	FY2007 - DSS Sanitary Sewer Project	IV-22
Q8	FY2008 - DSS Sanitary Sewer Project	IV-23
QM	Small Valve Replacements - Contract 4	VII-46
S3	Large Valve Replacement (Contract 3-7)	VII-47
S5	WDSC6 - Lg.Dia.Wtrmain Int. Repairs	VII-48
TA	Process Computer Control System	III-52
TC	504B6 - Additional Chemical Systems	III-53
TF	504C5 - GRIT CHAMBER BLDG 1&2	III-19
TK	504G3 - BIOLOGICAL NUTRIENT REMOVAL	III-20
TM	504G6 - INFLUENT SCREEN FACILITY	III-21

CAPITAL PROJECTS

Project ID	Project Name	Page #
TN	504G9 - PRIMARY TREATMENT FACILTY	III-22
TO	504H1 - SECONDARY TREATMENT FAC	III-23
TP	504H2 - GRAVITY THICKENERS	II-60
TQ	504H3 - NITRIFICATION FACILITY	III-24
TS	504H5 - IMP EAST PRIM EFFL EXCESS FL	III-25
TZ	504I6 - ELEC POWER SYS - SWITCH GEAR	III-54
UC	504J1 - FILTRATION/DISINFECTION FACI	III-26
UD	504J2 - RAW WATER PUMP STATIONS 1&2	III-27
XA	New Digestion Facilities	III-61
XB	Centrifuge Thickner Facility	III-62
XC	Additional Dewatering Facilities	III-63
XZ	Solids Processing Building / DSLF	II-64
YD	700D5 - MISCELLANEOUS PROJECTS	III-55
YZ	Digestion Facilities Site Preparation	III-65



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

SECTION III

WASTEWATER TREATMENT SERVICE AREA

APPROVED FY 2012 - 2021



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 \$57.4 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. A significant portion of the lifetime budget is comprised of projects in the Blue Plains Enhanced Nitrogen Removal Facilities, 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, with compliance with reduced nitrogen limits starting on January 1, 2015.

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.

Liquid Processing Program – \$632.9 million

(project pages III-8 to III-27)

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 now underway include:

- Dual Purpose Rehabilitation (Project BG) \$24.5 million The project rehabilitates the sedimentation basins that were constructed approximately 20 years ago to provide sedimentation of flows from either the secondary reactors or the nitrification reactors or various combinations. The project results in a revision to the operating conditions to dedicate four (4) basins to service the secondary treatment processs and dedicate four (4) basins to service the enhanced nitrogen removal process. The design and construction is combined with Project BI, Secondary Treatment Facilities Upgrade, ENR-N.
- Nitrification/Denitrification Facilities Upgrade (<u>Project BR</u>) \$52.0 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. The construction contract for the electrical upgrade was issued in FY 2011. and is 40% complete. Also, included in this project is rehabilitation of the nitrification return sludge line, which is scheduled over the next couple of years and will be coordinated with construction of the Enhanced Nitrogen Removal Facilities.
- Filtration/Disinfection Facility Phase III (<u>Project BT</u>) \$19.0 million This project is an upgrade to major electrical equipment serving the Filtration/ Disinfection Facility. Construction began in FY 2011 and is 40% complete..

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

Headworks HVAC Rehabilitation (Project IX) \$0.4 million – The heating, air conditioning and ventilation systems (HVAC) systems in the headworks are in need of upgrades to improve the condition of the air in the influent pump stations and preliminary treatment buildings at Blue Plains. The project is initially funded to perform investigations and provide

- recommendations and additional capital budget will be required in the future to implement the recommendations. The initial investigations are scheduled to occur in FY 2013.
- 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.
- Raw Wastewater Pump Station 2 (<u>Project BV</u>) \$27.5 million An upgrade to the Raw Wastewater Pump Station is required to replace equipment that is at the end of its useful life and to improve reliability. This project is scheduled to begin in FY 2013.

Plantwide Facilities Program - \$361.0 million

(project pages III-28 to III-55)

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 now underway include:

- Laboratory Rehabilitation (Project CV) \$7.5 million Construction is currently underway to rehabilitate the laboratory on the Blue Plains site, which provides analyses for permit compliance, process optimization and long-range planning. Construction is scheduled to be completed in FY 2013.
- Instrumentation and Control Engineering Program Management (<u>Project GP</u>) \$13.6 million This project will 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 and confirming proper installation of control loops.
- Central Operations Facility Renovations (Project AZ) \$17.2 million This project includes several contracts to upgrade space and building systems in the Central Operations Facility. Examples of contracts include an upgrade to the data center, office space renovation, and rehabilitation of heating, ventilation of air conditioning systems.
- Electrical Power System Switchgear (Project TZ) \$31.2 million The electrical power system at Blue Plains is comprised of
 area sub stations that feed unit substations throughout the facility. This project includes several projects to upgrade electrical
 switchgear and appurtenances that have reached the end of their useful lives and/or to replace equipment for which parts are
 obsolete.

Solids Processing Program – \$772.9 million

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.

DC Water is continuing implementation of the Biosolids Management Plan (BMP), originally adopted by the Board in 1999. This plan, which included input from neighbors, environmental groups, and other stakeholders, evaluated a number of options for long-term biosolids processing and disposal, 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 will significantly reduce 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. However, results of the Belt Filter Press (BFP) pilot testing have highlighted a number of requirements and additional work necessary for the Final Dewatering Facility. This required additional ancillary equipment and additional building space to accommodate the equipment, thus resulting in an increased lifetime budget. During FY 2012 a "zero" base model was developed to estimate the O & M costs for the new biosolids program. This model includes the Main Power Train (MPT), Combined Heat and Power facility (MPT) and the Final Dewatering Facility (FDF) as well as all other costs common to the biosolids program. This model will allow for the timely update of costs and savings as better information becomes available. As all construction contracts have been awarded and operating assumptions are revised, we have reviewed the impacts on other operating costs and benefits.

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 obtained substantial completion in FY 2012 include:

 Area Substation No. 6 and Miscellaneous Switchgear Upgrades (Projects EV) 23.0 million - This project delivered 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. Biological Sludge Thickening Facilities (XB) \$48.4 million- Upgrade of the existing dissolved air floatation thickening units to restore integrity to this system and reduce sludge processing and chemical costs through improved efficiency.

Major projects underway in this program include:

- New Digestion Facilities (Project XA) \$514.8 million This project includes four Cambi thermal hydrolysis trains, four digesters, new dewatering equipment and a combined heat and power plant. Two contracts, construction for site preparation and a design-build contract for the main process train were awarded in FY 2011. The site preparation contract is now complete, while the main process train project is 30% complete. The remaining contracts, a design-build-operate contract for the combined heat and power facility and two contracts for construction of the final dewatering facilities were awarded in FY 2012.
- Gravity Thickening Upgrade (<u>Project BX</u>) \$31.2 million This project will restore Thickener Units 5 and 6 to service and provide a major upgrade to Thickener Units 7 to 10, including collector mechanisms, thickened sludge pumps, and scum pumps. Concept Design was completed in FY2012 and detailed design is scheduled to begin in FY 2013.

Enhanced Nitrogen Removal Facilities – \$966.9 million

(project pages III-66 to III-75)

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 Nitrogen -Wet Weather (TN/WW) Plan, which addresses the requirements of the Clean 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.

Major projects underway in this program include:

- Enhanced Nitrogen Removal- North (<u>Project BI</u>) \$71.9 million (formerly named <u>Plantwide Fine Bubble Aeration System in the Plantwide Program Area</u>). 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 was completed in FY 2012 and construction is scheduled to begin in FY 2013.
- Enhanced Clarification Facilities (<u>Project E8</u>) \$224.1 million The principal components of this project are grit removal and screening for combined sewer flows pumped out of the Blue Plains Tunnel 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.

- A design-build contract is expected to be issued for this project, combined with the Tunnel Dewatering Pump Station (Project FR) in FY 2013.
- Enhanced Nitrogen Removal Facilities (<u>Project E9</u>) \$267.4 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. Two construction contracts for this project began in FY 2011 and are well underway with the first contract 80% complete and the second contract 25% complete and on schedule to meet NPDES permit compliance dates.
- 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. In FY 2011, DC Water investigated several design concepts for this project and selected deammonification as the the most cost-effective and reliable method to provide separate treatment of the centrate recycle stream. Detail design began in FY 2012 and will continue into FY 2013.
- Wet Weather Mitigation, Diversion at Bolling and Tunnel Dewatering Pump Station (Projects EG, FR, H7 and FS) \$237.3 million These projects provide the Blue Plains Users' contribution to the Clean Rivers Project components that were part of the Total Nitrogen Removal/ Wet Weather Plan. The various construction contracts funded by these projects result in a reduction in combined sewer overflows and reduction in peak flow rates through Blue Plains.
- Secondary Treatment Upgrades for TN (Project FG) \$56.9 million This project will expand Secondary Reactors 5 and 6 to double their size. Treatment plant modeling predicts that additional volume will be needed for the secondary treatment process by the year 2020 to accommodate future plant influent flows and loads while continuing to meet current NPDES permit limits. Research and pilot testing is scheduled to begin in FY 2013 to define the most cost-effective and sustainable project to meet the project need.

FY 2012 - 2021 Capital Improvement Program

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 - Nitrogen Removal Program Manager

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

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 - 41.44%
EPA/Fed - 0.00%
WSSC - 45.67%
Fairfax - 8.35%
Loudoun/PI - 4.54%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

 Approved Life Budget
 13,491,123

 Approved Life Budget
 23,018,352

 Increase/(Decrease)
 9,527,229

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,918	1,217	2,358	5,342	1,238	1,813	1,215	432	637	410	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,156	6,200	6,400	6,000	0	0	2,200	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2021

FY 2012 - 2021 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**

EPMC: NRPM - Nitrogen Removal Program Manager

Potential Failure/Ability to continue meeting permit requirement **Priority:**

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

d	C
wat	er is life

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budge Increase/(Decrease

et	21,091,668
et	24,473,629
e)	3,381,961

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,391	3,936	3,955	3,526	2,090	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	9,576	13,541	1,345	12	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2011

Feb 2012

Sep 2016

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

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%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

dget	5,434,000
dget	5,434,000
ase)	0

Start Date

Jun 2015

Mar 2017

Oct 2019

Phase

Design:

Project Completion:

Construction:

Disbursements	<u>Pre FY 2013</u>	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	54	320	1,506	1,667	23	0	0	0
Commitments	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	427	152	4,856	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

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 - Nitrogen Removal Program Manager

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

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



FY2013 Approved Life Budget	I
FY2013 Revised/FY2014 Approved Life Budget	·

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Start Date

Jun 2015

Mar 2018

Jan 2021

14,625,000

14,625,000

0

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014	FY 2015						FY 2021	Post FY 2021
Commitments	0 Pre FY 2013	0 FY 2013	0 FY 2014	/1 FY 2015	500 FY 2016	576 FY 2017	1,757 FY 2018	6,698 FY 2019	915 FY 2020	2 FY 2021	0 Post FY 2021
Budget	0	0	0	1,320	0	360	12,945	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

PhaseStart DateDesign:Aug 2007Construction:Mar 2009

Project Completion: Oct 2017

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 - 40.21%
EPA/Fed - 0.01%
WSSC - 44.72%
Fairfax - 8.18%
Loudoun/PI - 4.45%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et	64,771,768
et	51,984,278
e)	-12,787,490

Disbursements	Pre FY 2013	FY 2013						FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	16,857	10,938	7,026	1,862	4,110	1,974	8	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	37,825	6,100	3,600	0	4,459	0	0	0	0	0	0

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

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

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 -35.09% EPA/Fed -6.13% WSSC -45.84% 8.38% Fairfax -Loudoun/PI -4.56%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget Increase/(Decrease)

18,250,039 18,978,176 728,137

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	7,175	4,403	1,151	15	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	18,895	83	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2009

Apr 2011

Dec 2014

FY 2012 - 2021 Capital Improvement Program

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

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

PhaseStart DateDesign:Nov 2012Construction:Jun 2016

Project
Completion: Dec 2019

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%



Increase/(Decrease	:)
FY2013 Revised/FY2014 Approved Life Budge	et
FY2013 Approved Life Budge	ŧ

t	27,522,000
t	27,522,000

Disbursements	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	484	640	667	1,163	7,261	6,916	2,231	44	0	0
Commitments	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	644	2,165	0	24,281	432	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Board Policy, DC Water's commitment to outside agencies

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%

FY2013 Approved Life Budget	4,101,235
FY2013 Revised/FY2014 Approved Life Budget	4,101,235
Increase/(Decrease)	0

Phase

Design:

Project Completion:

Construction:

Start Date

Jan 2015

Disbursements	Pre FY 2013	FY 2013 F	Y 2014		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,617	129 EV 2042 E	65 5 7 204 4	18	0 EV 2016	0 EV 2017	0 EV 2018	0 EV 2010	0 EV 2020	0 EV 2024	0 Doot EV 2024
Commitments Budget	Pre FY 2013	FY 2013 F	- Y 2014	F 1 2015	F Y 2016	FY 2017	F	F	FY 2020	FY 2021	Post FY 2021
Baaget	3,947	154	U	Ü	U	U	Ü	U	U	Ü	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Activity Group/Project Title IX - Headworks HVAC Rehab

Managing Department: **Engineering and Technical Services**

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low, M&F over long term **Project**

Phase

Design:

Construction:

Completion: Jul 2013

Start Date

Project Description:

This project provides for modifications to the HVAC components of the Headworks Buildings including: Grit Chamber Building 1, Grit Chamber Building 2, Raw Wastewater Pumping Station 1, Raw Wastewater Pumping Station 2, East Process Screens Facility, Grit and Screenings Loading Station 1, Grit and Screenings Loading Station 2. These modifications include replacement of foul air duct work using materials more suitable for corrosive environments, additional fans and ducts to capture foul air and direct the foul air to the existing odor scrubbers, correct deficiencies in the concept of the existing HVAC system and provide updated air flow diagrams. Only feasibility study has been funded. Additional capital funds will be requested in the future based on the results of the study.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)	0
Approved Life Budget	366,000
pproved Life Budget	366,000

Disbursements	Pre FY 2013
Budget	0
Commitments	Pre FY 2013

Budget

FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
239	0	0	0	0
<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	FY 2017
FY 2013 366	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017

<u>7</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>
)	0	0	0	0
<u>7</u>	FY 2018	FY 2019	FY 2020	FY 2021
0	0	0	0	0

<u>Post</u>	<u>FY</u>	<u> 2021</u>
		0
Post	FΥ	2021

0

(projected disbursements do not include contingencies)

0

(dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Activity Group/Project Title J6 - Deammonification Project

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low, M&F over long term

Project Description:

This project entails a full-scale plant demonstration of an ammonia-nitrogen removal process (deammonification) that has the potential for achieving significant savings in power and chemical addition compared to the present nitrification/ denitrification processes used to meet current and future total nitrogen limits. The existing process requires the addition of methanol as a carbon source in the denitrification process.

The purpose of this project is to investigate, evaluate, and verify the operating parameters and stability of the deammonification process at Blue Plains. For the FY2012-FY2021 budget cycle, funding is requested for initial studies, which will be used to refine the scope and cost estimate for the full scale plant demonstration. Additional budget will be requested in the future to fund the full-scale plant demonstration project.

Impact on Operations:

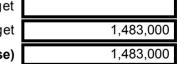
This project is not anticipated to have a significant impact on maintenance or operations costs during the study phase; however, deammonification could lead to significant operational savings by eliminating the need for methanol or another more costly carbon source (ethanol).

Effective Funding by User (percent):

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)



Phase

Design:

Project Completion:

Construction:

Ν	E	V	V

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	121	23	164	258	249	188	37	0	0	0
Commitments	<u>Pre FY 2013</u>	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	220	0	1,263	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2019

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Activity Group/Project Title LC - Effluent Disinfection Upgrades

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low, M&F over long term

Project

Phase

Design:

Construction:

Completion: Sep 2018

Start Date

Project Description:

This project involves construction of revised and improved disinfection process equipment based upon industry experience over the preceding 20 years. Funding is requested for initial studies, which will be used to refine the scope and cost estimate for the future upgrades that will be necessary to Blue Plains' effluent disinfection strategies and systems. Additional budget will be requested in the future to fund the remainder of the project.

Impact on Operations:

Without this upgrade in place by 2025, maintenance costs will increase to keep the critical yet aged equipment reliable, or at least, in working order.

Effective Fundi	ng by User (perce	ent):									
DC -	41.22%					FY2	013 Appro	oved Life I	Budget F		
EPA/Fed -	0.00%				Y2013 Re				ĭ <u>L</u>		770,000
WSSC -	45.84%				12013110	VISCU/I IZ			ĭ þ		
Fairfax -	8.38%	wa	ter is	lite			inci	rease/(De	crease)		770,000
Loudoun/PI -	4.56%									NE	EW
Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	86	130	125	153	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	660	0	110	0	0	0	0	0
(projected disburse	ements do not include	e contingencie	es)							(dolla	rs in thousands)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

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 - 14.95%
EPA/Fed - 26.38%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.46%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

 Approved Life Budget
 70,314,285

 Approved Life Budget
 70,588,572

 Increase/(Decrease)
 274,287

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013 66,846	FY 2013 1,263	FY 2014 701	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 67,980	FY 2013 2,609	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 1998

Jan 2003

Mar 2014

FY 2012 - 2021 Capital Improvement Program

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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Apr 2013

Start Date

Sep 1998

Jun 1999

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) which included methanol storage and feed facilities enabling DC Water to conduct a half-plant-scale nitrogen removal pilot study. The second contract provided the capability for full-scale nitrogen removal, 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.

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 -	6.03%
WSSC -	45.84%
Fairfax -	8.38%
Loudoun/PI -	4.56%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget 95,590,339

Increase/(Decrease) 0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	88,290	379	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	95,173	417	0	0	0	٥	٥	0	0	Λ	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

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 - Nitrogen Removal Program Manager

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. This project is in the process of being closed out.

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 - 15.14%
EPA/Fed - 26.18%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.46%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget 39,123,170
Approved Life Budget 39,123,170
Increase/(Decrease) 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	38,475	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	39,123	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 1998

Jan 2003

Oct 2012

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

PhaseStart DateDesign:Jul 1999Construction:Oct 2001

Project Completion: Nov 2013

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:

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 due to reduction in plant sludge production.

Effective Funding by User (percent):

DC -	14.35%	
EPA/Fed -	27.06%	
WSSC -	45.78%	
Fairfax -	8.37%	
Loudoun/PI -	4.45%	



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget	38,658,735
Approved Life Budget	38,658,735
Increase/(Decrease)	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	38,070	7	1	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	38,659	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Nov 2013

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



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)

70,593,858 70,593,858

Disbursements Budget	Pre FY 2013 69,098	FY 2013 169	FY 2014 28	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 70,594	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

(projected disbursements do not include contingencies)

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

Managing Department: **Engineering and Technical Services**

EPMC: NRPM - Nitrogen Removal Program Manager

Potential Failure/Ability to continue meeting permit requirement **Priority:**

Project Description:

Project Completion: Aug 2013

Phase

Design:

Construction:

Start Date

Apr 2003

Jun 2005

(dollars in thousands)

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 -35.53% FY2013 Approved Life Budget 47,417,263 6.02% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 47,417,263 WSSC -45.58% Increase/(Decrease) 0 water is life Fairfax -8.33% Loudoun/PI -4.54% Pre FY 2013 **Disbursements** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 44.614 53 0 0 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 47,417 0 0 0 0 0 0

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Oct 2012

Start Date

Jan 1999

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 - 16.48%
EPA/Fed - 24.83%
WSSC - 45.84%
Fairfax - 8.38%
Water
Loudoun/PI - 4.46%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

et	1,684,749
et	1,684,749
٥,	0

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
	1,659	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,685	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

PhaseStart DateDesign:Aug 2002Construction:Mar 2004

Project
Completion: Sep 2016

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 was conducted on the reliability of reinforced and non-reinforced concrete structures plant-wide. Based on results from the survey additional budget dollars are needed to continue the project with the additional scope in program management, construction management, OCIP and additional cost related to construction contract.

Impact on Operations:

This project could significantly reduce operating and maintenance budgets.

Effective Funding by User (percent):

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

 Approved Life Budget
 73,641,935

 Approved Life Budget
 80,841,242

 Increase/(Decrease)
 7,199,307

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	60,456	134	372	6,263	4,277	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	63,503	971	8,307	7,803	258	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Potential Failure/Ability to continue meeting permit requirement **Priority:**

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 -WSSC -45.84% 8.38% Fairfax -Loudoun/PI -4.56%

is life

FY2013 Approved Life Budg FY2013 Revised/FY2014 Approved Life Budg Increase/(Decreas

get	15,428,915
get	15,694,415
se)	265,500

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	14,587	413	83	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	15,694	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2001

Apr 2007

Dec 2013

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

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

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 - 41.57% EPA/Fed - 0.00% WSSC - 45.56% Fairfax - 8.33% Loudoun/PI - 4.53%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget 18,397,051

Increase/(Decrease) 7,177,364

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,187	837	1,446	934	854	1,251	904	1,189	1,753	1,127	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,921	4,976	0	4,400	0	0	6,100	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

11,219,687

Start Date

Sep 2021

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Activity Group/Project Title AZ - COF Renovations

Managing Department: Facilities and Security

EPMC: NRPM - Nitrogen Removal Program Manager

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

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, Fire Alarm upgrades, sewage ejector upgrades and Landscaping, among others.

Impact on Operations:

Disbursements

Budget

This project has no material impact on the operating budget.

Effective Funding by User (percent):

DC -71.31% 0.00% EPA/Fed -WSSC -22.43% Fairfax -4.11% Loudoun/PI -2.15%



FY2013 Approved Life Budget	I
FY2013 Revised/FY2014 Approved Life Budget	Ī
	Г

ŧ	17,202,555
ŧ	17,212,240

Increase/(Decrease)

0

Phase

Design:

Project Completion:

Construction:

FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
1,901	678	0	0	0	0	0	0	0	0

0

Commitments Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Budget** 0 0 0 0 0 12,750 4.462 0

(projected disbursements do not include contingencies)

Pre FY 2013

12,087

(dollars in thousands)

9,685

Post FY 2021

0

Start Date

Jan 2011

Nov 2012

Aug 2014

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

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

Managing Department: **Engineering and Technical Services**

EPMC: NRPM - Nitrogen Removal Program Manager

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

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):

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

Disbursements

Commitments

Budget

Budget



0

0

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

315

FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
0	0	0	0	0	21	145	48	681	1,803
FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

0

3.507

Phase

Design:

Project Completion:

Construction:

(projected disbursements do not include contingencies)

Pre FY 2013

Pre FY 2013

0

0

0

(dollars in thousands)

0

3,821,638

3,821,638

0

0

Start Date

Jun 2018

Sep 2020

Jun 2024

0

0

FY 2012 - 2021 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

(projected disbursements do not include contingencies)

EPMC: NRPM - Nitrogen Removal Program Manager

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.

Phase

Design:

Project Completion:

Construction:

Start Date

Dec 2014

(dollars in thousands)

Impact on Operations:

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

Effective Funding by User (percent): DC -62.04% FY2013 Approved Life Budget 7,313,217 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 7,413,217 WSSC -29.64% Increase/(Decrease) 100,000 water is life 5.42% Fairfax -Loudoun/PI -2.89% FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Pre FY 2013 **Disbursements Post FY 2021** Budget 4.116 1.309 539 49 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 4.960 2.454 0 0 0 0 0

FY 2012 - 2021 Capital Improvement Program

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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Oct 2012

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):

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et 1,286,308 et 1,286,308

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,215	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,286	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

,	5,001,000
get	7,526,159
se)	1,574,763

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,585	1,864	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	7,526	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

5.951.396

Start Date

Sep 2007

Sep 2010

Jun 2013

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

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/PI - 4.56%



Increase/(Decrease)	, [
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

get	1,465,761
get	1,490,761
(مء	25,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	40	501	442	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	41	1,450	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2014

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

get	1,862,031
get	1,867,580
se)	5,549

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	843	135	1	222	276	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget											

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2008

Sep 2011

Sep 2016

FY 2012 - 2021 Capital Improvement Program

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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

Phase Start Date

Design:

Construction:

Project Completion: Jun 2016

-

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%
Fairfax - 8.38%
Loudoun/PI - 4.56%



Increase/(Decrease)	Ī
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

et	2,107,090
et	2,107,090
	٥

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	966	47	279	271	132	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	977	1,130	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Health Safety **Priority:**

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:

Disbursements

Commitments

Budget

Budget

This project will prevent unforeseen repair / replacement costs.

Effective Funding by User (percent):

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



0

4.880

0

FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

0

FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
0	0	37	1,054	1,044	1,023	0	0	0	0
FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

0

0

Phase

Design:

Project Completion:

Construction:

(projected disbursements do not include contingencies)

Pre FY 2013

Pre FY 2013

57

80

(dollars in thousands)

0

4,960,000

4,960,000

0

0

Start Date

Sep 2015

Sep 2018

0

0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Activity Group/Project Title EN - Central Fire Alarm System

Managing Department: **Engineering and Technical Services**

EPMC:

Priority:

Project Description:

NRPM - Nitrogen Removal Program Manager **Project** Completion: Jun 2016 Health Safety

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 -Loudoun/PI -4.56%



Increase/(Decreas	e)
FY2013 Revised/FY2014 Approved Life Budg	et
FY2013 Approved Life Budg	et

et	2,601,736
et	3,014,330
e)	412,594

Phase

Design:

Construction:

Disbursements Budget	Pre FY 2013 1.978	FY 2013 L	FY 2014 161	FY 2015 70	FY 2016 49	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments Budget	Pre FY 2013	FY 2013		FY 2015	_	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2010

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Activity Group/Project Title FF - WWTP Flood Protection

Managing Department:

EPMC:

Priority:

Project Description:

Engineering and Technical Services NRPM - Nitrogen Removal Program Manager **Project** Completion: Oct 2012 Health Safety

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. The study determined a desire for a flood wall at Blue Plains; however, as a result of budget prioritization, the flood wall construction is not funded at this time.

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)

Phase

Design:

Construction:

get	607,513
get	607,513
se)	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	590	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	608	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Apr 2015

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):

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

rease)

13,591,494 -2,588,538

16,180,032

Increase/(Decrease) -2,588

Disbursements	Pre FY 2013			FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,592	1,997	2,093	2,907	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	8,883	^	4.708	^	^	^	^	0	0	^	0

(projected disbursements do not include contingencies)

		and Sewer Auth rovement Progra	•							
Service Area Title Program Title: Activity Group/Pr	: Was	stewater Treatment S ntwide - MWCOG Budget Ite	ervice Are	ea				Phase Design Constr		Start Date
Managing Depart		WWW OOO Budget No								
metropolitan area. capital funding for independent of the Impact on Operat	Headon: Vashington Cour DC Water contribuse tasks were other projects u	PM - Nitrogen Remov Ith Safety ncil of Governments (ibutes, in proportion to the historically budgeted ander YD. This project on operations or main	MWCOG) o its bene d under Pr ct will be d) provides fit, to the re roject YD, l ropped fro	regional p egional wa Miscellane	istewater p ous Proje	olanning eff cts. Projec	forts perfo	etion: of Columbia rmed by MV	VCOG. The
Effective Funding DC - EPA/Fed - WSSC - Fairfax - Loudoun/PI -	by User (perce	water is		⁻ Y2013 Re		2014 Appr	oved Life E oved Life E rease/(Dec	Budget	DROI	PPED
Disbursements Budget Commitments Budget	Pre FY 2013 Pre FY 2013	FY 2013 FY 2014 FY 2013 FY 2014								Post FY 2021 Post FY 2021

(dollars in thousands)

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

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/Pl - 4.56%



FY2013 App	roved Life Budget
FY2013 Revised/FY2014 App	proved Life Budget
_	

2,442,000 e) 0

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013 2,143	FY 2013 96	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 2,442	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2013

2,442,000

FY 2012 - 2021 Capital Improvement Program

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

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low, M&F over long term

Project Description:

This project will construct a new central warehouse at the Blue Plains Treatment Facility. By consolidating all material required in multiple storage areas 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:

Efficiencies anticipated by these improvements will result in operating savings through re-structured functions and greater equipment availability.

Effective Funding by User (percent):

DC - 41.66% EPA/Fed - 0.00% WSSC - 45.50% Fairfax - 8.32% Loudoun/PI - 4.53%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

get 18,128,600 se) 1,767,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,829	9,378	1,210	7	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,134	12,995	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

16,361,600

Start Date

Aug 2011

Nov 2012

Jan 2015

FY 2012 - 2021 Capital Improvement Program

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 - Nitrogen Removal Program Manager

Priority: Good Engineering, Low, M&F over long term

Project Description:

PhaseStart DateDesign:Sep 2016Construction:Sep 2017

Project

Completion: Sep 2020

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



Increase/(Decrea	se)
FY2013 Revised/FY2014 Approved Life Bud	jet
FY2013 Approved Life Budg	et

8,872,000 et 8,872,000

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	43	840	3,617	1,114	484	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	1,470	6,485	0	917	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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

EPMC: NRPM - Nitrogen Removal Program Manager

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

-	1,00=,000	4
)	0	
		_
		_

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014	FY 2015	·			FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	214 FY 2016	929 FY 2017	1,489 FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	498	3,334	200	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

4,032,000

4.032.000

Start Date

Mar 2016

Feb 2017

Sep 2018

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

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%



FY2013 Approved Life Budget	I
FY2013 Revised/FY2014 Approved Life Budget	Į

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

	3,020,000
)	0

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	559	426	481	310	288	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,660	360	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

3,020,000

3 020 000

Start Date

Jun 2016

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

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

Project Description:

Phase Start Date
Design:
Construction: Sep 2012

Project

Completion: May 2017

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):

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

get see)

Increase/(Decrease)

Disbursements Budget	Pre FY 2013 465	FY 2013 1,143	FY 2014 892	FY 2015 881	FY 2016 188	FY 2017 107	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 1,714	FY 2013 2,483	FY 2014 1,000	FY 2015 1,000	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

6,006,283

6,196,283

190,000

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Activity Group/Project Title IC - Electrical Monitoring Systems

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2013 Approved	d Life Budget
FY2013 Revised/FY2014 Approved	d Life Budget
<u>.</u>	

et 1,650,000 et 1,650,000 e) 0

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013	FY 2013 168	FY 2014 666	FY 2015 131	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 0	FY 2013 1,650	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2015

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Activity Group/Project Title JY - IT - Data Center

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low, M&F over long term

Project Description:

PhaseStart DateDesign:May 2011Construction:Jan 2013

Project

Completion: Jan 2015

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

Impact on Operations:

This project will have no material impact 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%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	Г

et 3,335,175 et 3,335,175 e) 0

Disbursements	<u>Pre FY 2013</u>	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	211	918	889	42	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	461	2,874	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Activity Group/Project Title LP - Wastewater Asset Management Tech Support

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Phase

Design:

Project Completion:

Construction:

Start Date

Mar 2018

Impact on Operations:

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

Effective Fundi	ng by User (perce	<u>ent):</u>									
DC -	41.22%					FY2	013 Appro	oved Life I	Budget F		
EPA/Fed -	0.00%			A	- - - - - - - - - - - - - - - - - - -				ĭ <u>L</u>		10,000,000
WSSC -	45.84%				12010110	, v 10 0 0 / 1 1 2	• •		ĭ þ		
Fairfax -	8.38%	W	ater is	life			Inc	rease/(De	crease)		10,000,000
Loudoun/PI -	4.56%									NI	EW
Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	359	1,320	1,314	1,619	1,323	960	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	10,000	0	0	0	0	0	0	0	0	0
(projected disburse	(projected disbursements do not include contingencies) (dollars in thousands)										

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Activity Group/Project Title LS - Misc. Facilities Projects FY2013

Managing Department: Facilities and Security

EPMC: NRPM - Nitrogen Removal Program Manager

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 Facilities Management for the rehabilitation, upgrade and improvement of various facilities and buildings at Blue Plains. Job numbers will be issued to identify the location of projects.

Phase

Design:

Project Completion:

Construction:

Start Date

Sep 2014

Impact on Operations:

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

Effective Funding by User (percent): DC -68.35% FY2013 Approved Life Budget 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 1,350,000 WSSC -24.75% Increase/(Decrease) 1,350,000 water is life 4.53% Fairfax -Loudoun/PI -2.37% **NEW Pre FY 2013** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements Post FY 2021 Budget** 0 38 842 0 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 1,350 0 0 0 0 0 0 0 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Mar 2014

Start Date

Sep 1998

Aug 2002

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 improves treatment, control and optimizes 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 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. PCCS in conjunction with the Grit & Screen Facility Upgrades and Gravity Thickener Upgrade is expected to save about \$200,000 per year in labor costs. 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 - 45.73% Fairfax - 8.36% Loudoun/PI - 4.55%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

et 63,896,572 et 64,852,128 e) 955,556

Increase/(Decrease

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	56,943	2,604	1,108	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	64,852	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

PhaseStart DateDesign:Dec 1998Construction:Apr 2001

Project
Completion: Oct 2012

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. This project is in the process of being closed out.

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 - 15.37% EPA/Fed - 25.97% WSSC - 45.84% Fairfax - 8.38% Loudoun/PI - 4.44%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et 74,080,993 et 74,080,993

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	73,240	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	74,081	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Potential Failure/Ability to continue meeting permit requirement **Priority:**

Project Description:

Start Date Design: Mar 2003 Construction:

Project

Phase

Completion: Mar 2020

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. This project is a multi-phase project.

Impact on Operations:

Project has no material impact on operations costs

Effective Funding by User (percent):

DC -40.48% EPA/Fed -0.74% WSSC -45.84% 8.38% Fairfax -Loudoun/PI -4.56%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)

	37,224,707
t	31,223,875
)	-6.000.832

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,394	319	937	304	9	236	5,629	5,056	867	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	8,102	5,616	0	0	70	1,011	16,425	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

37 224 707

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

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 -38.10% EPA/Fed -3.71% WSSC -45.40% Fairfax -8.30%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)	168,098
Approved Life Budget	48,515,790
approved Life Budget	48,347,692

Phase

Design:

Project Completion:

Construction:

Loudoun/PI -	4.50%

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	31,305	2,792	1,604	3,066	1,573	980	28	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	35,969	3,884	4,562	3,600	500	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2011

Jul 2011

Nov 2017

FY 2012 - 2021 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 - Biosolids Program Manager

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 - 41.48%
EPA/Fed - 0.00%
WSSC - 45.64%
Fairfax - 8.34%
Loudoun/PI - 4.54%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

lget	27,531,460
lget	25,476,469
ase)	-2,054,991

Phase

Design:

Project Completion:

Construction:

Start Date

Sep 2018

Disbursements	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,640	7,000	2,927	1,396	1,400	1,859	1,096	0	0	0	0
Commitments	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	17,476	0	2,000	6,000	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

PhaseStart DateDesign:Feb 2011Construction:Apr 2015

Project Completion: Apr 2019

This project will provide modifications to primary screening, degritting, scum processing, major upgrades to Gravity Thickeners 5-10 (GTs 5-10), and miscellaneous improvements to Gravity Thickeners 1-4 (GTs 1-4). The project budget modification is due to the following project scope additions: Sludge degritting and scum removal improvements, replacement of flat covers with domes on GTs 1-4, commissioning of inactive GTs 5 and 6, improvements to reduce entrained air sludge and new sludge blanket detectors

Impact on Operations:

This project will add facilities requiring operations and maintenance.

Effective Funding by User (percent):

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



Increase/(Decrease	Ŀ
FY2013 Revised/FY2014 Approved Life Budge	et 🛭
FY2013 Approved Life Budge	et

jet	15,499,200
get	31,167,092
se)	15,667,892

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,012	837	1,985	1,703	7,933	6,620	2,427	80	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,390	1,860	1,591	26,326	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 24.42%
EPA/Fed - 16.80%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.56%

FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

get	22,864,166
get	23,032,040
se)	167.874

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 FY 20	<u>14 FY 2015</u>	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	17,287	1,771 1	05 12	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY 20	<u>14 FY 2015</u>	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	22,858	174	0 0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2010

Nov 2014

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Activity Group/Project Title 12 - Biosolids Loadout Crane Rehabilitation

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

Project Description:

Construction: Managing Department: **Engineering and Technical Services** EPMC: EPMC4 - Biosolids Program Manager **Project** Completion:

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



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

et	2,350,000
et	2,350,000
、	0

Start Date

May 2013

May 2015

Phase

Design:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	27	364	888	494	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	28	2,322	0	0	0	0	0	0	0	0	0

(dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 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

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Nov 2013

Start Date

Oct 1999

Dec 2002

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.

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



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

_	
get	19,958,237

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	19,700	7	1	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	19,958	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

19.958.237

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Activity Group/Project Title XA - New Digestion Facilities

Engineering and Technical Services Managing Department:

EPMC: EPMC4 - Biosolids Program Manager

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

Phase **Start Date** Design: Aug 2002 Construction: Dec 2010

Project

Completion: Sep 2015

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 defer 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 result was the selection of thermal hydrolysis and disgestion. The budget adjustment reflects actual construction bids and reallocation of Program Managment costs from Project AM.

Impact on Operations:

The new digestion facility reduces biosolids production by half, produces a stable product for beneficial reuse, and generates excess digester gas that can supply 1/3 of the plant's electrical needs. The facility provides O&M savings of approximately \$20 million per year beginning in FY 2015 that inloude savings in biosolids hauling and reuse, personnel, chemicals, contracts and energy costs.

Effective Funding by User (percent):

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



FY2013 Approved Life Budge FY2013 Revised/FY2014 Approved Life Budge

Increase/(Decrease)	39,303,130
Approved Life Budget	514,793,141
pproved Life Budget	475,490,011

Disbursements Budget	Pre FY 2013 144.739			FY 2015	FY 2016	FY
Commitments	Pre FY 2013			FY 2015	FY 2016	<u>FY</u>
Budget	508,993	0	5,800	0	0	

	ļ	
(projected disbursements	do not include	contingencies)

FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
147,108	120,392	36,790	0	0	0	0	0	0	0
FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
0	5,800	0	0	0	0	0	0	0	0

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

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

FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

Budget	48,139,625
Budget	48,431,042
ecrease)	291,417

Phase

Design:

Project Completion:

Construction:

Start Date

Jun 2005

Mar 2009

Apr 2013

Disbursements	Pre FY 2013	FY 2013 FY 2	<u> 2014 </u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	45,615	761	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY 2	<u> 2014 </u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	48,168	263	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Activity Group/Project Title XC - Additional Dewatering Facilities

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

Processing
Additional Dewatering Facilities
Construction: Dec 1998
Construction: Dec 2001

Project
Completion: Oct 2012

Start Date

Phase

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.

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%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

get	81,725,849
get	81,725,849
Se)	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	80,571	1	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	81,726	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Oct 2017

Start Date

Sep 2005

Project Description:

This project involves repairs to chemical systems and provides for miscellaneous improvements to the Solids Processing Building and Dewatered Sludge Loading Facility. This project replaces aged equipment to ensure integrity and reliability of the systems and facilities which results in improved performance of chemical feed systems and other solids processing operations, and improved biosolids quality. Construction of a vault and switchgear improvements at the main substation are also included in this project.

Impact on Operations:

This project could increase operations and maintenance cost depending on final study findings and determination of Clean Air requirements, if any. A study of emissions data is ongoing.

Effective Funding by User (percent):

DC - 39.73%
EPA/Fed - 1.50%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/Pl - 4.55%

FY2013 Approved Life Budget	23,743,76
FY2013 Revised/FY2014 Approved Life Budget	23,743,79
Increase/(Decrease)	3

	1,642	1,709	3,799	2,972	1,910	8	0	0	0	0
Commitments Pre FY 201 Budget 15,828		FY 2014 7.903	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

PhaseStart DateDesign:May 2000Construction:Nov 2001

Project Completion: Feb 2014

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%



Ingresse (/Degresse)	
FY2013 Revised/FY2014 Approved Life Budget	2,23
FY2013 Approved Life Budget	2,23

I	ncreas	e/(Dec)				
							•

Disbursements Budget	Pre FY 2013 1,829	FY 2013 F Y 199	Y 2014 109	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments	Pre FY 2013	FY 2013 FY		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,895	339	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Health Safety

This project was formally "Project BI00 – Plant-wide Fine Bubble" and replaces the 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. The project retrofits or replaces the secondary process blowers and motors that are needed to operate at the higher-pressure requirements of fine bubble systems. This project also modifies Secondary Reactors 3 and 4, to reduce short-circuiting and improve their detention time and performance. Expansion of Secondary Reactors 5 and 6 is no longer part of this project. The project budget increase is required for the following scope additions and increases: upgrades to electrical switchgear, safety improvements to reactor walkways and aeration piping, air header improvements, blower rebuild, concrete repairs and HVAC upgrades.

Impact on Operations:

Project Description:

This project will add facilities requiring operations and maintenance.

Effective Funding by User (percent):

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



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et 59,803,602 et 71,861,603 e) 12,058,001

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,206	5,004	18,385	18,495	7,424	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	9,667	62,179	16	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2009

Feb 2013

Sep 2016

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Court Ordered, Stipulated Agreements, Etc. **Priority:**

Project

Phase

Design:

Construction:

Completion: Nov 2018

Start Date

Aug 2013

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



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

224,140,500 Increase/(Decrease) -22,845,500

Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,688	9,851	1,125	10,815	58,088	57,331	25,567	366	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	10,502	189,764	300	20,800	0	2,775	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

246,986,000

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

This project entails a new or expanded nutrient removal system to lower the concentration of total nitrogen in the Blue Plains effluent to 3 mg/l.

The Total Nitrogen Removal Project is part of DC Water's proposed Total Nitrogen -Wet Weather (TN/WW) Plan, which addresses the requirements of the Long Term Control Plan as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The principal components of this project are this project and Project EE, Centrate Treatment Facilities. Project EE provides for a new treatment system that will remove nitrogen from the recycle stream from solids processing.

Impact on Operations:

Operation of the new system will significantly increase operating and maintenance costs beginning in FY 2014. Increased chemical addition and power consumption comprise most of the cost increase.

Effective Funding by User (percent):

DC - 35.60% EPA/Fed - 5.62% WSSC - 45.84% Fairfax - 8.38% Loudoun/PI - 4.56%



Increase/(Decreas	e)
FY2013 Revised/FY2014 Approved Life Budg	et
FY2013 Approved Life Budg	et

jet	291,581,615
get	267,370,531
se)	-24,211,084

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	126,459	69,635 30,058	15,766	892	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	255,992	11,379	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2009

Jan 2011

Aug 2016

FY 2012 - 2021 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

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Phase

Design:

Project

Construction:

Completion: Dec 2016

Start Date

Aug 2009

Nov 2013

Project Description:

This project provides for a new treatment system that will remove nitrogen from the recycle stream from solids processing. The Total Nitrogen Removal Project is part of DC Water's proposed Total Nitrogen -Wet Weather (TN/WW) Plan, which addresses the requirements of the Long Term Control Plan as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The principal components are the TN/WW(EE) and project E9, Total Nitrogen Removal. Project E9 entails a new or expanded nitrogen removal process to lower the concentration of total nitrogen in the Blue Plains effluent to 3 mg/l.

Impact on Operations:

Operation of the new system will significantly increase operating and maintenance costs beginning in FY 2014. 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%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget 89,125,000
Increase/(Decrease) -3,300,000

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,510	5,140	25,730	33,478	984	18	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	12,108	7,937	69,080	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

92,425,000

FY 2012 - 2021 Capital Improvement Program

Service Area Title:

Activity Group/Project Title

EPMC5 - LTCP Program Manager

Managing Department: **Engineering and Technical Services**

Court Ordered, Stipulated Agreements, Etc. **Priority:**

Project Description:

EPMC:

Wastewater Treatment Service Area Phase **Start Date** Program Title: Enhanced Nitrogen Removal Facilities Project Design: Construction: EG - Wet Weather Peak Mitigation (Blue Plains Tunnel)

> **Project** Completion: Jun 2021

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.

Effective Funding by User (percent):

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



FY2013 Approved Life Budg FY2013 Revised/FY2014 Approved Life Budg

Increase/(Decrease)	0
Approved Life Budget	177,380,058
pproved Life Budget	177,380,058

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	50,619	51,795	20,739	17,235	1,520	12	12	12	12	8	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	177,230	150	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project
Completion: Jul 2025

Start Date

Feb 2019

Feb 2021

Phase

Design:

Construction:

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%



FY2013 Approv	ved Life Budget
FY2013 Revised/FY2014 Appro	ved Life Budget
_	

Approved Life Budget 56,925,000
Increase/(Decrease) -3,000,000

Disbursements	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	-37	-141	-138	-105	-131	101	633	1,233	5,061	36,078
Commitments	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	-3,000	440	1,100	440	0	0	3,435	2,690	66	50,328	1,426

(projected disbursements do not include contingencies)

(dollars in thousands)

59,925,000

FY 2012 - 2021 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 - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

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. 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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

29,274,635 et 27,194,802 e) -2,079,833

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,907	1,878	2,978	5,550	3,999	3,059	1,665	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,025	23,557	0	750	0	862	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2018

FY 2012 - 2021 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 - LTCP Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

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

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et	25,042,180
jet	26,375,532
se)	1,333,352

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,499	447	1,418	1,201	6,163	7,022	1,458	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,734	0	2,883	20,759	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2014

Aug 2015

Dec 2017

FY 2012 - 2021 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 - LTCP Program Manager

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.

Impact on Operations:

There are no anticipated impacts on operations or maintenance costs.

Effective Funding by User (percent):

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

udget	6,360,303
udget	6,360,303
ease)	0

Phase

Design:

Project Completion:

Construction:

Start Date

Apr 2009 Feb 2010

Aug 2013

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,484	56	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,360	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Activity Group/Project Title LM - ENR Program Management

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

Program management services are provided during planning, design, and construction of upgrades to the nitrogen removal facilities at the Blue Plains AWTP to ensure continued reliability of the facilities and compliance with the plant's NPDES discharge permit. Program management services are required for the Enhanced Nitrogen Removal Program due to the size and scope of the projects that comprise this program.

Phase

Design:

Project Completion:

Construction:

Start Date

Sep 2021

(dollars in thousands)

Impact on Operations:

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

(projected disbursements do not include contingencies)

Effective Funding by User (percent): DC -41.22% FY2013 Approved Life Budget 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 20,154,478 WSSC -45.84% Increase/(Decrease) 20,154,478 water is life Fairfax -8.38% Loudoun/PI -4.56% **NEW Disbursements Pre FY 2013** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 1,294 0 4.072 7.435 5.284 1.889 2.766 1.869 879 832 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 18.497 1.345 8.847 0 0 4.062 0 0 0

APPENDIX

WASTEWATER TREATMENT SERVICE AREA PROJECT NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
A2	Liquid Processing Program Management	III-8
AL	Plantwide Project Program Management	III-28
AM	Solids Processing Program Management	III-56
AZ	COF Renovations	III-29
BG	Dual Purpose Rehabilitation	III-9
BI	Enhanced Nitrogen Removal (ENR)	III-66
BP	Grit Chamber Facilities Phase II	III-10
BQ	Primary Treatment Facilities Ph II	III-11
BR	Nitrification/Denitrification Fac	III-12
BT	Filtration/Disinfection Fac PH II	III-13
BV	RWWPS No. 2 Upgrades	III-14
BX	Gravity Thickener Upgrades Ph II	III-57
BY	Additional Chemical Systems PH III	II-30
CH	Misc Facility Projects	III-31
CK	WWTP Sampler Program	III-32
CV	Laboratory Upgrades	III-33
CW	Perimeter Security at Blue Plains	III-34
DA	DWT Research / Pilot Projects	III-15
DP	Chemical Building Enhancements	III-35
DQ	Non-OEM PLC Interfaces/Replacements	III-36
E8	Enchance Clarification Facilities	III-67
E9	Nitrogen Removal Facilities	III-68
EE	Centrate Treatment Facilities	III-69
EG	Wet Weather Peak Mitigation (aka Blue Plains Tunnel)	III-70
El	Plantwide Painting of Steel Pipes	III-37

APPENDIX

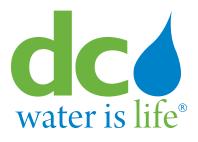
WASTEWATER TREATMENT SERVICE AREA PROJECT NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
EN	WWTP - Central Fire Alarm System	III-38
EV	Area Substation No. 6	III-58
FF	WWTP Flood Protection	III-39
FG	Secondary Treatment Upgrades for TN	III-71
FR	BP Tunnel Dewatering Pumping Sta	III-72
FS	Div D - Bolling Overflow & Diversion	III-73
GP	I & C & Elec - EPMC	III-40
H1	MWCOG Budget Items	III-41
H7	Blue Plains Tunnel Site Preparation	III-74
H9	Blue Plains Capital Equipment	III-42
HC	New Warehouse Facility at Blue Plains	III-43
HJ	COF Renovations and Additions	III-44
HK	CMF Renovations and Consolidation	III-45
HL	DWT - Process and Operations Jobs	III-46
HU	Blue Plains Logisitics	III-47
12	Biosolids Loadout Crane Rehabilitation	III-59
IC	Electrical Monitoring Systems	III-48
IX	Headworks HVAC Rehab	III-16
J6	Deammonification Project	III-17
JY	I.T Data Center	III-49
LC	Effluent Disinfection Upgrades	III-18
LM	ENR Program Management	III-75
LP	Wastewater Asset Management Tech Support	III-50
LS	Misc. Facilities Projects FY2013	III-51
TA	Process Computer Control System	II-52

APPENDIX

WASTEWATER TREATMENT SERVICE AREA PROJECT NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
TC	504B6 - Additional Chemical Systems	III-53
TF	504C5 - GRIT CHAMBER BLDG 1&2	III-19
TK	504G3 - BIOLOGICAL NUTRIENT REMOVAL	III-20
TM	504G6 - INFLUENT SCREEN FACILITY	III-21
TN	504G9 - PRIMARY TREATMENT FACILTY	III-22
TO	504H1 - SECONDARY TREATMENT FAC	III-23
TP	504H2 - GRAVITY THICKENERS	II-60
TQ	504H3 - NITRIFICATION FACILITY	III-24
TS	504H5 - IMP EAST PRIM EFFL EXCESS FL	III-25
TZ	504I6 - ELEC POWER SYS - SWITCH GEAR	III-54
UC	504J1 - FILTRATION/DISINFECTION FACI	III-26
UD	504J2 - RAW WATER PUMP STATIONS 1&2	III-27
XA	New Digestion Facilities	III-61
XB	Centrifuge Thickner Facility	III-62
XC	Additional Dewatering Facilities	III-63
XZ	Solids Processing Building / DSLF	II-64
YD	700D5 - MISCELLANEOUS PROJECTS	III-55
YZ	Digestion Facilities Site Preparation	III-65



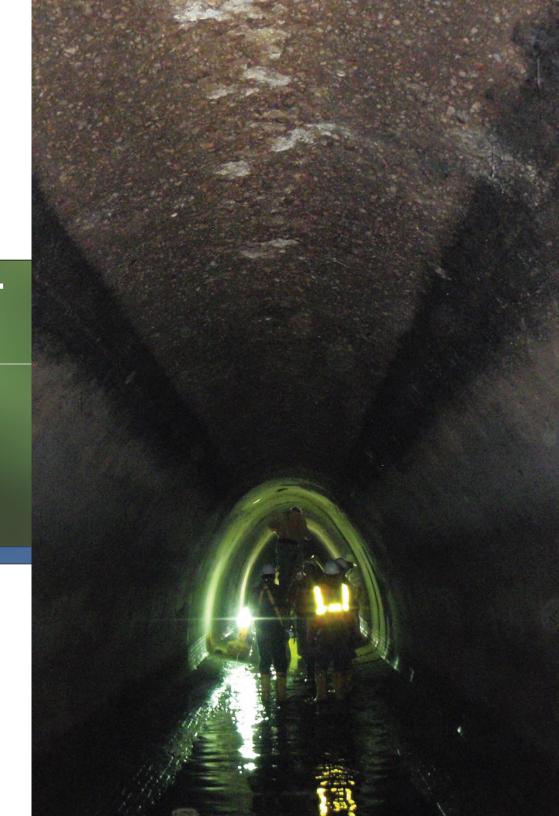
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

SECTION IV

SANITARY SEWER SERVICE AREA

APPROVED FY 2012 - 2021



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 Dulles International Airport, areas in Virginia and Maryland, to Blue Plains WWTP. 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.

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 17,000 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 funding to address currently identified projects (\$536 million) and a sewer pipe renewal program (\$664 million). Of the \$536 million, about \$330 million are currently

included in the lifetime budget for this service area. The remaining \$200 million will be included in future requests as they are analyzed and prioritized with all other funding needed for all service areas.

Some of the projects (or jobs within a project) that are planned for design and construction in FY 2013 and FY 2014 include:

- EJ01- Potomac Pump Station Phase III Rehab
- FV01 Rehab of Lower East Side Interceptor
- G401 Upper Potomac Interceptor Sewer Rehab
- G501 Glover Park Sewer Rehab
- G502 Soapstone Park Sewer Rehab
- G503 Foundry Branch Sewer Rehab
- G601 Sanitary SUB Rehab and Repair Phase 2
- G701 Combined Sewers Under Buildings
- G800 Small Local Sewer Rehab 2
- G900- Small Local Sewer Rehab 3
- GA00 Small Local Sewer Rehab 4
- GH00 Large Sewer Rehab 3
- GG00 Large Sewer Rehab 2
- IF01 Sanitary Sewer Rehabilitation 2
- IK01 Potomac Forcemain Rehab
- IL02 Creekbed Sewer Rehabilitation 2
- IL03 Creekbed Sewer Rehabilitation 2
- IL04 Creekbed Sewer Rehabilitation 2
- IN01 Upper East Side Trunk Sewer Rehabilitation
- J306 Sewer Upgrade City Wide
- N701 Potomac Interceptor Rehab at Fairfax & Loudoun Counties
- N708 Potomac Interceptor Repairs at Waxpool Road, Loudoun County, Virginia

The current CIP includes the following programs:

Sanitary Collection Sewers - \$162.7 million

(project pages IV-7 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:

 Local Sewer Rehab – Project 'G8' - This project consists of all necessary repairs and rehabilitation of the local sewers that convey sewage from neighborhood sewers as identified in the Sewer System Facilities Plan. Design is anticipated in the 3rd quarter of FY2013.

Sanitary On-Going Projects - \$173.8 million

(project pages IV-21 to IV-37)

This area includes capital projects managed by the Department of Sewer Services including the replacement of sewer laterals, relining of sewer mains/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.

• 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 completion is anticipated in 2014 with construction anticipated to start in 2015.

Sanitary Pumping Facilities - \$30.5 million

(project pages IV-38 to IV-43)

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 2013, which will place interior and exterior cameras throughout DC Water's Sewer Services facilities, install traffic control devices, and perimeter fencing.

Sanitary Sewer Program Management – \$91.1 million

(project pages IV-44 to IV-46)

During FY 2012, 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 Project 'AU' This project provides design, review and management of
 the sewer system capital program to meet current service demands and planned growth. This planning effort is also required
 to rehabilitate the existing infrastructure to maintain the infrastructure service life.
- Sewer Inspection Program Project 'DN' This ongoing project began in FY 2009, and provides valuable planning, design
 and management information for the Department of Engineering's evaluation of the wastewater collection system to Blue
 Plains Advanced Wastewater Treatment Plant.

Sanitary Interceptor/Trunk Force Sewers - \$466.5 million

(project pages IV-47 to IV-79)

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 in the Sewer System Facilities Plan as part of the comprehensive assessment of the sewer system. The current CIP contains several projects in this service area, including:

- Low Area Trunk Sewer Rehabilitation Project 'DR' This project was identified in the Sanitary Sewer Facilities Plan and provides for the rehabilitation of the sewer trunk main along Pennsylvania Avenue through the heart of DC and continuing to the Main Pumping Station. Design is presently underway and construction rehabilitation is anticipated in FY2014.
- Sewer Rehab Near Creek Beds Project 'G5' 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. Three identified locations (Glover Archbold Park, Soapstone Park and Foundry Branch Park) where design started in FY2011 and is presently within the Environmental Assessment phase. If environmental permitting is straightforward, then construction could commence in late FY 2014 for one or more of these three locations.
- Sanitary Sewer Rehab Under Buildings 'G6' This project rehabilitates sanitary sewers located under and adjacent to 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.
- Outfall Sewer Rehabilitation 'HS' This project addresses the need to conduct detailed assessments of approximately 32,000 linear feet of the several major sewers prior to proceeding with implementation of corrective actions. The relevant sewers include three of the major influent sewers to Blue Plains WWTP: the East Outfall Relief Sewer, the West Outfall Sewer and the West Outfall Relief Sewer.

- Rehabilitation of Anacostia Force Main Project 'HT' This series of projects provides for the assessment of this critical
 asset through a variety of methods. Ultimately, the goal of the projects is to establish the existing condition of the AFM and
 rehabilitate if there are defects that will adversely affect its structural safety and prevent potentially extensive and costly
 repairs in the future.
- 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 (\$55.3 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 two separate portions of the interceptor in Fairfax and Loudoun Counties.
 - Additional Inspections These projects further assess the Potomac Interceptor and provide reinspection when needed, 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.
 - Odor Control Projects DC Water is constructing a permanent odor control system that includes a forced air/activated carbon filter system. The conceptual design was completed in FY 2003. During the past eight years, DC Water has been seeking the requisite 40+ permits, performing associated environmental assessments, and coordinating with the community. Construction is nearing completion for 4 sites in Maryland and the District. One Virgina site construction is commencing and the remaining Virginia site will commence construction before the end of 2012.
- 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 FY 2009, but recent cleaning and inspection shows other repairs are necessary that will delay construction start until early 2014 due to further negotiation with NPS.

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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

PhaseStart DateDesign:Jul 2011Construction:Nov 2013

Project

Completion: Mar 2017

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%

water is life

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

28,000,000 et 28,000,000

Increase/(Decrease)

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	509	406	4,804	6,770	1,803	191	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,591	273	22,719	3,417	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area Program Title:

G8 - Small Local Sewer Rehab 2 Activity Group/Project Title

Managing Department: **Engineering and Technical Services** EPMC3C - Sewer Program Manager EPMC:

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

Sanitary Collection Sewers

Phase Start Date Design: Mar 2013 Construction: Jan 2015

Project

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

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget Increase/(Decrease)

2,750,000 2,750,000 0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	44	68	315	840	190	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	183	0	2,567	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Activity Group/Project Title G9 - Small Local Sewer Rehab 3

Managing Department: **Engineering and Technical Services** EPMC3C - Sewer Program Manager

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

Sanitary Collection Sewers

Project

Start Date

Jun 2013

May 2015

Jul 2017

Phase

Design:

Construction:

Completion:

Project Description:

Program Title:

EPMC:

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



FY2013 Approved Life Budg FY2013 Revised/FY2014 Approved Life Budg Increase/(Decreas

get	5,650,000
get	5,650,000
se)	0

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	25	164	239	1,799	769	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	377	0	5,273	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Activity Group/Project Title GA - Small Local Sewer Rehab 4

Managing Department: **Engineering and Technical Services**

Priority:

Sanitary Collection Sewers

EPMC3C - Sewer Program Manager Good Engineering, High pay back, Mission / Function

Project

Phase

Design:

Construction:

Completion: Jun 2017

Start Date

Mar 2014

Jan 2016

Project Description:

Program Title:

EPMC:

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.

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% 0.00% Fairfax -Loudoun/PI -0.00%

t	FY2013 Approved Life Budget
t $lacksquare$	FY2013 Revised/FY2014 Approved Life Budget
	Increase/(Decrease)

dget	8,700,000
dget	8,700,000
ase)	0

Disbursements	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	121	179	3,361	1,027	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	560	0	8,140	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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

Project

Phase

Design:

Construction:

Completion: Mar 2019

Start Date

Mar 2015

Jan 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 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%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et	12,000,000
et	12,000,000
,	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	156	260	1,476	3,663	847	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	800	0	11,200	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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

EPMC: EPMC3C - Sewer Program Manager

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

Project

Phase

Design:

Construction:

Completion: 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%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

ŧ	12,400,000
et	12,400,000
	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	174	265	1,544	3,826	870	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	827	0	11,573	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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

Project

Phase

Design:

Construction:

Completion: Mar 2021

Start Date

Mar 2017

Jan 2019

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%
Loudoun/PI - 0.00%

Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

t 12,700,000 t 12,700,000

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	176	275	1,595	3,897	890	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	847	0	11,853	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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

Project

Phase

Design:

Construction:

Completion: Jan 2023

Start Date

Mar 2018

Jan 2020

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%

Loudoun/PI - 0.00%



Increase/(Decrease	e)
FY2013 Revised/FY2014 Approved Life Budge	et
FY2013 Approved Life Budge	et

et	13,100,000
et	13,100,000
٥)	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017					Post FY 2021
Budget	0	0	0	0	0	0	184	287	1,649	4,010	1,225
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	874	0	12,226	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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

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):

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



Increase/(Decrease)	ľ
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

et	13,495,000
et	13,495,000
۵۱	0

Start Date

Mar 2019

Jan 2021

May 2023

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	180	278	1,728	7,150
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	900	0	12,595	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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

C - Sewer Program Manager

Project
Completion:

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)	0
Approved Life Budget	6,682,537
approved Life Budget	6,682,537

Start Date

Feb 2004

Oct 2013

Phase

Design:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,188	2	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,683	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

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** EPMC3C - Sewer Program Manager EPMC:

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

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:

Disbursements

Commitments

Budget

Budget

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

553

1,150

0

0

Pre FY 2013

Pre FY 2013

FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase//Decrease)	ſ

0

water is life					Increase/(Decrease) 0								
	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021			
	65	0	0	0	0	0	0	0	0	0			

0

0

0

Phase

Design:

Project Completion:

Construction:

Start Date

Oct 2007

Oct 2009

Jun 2013

1,150,000

1,150,000

Post FY 2021

0

(projected disbursements do not include contingencies) (dollars in thousands)

0

0

FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

0

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

EPMC3C - Sewer Program Manager

Potential Failure/Ability to continue meeting permit requirement

Completion:

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%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et 12,718,000 et 16,063,000 e) 3,345,000

Phase

Design:

Construction:

Start Date

Nov 2002

Feb 2016

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,573	316	1,537	3,807	53	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,066	689	11,308	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary Collection Sewers

Activity Group/Project Title JS - Small Local Sewer Rehabilitation 10

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

Phase Start Date
Design: Feb 2020
Construction: Jan 2022

Project

Completion: Mar 2024

This project is to rehabilitate and/or replace laterals and collector sewers throughout the District of Columbia as one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Specific sewers for inclusion in this project will be determined by the ongoing condition assessment work.

Impact on Operations:

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

DC -	100.00%					FY2	013 Appro	ved Life I	Budget			
EPA/Fed - WSSC -	0.00% 0.00%		FY2013 Revised/FY2014 Approved Life Budget						Budget	13,910,000		
Fairfax -	0.00%	wa	ter is	life	Increase/(Decrease)					13,910,000		
Loudoun/PI -	0.00%		101 10	1110						NE	EW	
Disbursements	s <u>Pre FY 2013</u>	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	0	0	0	0	0	0	0	219	335	10,386	
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	0	0	0	0	0	0	0	927	0	12,983	
(nuninata d dinb	sements do not include		:\							(delle	rs in thousands)	

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area Program Title:

LL - Small Local Sewer Rehabilitation 11 Activity Group/Project Title

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

Priority:

Sanitary Collection Sewers

Good Engineering, High pay back, Mission / Function

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.

Phase

Design:

Project Completion:

Construction:

Start Date

Mar 2021

Aug 2023

Aug 2026

Impact on Operations:

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

Effective Funding by User (percent): DC -100.00% FY2013 Approved Life Budget EPA/Fed -0.00% FY2013 Revised/FY2014 Approved Life Budget 16,055,000 WSSC -0.00% Increase/(Decrease) 16,055,000 water is life 0.00% Fairfax -Loudoun/PI -0.00% **NEW Disbursements Pre FY 2013** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 0 0 0 0 0 0 0 0 125 11.869 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 0 0 1.040 15.015 (dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 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: **Engineering and Technical Services** EPMC3C - Sewer Program Manager EPMC:

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

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. Major work in this project includes replacement of a 12 inch sewer line along Pope Branch.

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 -86.41% EPA/Fed -13.59% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%

lifa	Increase/(Decreas
	FY2013 Revised/FY2014 Approved Life Budg
	FY2013 Approved Life Budg

·	
FY2013 Approved Life Budget	13,753,484
FY2013 Revised/FY2014 Approved Life Budget	13,753,484
Increase/(Decrease)	0

Phase

Design:

Project Completion:

Construction:

Start Date

Apr 2003

Oct 2015

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,418	172	2,566	2,060	19	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,805	8,948	0	0	0	0	0	0	0	0	0

(dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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:

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	5,670,000
et	5,670,000
٥,	0

Start Date

Mar 2007

Aug 2013

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,490	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,670	0	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Q8 - FY2008 - DSS Sanitary Sewer Project Activity Group/Project Title

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

Potential Failure/Ability to continue meeting permit requirement **Priority:**

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:

Disbursements

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 -Loudoun/PI -0.00%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

Budget 4,165 179 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 4,640 0 0

(projected disbursements do not include contingencies)

Pre FY 2013

(dollars in thousands)

4.640.000

4.640.000

0

0

0

Start Date

Jun 2008

Dec 2013

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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:

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%

wat	er is life

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

ŧ	5,720,000
et	5,720,000

Start Date

May 2009

Jan 2013

Phase

Design:

Project Completion:

Construction:

0.00% water is life Increase/(Decrease)

Disbursements Budget	Pre FY 2013 5,512	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 5.609	FY 2013 111	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021	Post FY 2021

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et	6,790,000
et	7,924,251
(د	1.134.251

Start Date

Jun 2010

Feb 2013

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,200	172	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	7,924	0	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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:

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

Cl	0,105,000
et	8,165,000
e)	0

Start Date

Sep 2012

Oct 2013

8 165 000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,043	1,957	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,496	1,669	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

CE - FY2012 - DSS Sanitary Sewer Projects Activity Group/Project Title

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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:

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 -Loudoun/PI -0.00%

wat	er is life

FY2013 Approved Life Budge FY2013 Revised/FY2014 Approved Life Budge Increase/(Decrease)

ŧ	9,385,000
et	9,385,000
	٥

Start Date

Dec 2011

Apr 2014

Phase

Design:

Project Completion:

Construction:

FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Pre FY 2013 **Disbursements Post FY 2021 Budget** 1,848 3.426 1,071 0 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 5,075 4.310 0 0 0 0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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:

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

10,205,000 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	3,442	1,703	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	10,205	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

10,205,000

Start Date

Feb 2013

May 2014

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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:

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%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

JCI	10,575,000
get	10,575,000
se)	0

Start Date

Feb 2014

May 2015

10 575 000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	3,442	1,541	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	10,575	0	0	0	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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:

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%



Increase/(Decrease)	Ī			
FY2013 Revised/FY2014 Approved Life Budget				
FY2013 Approved Life Budget				

et	10,846,000
et	10,846,000
Λĺ	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	3,011	1,863	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	10,846	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2015

Apr 2016

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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:

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%

Disbursements

Pre FY 2013



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increses//Decreses

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

Start Date

Feb 2016

Apr 2017

11,215,000

11,215,000

0

Budget 0 0 0 4.680 2.197 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 11.215 0 0 0 0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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

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:

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% Fairfax -0.00% Loudoun/PI -0.00%

Disbursements

Commitments

Budget

Budget



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

FY 2	013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
	0	0	0	0	4,751	2,291	0	0	0	0
FY 2	<u>013</u>	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
	0	0	0	0	11,500	0	0	0	0	0

Phase

Design:

Project Completion:

Construction:

(projected disbursements do not include contingencies)

Pre FY 2013

Pre FY 2013

0

0

(dollars in thousands)

11,500,000

11,500,000

0

Start Date

Feb 2017

May 2018

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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 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%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

get	11,845,000
get	11,845,000
se)	0

Start Date

Feb 2018

Apr 2019

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	4,878	2,352	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	11,845	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

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

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

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:

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 -Loudoun/PI -0.00%

Disbursements



FY2013 Approved Life Budget	Į	
FY2013 Revised/FY2014 Approved Life Budget	Ī	
	Г	_

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

20	FY 2021	Post FY 2021

Start Date

Feb 2019

Apr 2020

12.200.000

12,200,000

0

Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 202 **Budget** 0 0 0 0 0 0 5.252 2.474 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 12.200 0 0 0

(dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Activity Group/Project Title JI - FY2020 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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 2020 for sanitary sewer mains and lateral 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%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	12,568,000
et	12,568,000
	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	5,689	2,290	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	12,568	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2020

Jan 2021

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Activity Group/Project Title LN - FY2021 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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 2021 for sanitary sewer mains and lateral infrastructure improvements. Job numbers will be issued to identify different jobs within the project.

Phase

Design:

Project Completion:

Construction:

Start Date

Jan 2021

Jan 2022

Impact on Operations:

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

Effective Funding by User (percent): DC -100.00% FY2013 Approved Life Budget 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 12,945,000 WSSC -0.00% Increase/(Decrease) 12,945,000 water is life 0.00% Fairfax -Loudoun/PI -0.00% **NEW** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements Pre FY 2013 Post FY 2021 Budget** 0 0 0 0 0 0 0 0 5.833 2.719 **Post FY 2021 Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Budget** 0 0 0 0 0 0 0 0 0 12.945 0 (projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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

Project

Phase

Design:

Construction:

Completion: Oct 2014

Start Date

Dec 2008

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):

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

14,600,000 et 14,600,000

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	8,778	1,198	511	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	14,600	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

get	1,135,000
get	1,135,000
۰۵۱	0

Start Date

Nov 2014

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	155	120	115	16	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	435	700	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 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** EPMC3C - Sewer Program Manager

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

Project Description:

EPMC:

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 -98.52% 0.00% EPA/Fed -WSSC -1.15% 0.21% Fairfax -Loudoun/PI -0.11%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

2.400.000 2.400.000 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	231	40	40	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,400	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2015

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary Pumping Facilities

Activity Group/Project Title HB - DSS Sewer Pumping Project

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget 4,560,000
Approved Life Budget 4,560,000
Increase/(Decrease) 0

Start Date

Oct 2010

Sep 2015

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	916	488	232	225	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,280	760	760	760	0	0	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

L3 - Rock Creek Sewage Pumping Station Activity Group/Project Title

Managing Department: **Engineering and Technical Services**

Potential Failure/Ability to continue meeting permit requirement **Priority:**

EPMC3C - Sewer Program Manager

Project Description:

EPMC:

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 -43.32% 0.00% EPA/Fed -WSSC -35.94% 12.61% Fairfax -Loudoun/PI -8.14%



FY2013 Approved Life Budget	I
FY2013 Revised/FY2014 Approved Life Budget	·

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Start Date

Nov 2003

Apr 2007

Mar 2013

11,131,290

11,131,290

0

Disbursements Budget	Pre FY 2013 7,733	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	11,131	0	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

L4 - Upper Anacostia Sew. Pump. Station Activity Group/Project Title

Managing Department: **Engineering and Technical Services** EPMC: EPMC3C - Sewer Program Manager

Potential Failure/Ability to continue meeting permit requirement **Priority:**

Project

Phase

Design:

Construction:

Completion: Aug 2013

Start Date

Nov 2003

May 2008

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:

Disbursements

Commitments

Budget

Budget

There will be no material impact on operating costs.

Effective Funding by User (percent):

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



0

0

FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
In anno ann (/Danno ann)	

0

Increase/(Decrease)

0

0

FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
43	0	0	_	_	0	_	_	_	0
FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

0

(projected disbursements do not include contingencies)

Pre FY 2013

Pre FY 2013

6.826

9.135

(dollars in thousands)

9,134,559

9,134,559

0

0

0

0

0

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	2,097,568
et	2,097,568
、	0

Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,704	15	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,098	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2002

Aug 2005

Jul 2013

Phase

Design:

Project Completion:

Construction:

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

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%



FY2013 Appro	ved Life Budget
FY2013 Revised/FY2014 Appro	oved Life Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

61,079,994
0

61.079.994

Start Date

Sep 2021

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	20,958	1,657	2,529	2,349	2,310	3,676	3,897	3,571	2,840	2,183	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	40,280	0	0	0	20,800	0	0	0	0	0	0

(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 2012 - 2021 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: EPMC3C - Sewer Program Manager

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.

Construction:	May 2011	

Start Date

Mar 2010

Project Completion: Jan 2023

Phase

Design:

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et	42,055,000
jet	25,006,445
e)	-17,048,555

(dollars in thousands)

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,128	2,163	1,677	1,570	1,155	987	996	647	1,052	1,357	1,204
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget											

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Sewer Program Mgmt

Activity Group/Project Title LR - Sanitary Sewer Asset Management

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

Phase

Design:

Project Completion:

Construction:

Start Date

Mar 2018

Impact on Operations:

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

Effective Fund	ing by User (perce	ent):									
DC -	100.00%				FY2	013 Appro	oved Life I	Budget			
EPA/Fed -	0.00%		,	- - - - - - - - - - - - - - - - - - -		• • •		Ŭ L		5,000,000	
WSSC -	0.00%			12010110	. V 10 C G / 1 1 2	• •		, ,			
Fairfax -	0.00%	water is	life			Inc	rease/(Ded	crease)		5,000,000	
Loudoun/PI -	0.00%	77.11.01							NE	≡W	
Disbursements	Pre FY 2013	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	409 700	650	695	688	298	0	0	0	0	
Commitments	Pre FY 2013	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	5,000 0	0	0	0	0	0	0	0	0	
(projected disburs	(projected disbursements do not include contingencies) (dollars in thousands)										

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

Priority: Good Engineering, Low, M&F over long term

Project

Phase

Design:

Construction:

Completion: Apr 2024

Start Date

Oct 2003

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 - 86.68% EPA/Fed - 6.31% WSSC - 6.51%

Fairfax - 0.38% Loudoun/PI - 0.12%

Effective Funding by User (percent):



	FY2013 Approved	Life	Budget
FY2013 Revised	d/FY2014 Approved	Life	Budget

Increase/(Decrease)

43,815,515
43,815,515

9)

Disbursements	Pre FY 2013	FY 2013						FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	15,411	2,533	1,283	2,259	2,164	827	272	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	28,210	11,306	2,300	2,000	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

- Sewer Program Manager

Failure/Ability to continue meeting permit requirement

Completion:

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%

Fairfax - 0.00%

Loudoun/PI - 0.00%

wat	er is life

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

get	12,350,000
get	12,350,000
se)	0

Start Date

Sep 2010

Aug 2013

Jan 2016

Phase

Design:

Construction:

Disbursements	Pre FY 2013	FY 2013 FY 20°	4 FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	297 2,6	9 2,298	341	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY 20°	4 FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	750	11,600	0 0	0	0	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Sep 2015

Start Date

Sep 2007

Jun 2009

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

Jei	4,410,000
get	10,616,570
se)	6,200,570

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	991	229	2,622	1,574	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,662	990	7,965	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

4 416 000

FY 2012 - 2021 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** EPMC3C - Sewer Program Manager EPMC:

Potential Failure/Ability to continue meeting permit requirement **Priority:**

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

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Inorocco//Decreace)

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Start Date

Jul 2013

Nov 2013

Nov 2015

14,800,500

14,800,500

0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	1,414	1,246	2,892	527	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,300	987	8,513	0	0	0	0	0	0	0	0

(dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Jul 2018

Start Date

Jan 2014

May 2015

Project Description:

This project will rehabilitate the Piney Branch Trunk Sewer from the intersection of 3rd Street and Madison Street., NW to Structure No. 70, which is located at the outfall to Piney Branch in the vicinity of Piney Branch Parkway and 17th Street, NW. The project proposes to rehabilitate approximately 11,200 feet of the deteriorated sewer with an internal lining method.

Impact on Operations:

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

Effective Funding by User (percent):

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

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget 25,000,000

Increase/(Decrease) 0

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	105	0	480	628	5,054	5,802	2,197	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	283	0	1,385	23,333	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

25,000,000

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Dec 2018

Start Date

Oct 2014 Apr 2016

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 -12.20% FY2013 Approved Life Budget 16.000.000 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 16.000.000 WSSC -87.80% Increase/(Decrease) 0 water is life 0.00% Fairfax -Loudoun/PI -0.00% **Disbursements** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 0 0 0 371 684 4.561 3.532 344 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 1.070 14.930 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

1 1

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

EPMC: EPMC3C - Sewer Program Manager

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

Project

Phase

Design:

Construction:

Completion: May 2016

Start Date

Jan 2013

Jul 2014

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):

89.51%
0.00%
10.49%
0.00%
0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

jet	9,000,000
get	9,000,000
se)	0

(dollars in thousands)

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	137	312	2,500	924	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	663	3,667	4,670	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

2 Note:Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

(projected disbursements do not include contingencies)

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title G4 - Upper Potomac Intercept Sewer Rehab.

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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.

Phase

Design:

Project Completion:

Construction:

Start Date

Oct 2009

Oct 2013

Feb 2015

(dollars in thousands)

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 -52.70% FY2013 Approved Life Budget 3,927,906 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 3,927,906 WSSC -47.30% Increase/(Decrease) 0 water is life Fairfax -0.00% Loudoun/PI -0.00% **Disbursements** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 274 40 1.270 37 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 513 385 3.030 0 0 0 0 0

2 Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

35	32,000,000
et	32,000,000
٠,	0

Start Date

Jun 2011

Sep 2014

Dec 2018

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	156	123	417	3,924	6,980	3,505	1,101	78	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,270	0	19,000	600	8,630	2,500	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%

FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

et	8,468,000
et	8,468,000
۷)	0

Start Date

Mar 2009

Jan 2010

Nov 2017

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	829	276	110	329	1,533	984	12	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,000	59	1,127	4,283	0	0	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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

Project Complete

Phase

Design:

Construction:

Completion: Dec 2017

Start Date

Jul 2013

Dec 2015

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%

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget 3,000,000
Increase/(Decrease) 0

3,000,000

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014 51	FY 2015 30	FY 2016 536	FY 2017 938	FY 2018 142	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments	Pre FY 2013	FY 2013						FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	200	0	0	2,800	0	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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:

Disbursements

Commitments

Budget

Budget

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%

 •
FY2013 Approved Life Budget
-
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Start Date

Jan 2014

Dec 2016

Jan 2019

6.150.000

6,150,000

0

0.00 /0										
Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
0	0	7	90	100	905	2,038	392	0	0	0
Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
0	0	410	0	0	5,740	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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

Project Completion

Construction:

Phase

Design:

Completion: Aug 2018

Start Date

Mar 2014

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

Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	L
FY2013 Approved Life Budget	I

et	9,530,000
et	9,530,000
、	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	71	140	218	2,925	2,075	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	636	0	8,894	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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

Good Engineering, Fight pay back, Miss

Project
Completion: Aug 2019

Start Date

Mar 2015

Aug 2017

Phase

Design:

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%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



Increase/(Decrease) [
FY2013 Revised/FY2014 Approved Life Budge	t [
FY2013 Approved Life Budge	t [

jet	13,100,000
get	13,100,000
(02	0

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	87	276	298	4,072	2,884	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	874	0	12,226	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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

Project Completion

Construction:

Phase

Design:

Completion: Aug 2020

Start Date

Mar 2016

Aug 2018

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%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

t 13,500,000 t 13,500,000

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	128	282	311	4,233	2,961	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	900	0	12,600	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

GL - Large Sewer Rehab 7 Activity Group/Project Title

Managing Department: **Engineering and Technical Services**

EPMC3C - Sewer Program Manager EPMC:

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

Project Completion:

Construction:

Phase

Design:

Aug 2021

Start Date

Mar 2017

Aug 2019

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% water is life 0.00% Fairfax -

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

13,900,000 13,900,000 Increase/(Decrease) 0

Loudoun/PI -0.00%

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	131	294	323	4,345	3,032	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	927	0	12,973	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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%

FY2013 Approved Life Budget	
Y2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

get	14,300,000
get	14,300,000
se)	0

Start Date

Mar 2018

Aug 2020

Aug 2022

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 137	FY 2019 305	FY 2020 331	FY 2021 4,465	Post FY 2021 3,850
Commitments Budget	Pre FY 2013 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 954	FY 2019 0	FY 2020 13,346	FY 2021 0	Post FY 2021

FY 2012 - 2021 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

EPMC: EPMC3C - Sewer Program Manager

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

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:

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

t 15,705,000 t 15,705,000

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	133	295	439	10,596
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	980	0	14,725	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2019

Aug 2021

Aug 2023

Phase

Design:

Project Completion:

Construction:

FY 2012 - 2021 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:

Phase Start Date
Design: Dec 2016
Construction: Oct 2017

Project
Completion: Jul 2018

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 costs associated with the construction of this new facility, along with any cost associated with site acquisition, will be reimbursed to DC Water by the District of Columbia.

Impact on Operations:

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%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

9,434,000 et 9,434,000

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	23	736	5,542	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	382	1,075	7,977	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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: EPMC:

Priority: Good Engineering, Low, M&F over long term

Project Description:

unk/Force Sewers

ement Facility

nical Services

EPMC: EPMC3

V, M&F over long term

Design: Dec 2016
Construction: Oct 2017

Project
Completion: Jul 2018

Phase

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 costs associated with the construction of this new facility along with any cost associated with site acquisition, will be reimbursed to DC Water by the District of Columbia.

Impact on Operations:

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%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et 9,669,000 et 9,669,000

Start Date

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	27	753	5,681	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	415	1,075	8,179	0	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title HS - Rehabilitation of Influent Sewers

Managing Department: **Engineering and Technical Services**

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

EPMC3C - Sewer Program Manager

Project

Phase

Design:

Construction:

Completion: Oct 2015

Start Date

Feb 2013

Project Description:

EPMC:

This project addresses the need to conduct detailed assessments of several major sewers within the District of Columbia prior to proceeding with implementation of corrective actions. The relevant sewers include three of the major influent sewers to Blue Plains WWTP: the East Outfall Relief Sewer, the West Outfall Sewer and the West Outfall Relief Sewer. Activities would include hydraulic cleaning, closed-circuit television (CCTV) inspection, sonar inspection, concrete testing, inspection using pipe penetrating radar and other methods and activities as necessary to fully ascertain the pipe condition. The project would assess approximately 32,000 linear feet of the three outfall and outfall relief sewers to provide a complete recommendation for future rehabilitation.

Impact on Operations:

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

Effective Funding by User (percent):

DC -64.75% EPA/Fed -0.00% WSSC -27.30% 5.20% Fairfax -Loudoun/PI -2.75%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget Increase/(Decrease)

3.000.000 3.000.000 0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	85	1,136	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	3,000	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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

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

EPMC3C - Sewer Program Manager

Project
Completion:

Construction:

Phase

Design:

Jan 2020

Start Date

Sep 2011

Jul 2015

Project Description:

EPMC:

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 - 15.60% EPA/Fed - 0.00% WSSC - 84.40% Fairfax - 0.00% Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

get 6,150,000
get 6,150,000

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	203	154	64	423	778	856	619	80	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	850	150	1,250	1,200	450	2,250	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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**

EPMC3C - Sewer Program Manager EPMC:

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

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

Impact on Operations:

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

rehabilitate the large sewer inventory which exhibits deteriorated conditions.

Effective Funding by User (percent):

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



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget Increase/(Decrease)

12,000,000 12,000,000 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	66	166	1,538	2,194	2,056	850	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	260	3,907	4,007	3,827	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2014

Jul 2015

Sep 2019

FY 2012 - 2021 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

EPMC: EPMC3C - Sewer Program Manager

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et	12,930,000
et	20,995,000
۵)	8 065 000

Start Date

Mar 2017

Jul 2018

Sep 2022

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	91	261	1,667	2,937	4,902	3,456
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	287	4,203	4,305	12,200	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	: [

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

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٠٠)	0

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014 701	FY 2015	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
900	U	1,500	U	U	U	U	U	U	U	U	U

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2011

Sep 2014

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title IL - Creekbed Sewer Rehabilitation 2

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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 -79.36% FY2013 Approved Life Budget 20.010.000 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 20.010.000 WSSC -20.64% Increase/(Decrease) 0 water is life 0.00% Fairfax -Loudoun/PI -0.00% **Disbursements Pre FY 2013** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 0 0 95 179 1.910 2.527 4.579 2.530 60 0 0 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Commitments** Pre FY 2013 **Post FY 2021 Budget** 0 0 0 0 385 3.769 3.966 9.990 1.900 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2013

Jun 2015

Dec 2019

Phase

Design:

Project Completion:

Construction:

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

Priority: Health Safety

Effective Funding by User (percent):

0.00%

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:

Loudoun/PI -

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

DC - 62.17% EPA/Fed - 0.00% WSSC - 37.83% Fairfax - 0.00%

FY2013 Approved Life Budget	16,107,000
FY2013 Revised/FY2014 Approved Life Budget	16,107,000
Increase/(Decrease)	0

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016			FY 2019			Post FY 2021
Commitments	0 Pre FY 2013	0 FY 2013	0 FY 2014	0 FY 2015	3 FY 2016	213 FY 2017	598 FY 2018	3,005 FY 2019	3,719 FY 2020	1,849 FY 2021	2,191 Post FY 2021
Budget	0	0	0	0	150	540	6,428	6,085	2,904	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2016

Mar 2018

Aug 2022

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 Capital Improvement Program

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: EPMC:

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

Project Description:

Engineering and Technical Services EPMC3C - Sewer Program Manager **Project** Completion: Aug 2020

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

FY2013 Approved Life Budget	14,250,0
FY2013 Revised/FY2014 Approved Life Budget	14,250,0
Increase/(Decrease)	

Phase

Design:

Construction:

Start Date

Apr 2012

Jun 2012

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	317	2,906	0	0	172	404	2,337	1,658	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	60	6,285	0	0	0	495	7,410	0	0	0	0

(dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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 - 85.29% EPA/Fed - 0.00% WSSC - 14.55% Fairfax - 0.09% Loudoun/PI - 0.07%



Increase/(Decrea	е) Г
FY2013 Revised/FY2014 Approved Life Bud	et
FY2013 Approved Life Bud	et

t	5,620,000
ŧ	5,620,000
١.	0

Phase

Design:

Project Completion:

Construction:

Disbursements	<u>Pre FY 2013</u>	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	101	18	26	32	2,446	550	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	220	0	410	0	4,990	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2009

Dec 2015

Mar 2017

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

water is life

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:

Fairfax -Loudoun/PI -

Effective Funding by User (percent):

0.00%

0.00%

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

DC - 13.80% EPA/Fed - 0.00% WSSC - 86.20%

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

7,945,000 7,945,000

Start Date

Jul 2013

Oct 2015

Oct 2017

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013 127	FY 2013 F 16	Y 2014 136	FY 2015 161	FY 2016 2,726	FY 2017 1,735	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 133	FY 2013 F 500	Y 2014 0	FY 2015 950	FY 2016 6,362	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title JQ - Hydraulic Protection Project

Managing Department: **Engineering and Technical Services**

EPMC3C - Sewer Program Manager EPMC:

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

Project Description:

This project includes all of the recommended Category V - Hydraulic Improvement Projects listed in the 2009 Sewer System Facilities Plan (SSFP). These projects are intended to rehabilitate and / or replace sewer manholes to prevent overflows during sewer storm surcharging. Specific manhole locations for these major sewers were determined by comparing hydraulic gradelines to manhole rim elevations for the DC Water 15 year design storm

Impact on Operations:

This project will reduce frequent repairs to the existing manholes at these locations after major wet weather events.

Effective Funding by User (percent):

DC -48.60% 0.00% EPA/Fed -WSSC -40.70% 6.90% Fairfax -Loudoun/PI -3.80%

wat	er is life

FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

get	1,723,000
get	1,723,000
se)	0

Phase

Design:

Project Completion:

Construction:

Disbursements	<u>Pre FY 2013</u>	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	47	159	783	40	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	117	1,606	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2013

Jun 2015

Jul 2017

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title JR - Large Sewer Rehabilitation 10

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is to rehabilitate and/or replace major sewers throughout the District of Columbia as one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Specific sewers for inclusion in this project will be determined by the ongoing condition assessment work.

Phase

Design:

Project Completion:

Construction:

Start Date

Feb 2020 Aug 2022

Aug 2024

Impact on Operations:

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

Effective Fund	ing by User (perce	ent):										
DC -	100.00%					FY2	013 Appro	oved Life	Budget F			
EPA/Fed -	0.00%				FY2013 Re		· •	16,175,500				
WSSC -	0.00%				1 12010110	VISCU/I I	• •		ř			
Fairfax -	0.00%	wat	water is life Increase/(Decrease)						crease)	16,175,500		
Loudoun/PI -	0.00%									NI	EW	
Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	0	0	0	0	0	0	0	159	473	10,726	
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	0	0	C	0	0	0	0	1,010	1,004	14,162	
(projected disburs	sements do not include	e contingencies	;)							(dolla	rs in thousands)	

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title JU - Sanitary Sewer Rehabilitation 4

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is to rehabilitate and/or replace active and abandoned sanitary sewers under buildings (SUBs) throughout the District of Columbia as one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Specific sewers for inclusion in this project will be determined by the ongoing sanitary sewers under buildings and abandoned sanitary sewers under buildings condition assessment work.

Phase

Design:

Project Completion:

Construction:

Start Date

Feb 2020

Jul 2021

Sep 2023

Impact on Operations:

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

Effective Funding by User (percent): DC -100.00% FY2013 Approved Life Budget 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 4,565,000 WSSC -0.00% Increase/(Decrease) 4,565,000 water is life 0.00% Fairfax -Loudoun/PI -0.00% **NEW** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements Pre FY 2013 Post FY 2021** Budget 0 0 0 0 0 0 0 0 110 202 3,266 **Post FY 2021 Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Budget** 0 0 0 0 0 0 0 0 305 4,260 0 (dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Activity Group/Project Title LK - Large Sewer Rehabilitation 11

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Health Safety

Project Description:

This Project is to rehabilitate and/or replace major sewers throught the District of Coloumbia as one aspect of the Service life Improvement plan outlined in the 2009 Sewer System Facilities plan. Specific sewers for inclusion in this project will be determined by the ongoing condition assessment work.

Phase

Design:

Project Completion:

Construction:

Start Date

Mar 2021 Aug 2023

Aug 2026

Impact on Operations:

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

Effective Fund	ing by User (perce	<u>ent):</u>										
DC -	100.00%					FY2	013 Appro	oved Life	Budget F			
EPA/Fed -	0.00%				FY2013 Re		· •	16,055,000				
WSSC -	0.00%				1 12010110	, v 10 Cd/1 1 1	• •		ř			
Fairfax -	0.00%	wa	water is life Increase/(Decrease)						crease)	16,055,000		
Loudoun/PI -	0.00%									NE	EW	
Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	0	0	0	0	0	0	0	0	135	11,833	
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	0	0	0	0	0	0	0	0	1,040	15,015	
(projected disburs	sements do not include	e contingencies	s)							(dolla	rs in thousands)	

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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:

Disbursements

Commitments

Budget

Budget

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

Effective Funding by User (percent):

DC -11.31% 0.00% EPA/Fed -WSSC -31.88% Fairfax -31.88% Loudoun/PI -24.94%



285

275

In avage of // De avage of	Г
FY2013 Revised/FY2014 Approved Life Budge	
FY2013 Approved Life Budge	

0

0

53,281,936 55,281,935 1,999,999

Increase/(Decrease)

0

0

Phase

Design:

Project Completion:

Construction:

FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
7,153	6,193	1,227	152	138	63	0	0	0	0
FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

0

(projected disbursements do not include contingencies)

Pre FY 2013

Pre FY 2013

18.900

35,442

19.005

(dollars in thousands)

0

Start Date

Mar 2003

Dec 2001

Jul 2018

275

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

APPENDIX

SANITARY SEWER SERVICE AREA PROJECT ID NAMES AND PAGE NUMBERS

Dunio et ID	5	
Project ID	Project Name	Page #
A4	Sanitary Interceptor/Trunk/Force Sewers	IV-47
A9	FY2010 - DSS Sanitary Sewer Projects	IV-25
AP	FY2009 - DSS Sanitary Sewer Projects	IV-24
AU	Sanitary Sewer Program Management	IV-44
BF	FY2011 - DSS Sanitary Sewer Projects	IV-26
CE	FY2012 - DSS Sanitary Sewer Projects	IV-27
CQ	FY2013 - DSS Sanitary Projects	IV-28
CX	Sewer Facilities Security Upgrades	IV-38
D6	FY2014 - DSS Sanitary Sewer Projects	IV-29
DI	FY2015 - DSS Sanitary Sewer Projects	IV-30
DM	UAMI Relief Sewer	IV-48
DN	Sewer Inspection Program	IV-45
DR	Low Area Trunk Sewer Rehabilitation	IV-49
DW	FY2016 - DSS Sanitary Projects	IV-31
EU	Sewer Lateral Rehab and Main Lining	IV-37
FP	FY2017 - DSS Sanitary Sewer Projects	IV-32
FV	Rehabilitation of East Side Interceptor	IV-50
FW	Rehab Piney Branch Trunk Sewer	IV-51
FY	Rehab Upper Rock Creek Interceptor	IV-52
G1	Small Local Sewer Rehab 1	IV-7
G2	Sewer Structure Rehabilitation (1)	IV-53
G4	Upper Potomac Intercept Sewer Rehab.	IV-54
G5	Sewer Rehab Near Creek Beds	IV-55
G6	Sanitary Sewers Under Buildings 1	IV-56

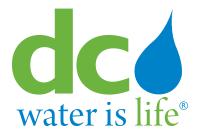
APPENDIX

SANITARY SEWER SERVICE AREA PROJECT ID NAMES AND PAGE NUMBERS

Project ID Project Name Page # IV-8 Small Local Sewer Rehab 2 G8 G9 Small Local Sewer Rehab 3 IV-9 IV-10 GA Small Local Sewer Rehab 4 GB IV-11 Small Local Sewer Rehab 5 GC Small Local Sewer Rehab 6 IV-12 GD IV-13 Small Local Sewer Rehab 7 GE IV-14 Small Local Sewer Rehab 8 GF IV-15 Small Local Sewer Rehab 9 GG IV-57 Large Sewer Rehab 2 GH IV-58 Large Sewer Rehab 3 IV-59 GI Large Sewer Rehab 4 GJ IV-60 Large Sewer Rehab 5 GK Large Sewer Rehab 6 IV-61 GL IV-62 Large Sewer Rehab 7 IV-63 GM Large Sewer Rehab 8 GN Large Sewer Rehab 9 IV-64 GΖ IV-39 Sewer Instrumentation & Control H6 FY2018 - DSS Sanitary Projects IV-33 HB FY 2011 DSS Sewer Pumping IV-40 HG New Field Operations & Maintenance Facility IV-65 HH **IV-66 New Fleet Management Facility** IV-34 HN FY2019 - DSS Sanitary Sewer Projects HT IV-68 Rehabilitation of Anacostia Force Main 11 Selective Sewer Separation & I/I Sewer Rehab. IV-16

APPENDIX

SANITARY SEWER SERVICE AREA



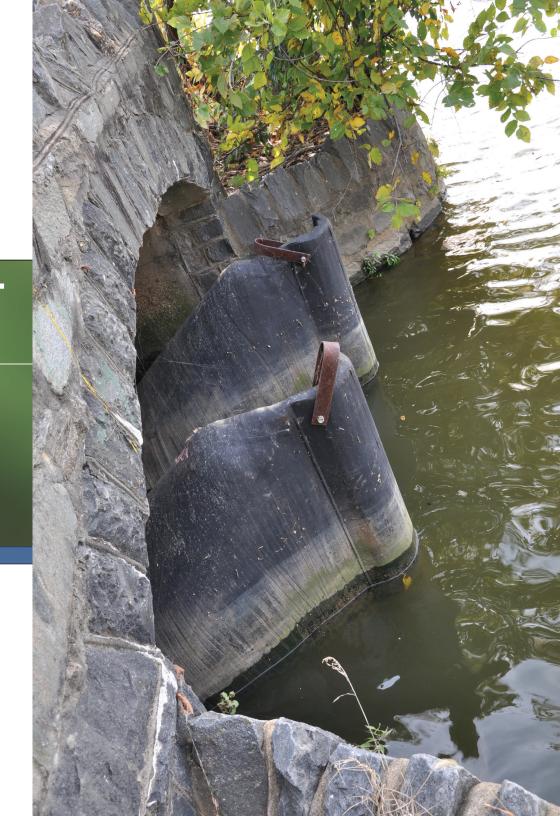
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

SECTION V

COMBINED SEWER
OVERFLOW SERVICE AREA

APPROVED FY 2012 - 2021



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 is captured by this 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 D.C. Clean Rivers Project ("DCCR", formerly 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 service area, and the schedule for completing the Clean Rivers Project spans over a 20-year period, ending in 2025. It is mandated 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 scheduled first in the court ordered schedule, and DC Water has completed a final Facility Plan for these projects. The Facility Plan includes a Summary Report and detailed implementation schedule which has been approved by the EPA. 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..

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:

- \$3 million (Project BA) to construct and maintain low impact development projects on three existing DC Water facilities to reduce runoff volumes to the collection system.
- \$1.71 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.
- \$384 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.
- \$65 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.
- \$40 million (Project LJ) to construct green infrastructure demonstration projects to allow for downsizing or eliminating tunnels at Potomac and Rock Creek or may be used in combination with smaller tunnels at Potomac and Rock Creek.

DC Water has completed the sewer separation of five neighborhoods and starting construction in three additional sewersheds in the Anacostia and Rock Creek watersheds, eliminating six combined sewer overflow locations and reducing CSOs at two others. Additionally, detailed designs are underway to add Low Impact Development (LID) at several DC Water facilities.

Construction is near completion 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. Construction of all identified projects has been completed. The upgrades at one facility, the Potomac Pumping Station, were completed in 2008, as required by the Consent Decree, however DC Water has been unable to certify the pumping capacity at this facility as required by the Consent Decree due to unanticipated flow deficiencies caused by the station configuration. Discussions on the resolution of this issue with EPA are ongoing. 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:

- 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 complete
 with construction proceeding with selected rehabilitation items. The chemical pumps and controls, hypochlorite storage tank
 and roof will all be replaced. Additionally, cracks in the wall and floor will be sealed.
- 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 required for the LTCP Consent Decree. LID technology will be evaluated for its effectiveness in controlling storm water runoff and improvement in water quality. Implementation of LID technologies has started at several facilities; the construction of the LID at the remaining facilities will begin in FY 2013
- Rock Creek CSO Projects (Project BH) with a lifetime budget of \$16.6 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 started construction in 2011 and continues until 2013. Job BH02, the Rock Creek Sewer Separation project provides for the separation of sanitary and storm sewers in four sub-watersheds of the Rock Creek drainage basin. The sewer separation was completed in 2011.
- 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 long term upgrade plan for these pumping stations. However, a small portion of the work was removed from the original upgrade project (EK) and has been brought forward in this near term project. Additionally, some other needed work such as the needed replacement of storm water pumps and various sluice gates and gate valves at the Main and O Street Pumping Stations is incorporated in this project.

- Combined Sewers under Buildings (Project G7), with a lifetime budget of \$24.7 million is to rehabilitate and/or relocate
 combined sewers located under or adjacent to buildings citywide. This project is a result of the recommendations from the
 Sewer System Facilities Plan. Other activities included in this project are cleaning, pre and post CCTV, sealing joints and
 repairs of offset pipe.
- Tiber Creek Trunk Sewer Rehabilitation (Project IP), with a lifetime budget of \$8.25 million is to rehabilitate the Tiber Creek combined sewers. This project is a result of the recommendations from the Sewer System Facilities Plan.
- Combined Sewer Rehabilitation (Project IH), with a lifetime budget of \$27.6 million is to rehabilitate combined sewers under the Service Life Restoration Program. This project is a result of the recommendations from the Sewer System Facilities Plan.

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

Phase Start Date

Design:

Construction:

Project

Completion: Sep 2021

regulatory agencies. Impact on Operations:

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

Effective Funding by User (percent):

DC - 98.33%
EPA/Fed - 1.67%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%

FY2013 Approved Life Budget	40,720,146
FY2013 Revised/FY2014 Approved Life Budget	40,720,146
Increase/(Decrease)	0

Disbursements	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,376	1,565	1,968	1,444	1,077	1,394	1,903	2,319	1,844	1,418	0
Commitments	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	26,120	0	0	0	14,600	0	0	0	0	0	0

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

(projected disbursements do not include contingencies)

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 2012 - 2021 Capital Improvement Program

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 - Engineering & Tech Services

Priority: Court Ordered, Stipulated Agreements, Etc.

Project

Phase

Design:

Construction:

Completion: May 2013

Start Date

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 -	39.92%	
EPA/Fed -	55.61%	
WSSC -	3.49%	
Fairfax -	0.62%	
Loudoun/PI -	0.36%	



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	I
	F

et	14,518,848
et	14,518,848

Increase/(Decrease)

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	13,597	69	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	14,519	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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 - Engineering & Tech Services

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%

FY2013 Approved Life Budget	1,900,000
FY2013 Revised/FY2014 Approved Life Budget	1,900,000
Increase/(Decrease)	0

Phase

Design:

Project Completion:

Construction:

Start Date

May 2005

Feb 2007

Jul 2013

Disbursements	Pre FY 2013	FY 2013 FY	<u>/ 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,531	62	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,900	0	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects

Activity Group/Project Title BA - DC Water Low Impact Development Projects / Nine Minimium Contro

Managing Department: Engineering and Technical Services

EPMC: EPMC5 - LTCP Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

This project bescription.

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%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%

FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

et	3,000,000
et	3,000,000
٠,	0

Start Date

Feb 2002

Jun 2004

Dec 2014

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	482	305	1,164	20	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,077	1,923	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Program Title: **Combined Sewer Projects**

BB - Potomac Pumping Station Rehab / Nine Minimium Controls Activity Group/Project Title

Managing Department: **Engineering and Technical Services** EPMC: EPMC3C - Sewer Program Manager

Court Ordered, Stipulated Agreements, Etc. **Priority:**

Project Completion:

Phase

Design:

Construction:

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 -24.85% FY2013 Approved Life Budget 20,052,932 EPA/Fed -24.85% FY2013 Revised/FY2014 Approved Life Budget 20,052,932 WSSC -25.80% Increase/(Decrease) water is life 16.00% Fairfax -Loudoun/PI -8.50%

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	19,368	75	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	20,053	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

0

Start Date

Jul 2002

Apr 2005

Oct 2013

³ Note: Facilities are listed as Joint Use. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

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 - 52.02%
EPA/Fed - 47.98%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



FY2013 Appro	ved Life Budget
FY2013 Revised/FY2014 Appro	oved Life Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013 13,191	FY 2013 1,128	FY 2014 255	FY 2015 16	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 16,462	FY 2013 109	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

16,570,900

16,570,900

0

Start Date

Mar 2007

Mar 2009

Jan 2015

FY 2012 - 2021 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

· · ·

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

EPMC:

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):

DC - 57.97% EPA/Fed - 34.93% WSSC - 5.54% Fairfax - 1.01% Loudoun/PI - 0.55% water is life

EPMC3C - Sewer Program Manager

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

1,391,000 1,391,000

Start Date

Feb 2008

Nov 2012

0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,333	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,391	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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.

Effective Fund	ing by User (perce	ent):												
DC -	100.00%		FY2013 Approved Life Budget							612,704				
EPA/Fed -	0.00%													
WSSC -	0.00%	uc	FY2013 Revised/FY2014 Approved Life Budge											
Fairfax -	0.00%	water is life Increase/(Decrease						crease)						
Loudoun/PI -	0.00%								CLC	DSED				
Disbursements	s <u>Pre FY 2013</u>	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021				
Budget	586	0 0	C	0	0	0	0	0	0	0				
Commitments	Pre FY 2013	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021				
Budget	613	0 0	C	0	0	0	0	0	0	0				
(projected disburs	(projected disbursements do not include contingencies) (dollars in thousands)													

Phase

Design:

Project Completion:

Construction:

Start Date

Jul 2008

Oct 2011

² Note:Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Program Title: **Combined Sewer Projects**

D2 - Outfall Sewer Rehabiliation / Nine Minimium Controls Activity Group/Project Title

Managing Department: EPMC:

Court Ordered, Stipulated Agreements, Etc. **Priority:**

Project Description:

Construction: Apr 2009 **Engineering and Technical Services** EPMC3C - Sewer Program Manager **Project** Completion: Jul 2013

Phase

Design:

Start Date

Nov 2007

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 -41.99% FY2013 Approved Life Budget 56,000,000 EPA/Fed -41.69% FY2013 Revised/FY2014 Approved Life Budget 55,500,000 WSSC -14.84% Increase/(Decrease) -500,000 water is life 0.97% Fairfax -Loudoun/PI -0.46% Pre FY 2013 **Disbursements** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 50,165 84 0 0 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 55,500 0 0 0 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

³ Note: Facilities are listed as Joint Use. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow

Program Title: Combined Sewer Projects

Activity Group/Project Title DD - Main & O Pump Sta. Development Effort

Managing Department: Chief Financial Officer

EPMC: EPMC3C - Sewer Program Manager

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.

Impact on Operations:

Loudoun/PI -

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

nding by User (percent):		
100.00%		
0.00%		E\/00
0.00%	u	FY20
0.00%	water is life	
	100.00% 0.00% 0.00%	100.00% 0.00% 0.00%

FY2013 Approved Life Budget	790,570
FY2013 Revised/FY2014 Approved Life Budget	790,570
Increase/(Decrease)	0

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013 720	FY 2013 4	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 791	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

0.00%

(dollars in thousands)

Start Date

Apr 2006

Dec 2012

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Program Title: **Combined Sewer Projects**

DS - New DC Water Headquarters Activity Group/Project Title

Chief Financial Officer Managing Department:

EPMC: EPMC3C - Sewer Program Manager

Good Engineering, Low, M&F over long term **Priority:**

Project Description:

This project is for the construction of a new DC Water Headquarters building: however, it is on hold until further deliberation by the Finance and Budget Committee and clearance by the Board.

Impact on Operations:

Fairfax -

Loudoun/PI -

This project will consolidate operating and support staff, while providing necessary space for insourced operations. In addition it will provide operating flexibility for future requirements at Blue Plains.

DC -68.81% EPA/Fed -0.00% WSSC -24.39%

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budge Increase/(Decrease

0

0

0

0

	,
t	960,000
)	500,000

Disbursements	Pre FY 2013
Budget	367
Commitments	Pre FY 2013
Budget	960

Effective Funding by User (percent):

4.46%

2.34%

	1 1 2010	1 1 2013	1 1 2014	1 1 2013
	0	0	0	593
ļ	FY 2016	FY 2015	FY 2014	FY 2013
	0	0	0	0

water is life

FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 0 0 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 0 0 0

Phase

Design:

Project Completion:

Construction:

Post FY 2021 0

Post FY 2021

460.000

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2013

Nov 2014

Feb 2017

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow

Program Title: **Combined Sewer Projects**

EJ - Potomac Pumping Station - Phase III Activity Group/Project Title

Managing Department: **Engineering and Technical Services**

Priority:

EPMC3C - Sewer Program Manager Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Mar 2017

Start Date

Oct 2009

Feb 2012

Project Description:

EPMC:

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 -44.22% 2.39% EPA/Fed -WSSC -29.36% water is life Fairfax -17.76% Loudoun/PI -6.27%

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

20,552,605 Increase/(Decrease) 0

Pre FY 2013 **Disbursements** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 1,321 3.082 5.698 3.294 61 22 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 5,670 14.553 0 330 0 0 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

20.552.605

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Good Engineering, Low, M&F over long term

Project

Phase

Design:

Construction:

Completion: Jan 2024

Start Date

Jun 2017

Aug 2020

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 -	90.70%	
EPA/Fed -	0.00%	
WSSC -	9.30%	u
Fairfax -	0.00%	water is li
Loudoun/PI -	0.00%	Witter 15 II

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

t	72,444,000
t	72,444,000
١.	0

Disbursements	<u>Pre FY 2013</u>	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	501	2,336	2,304	2,387	14,336	27,445
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	11.533	0	0	60.391	0	520

(projected disbursements do not include contingencies)

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Program Title:

Activity Group/Project Title EL - Swirl Facility Rehabilitation

Managing Department: **Engineering and Technical Services** EPMC: EPMC3C - Sewer Program Manager

Potential Failure/Ability to continue meeting permit requirement **Priority:**

Combined Sewer Projects

Project

Phase

Design:

Construction:

Completion: Dec 2015

Start Date

Nov 2008

Apr 2013

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 -97.75% EPA/Fed -2.25% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

ıdget	4,495,000
ıdget	4,495,000
ease)	0

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	436	1,238	1,171	264	5	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,119	2,291	0	85	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

Combined Sewer Overflow Service Area Title:

Program Title: **Combined Sewer Projects**

Activity Group/Project Title EQ - Potomac Pump Station Rehab - Phase IV

Managing Department: **Engineering and Technical Services**

EPMC3C - Sewer Program Manager

Good Engineering, Low, M&F over long term **Priority:**

Project Description:

EPMC:

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 -45.90% 0.00% EPA/Fed -WSSC -29.80% 18.50% Fairfax -Loudoun/PI -5.80%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	7,515,000
et	7,515,000
^/	0

(dollars in thousands)

Start Date

Jun 2018

Nov 2019

May 2021

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	118	494	2,980	652	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	1,085	650	5,550	230	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Program Title: **Combined Sewer Projects**

Activity Group/Project Title FQ - Main & O St PS Intermediate Upgrade

Engineering and Technical Services Managing Department: EPMC: EPMC3C - Sewer Program Manager

Potential Failure/Ability to continue meeting permit requirement **Priority:**

Project

Construction:

Phase

Design:

Completion: May 2016

Start Date

Sep 2011

Oct 2013

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 -91.05% FY2013 Approved Life Budget 17,345,000 EPA/Fed -0.00% FY2013 Revised/FY2014 Approved Life Budget 17,345,000 WSSC -8.95% Increase/(Decrease) water is life Fairfax -0.00% Loudoun/PI -0.00%

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	479	283	4,276	4,619	234	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,488	205	14,652	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

0

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Mar 2017

Start Date

Apr 2013

Aug 2014

18,500,000

18,500,000

0

Project Description:

This project will repair several segments of the lower portion of the Northeast Boundary Trunk Sewer (NEBT). The proposed project will rehabilitate approximately 5,700 feet of the sewer from structure B-1098 to structure N-36141, using the appropriate rehabilitation methods.

Impact on Operations:

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences.

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

Disbursements Budget	Pre FY 2013	FY 2013 341	FY 2014 662	FY 2015 3,523	FY 2016 5,128	FY 2017 1,356		FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 0	FY 2013 1,234	FY 2014 17,266	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Completie

Phase

Design:

Construction:

Completion: Feb 2018

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%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et 16,500,000 et 16,500,000 e) 0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	579	698	4,559	3,474	402	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	1,101	15,399	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Aug 2019

Start Date

Mar 2009

Jan 2010

Project Description:

This new project is the outcome of the recommendations of a comprehensive Sewer System Assessment (SSA) commissioned by DC Water. This study recommended certain High Priority rehabilitation projects that needed to be undertaken to fix structural defects and restore structural integrity of the sewer system. This project rehabilitates combined sewers located under buildings citywide identified as high priority activities under the SSA. Other activities included in this project are cleaning, pre and post CCTV, sealing joints and repair of offset pipe.

Impact on Operations:

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

lget	19,780,000
lget	24,720,000
ise)	4,940,000

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,686	234	590	1,132	2,566	3,290	2,783	143	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	7,000	221	2,545	3,920	6,414	4,620	0	0	0	0	0

(projected disbursements do not include contingencies)

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 2012 - 2021 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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: 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%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

27,600,000 27,600,000

Increase/(Decrease)

Disbursements Budget	Pre FY 2013	FY 2013 F							FY 2020	FY 2021	Post FY 2021
Commitments	0 Pre FY 2013	0 FY 2013 F	211 Y 2014	429 FY 2015	2,917 FY 2016	5,001 FY 2017	5,007 FY 2018	2,460 FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	594	8,920	9,220	8,866	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et	30,000,000
et	30,000,000
(م:	0

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	206	464	3,199	5,543	5,730	3,592
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	647	9,720	10,018	9,615	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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

Project

Phase

Design:

Construction:

Completion: Dec 2017

Start Date

Jan 2014

Apr 2015

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%



Increase/(Decrea	e)
FY2013 Revised/FY2014 Approved Life Bud	et
FY2013 Approved Life Budg	et

· ·	·
ife Budget	8,250,000
Decrease)	0

Disbursements	Pre FY 2013	FY 2013						FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0 Dra FV 2043	0 EV 2042 I	274	694	2,840	913 EV 2047	50	0 EV 2040	0 EV 2020	0 EV 2024	0 Doot EV 2024
Commitments	Pre FY 2013	FY 2013			FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	835	7,415	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

8,250,000

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Program Title: Combined Sewer Projects

Activity Group/Project Title JT - Combined Sewer Rehabilitation 4

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Oct 2024

Start Date

Mar 2020

Sep 2021

Project Description:

This project to rehabilitate and/or replace combined sewers throughout the District of Columbia as one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Specific sewers for inclusion in this project will be determined by the ongoing condition assessment work.

Impact on Operations:

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

Effective Funding by User (percent): DC -100.00% FY2013 Approved Life Budget 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 27,602,000 WSSC -0.00% Increase/(Decrease) 27,602,000 water is life 0.00% Fairfax -Loudoun/PI -0.00% **NEW** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements Pre FY 2013 Post FY 2021 Budget** 0 0 0 0 0 0 0 0 296 623 20.950 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 0 931 10,610 16.061 (dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

S - Sewer Program Manager Project Completion:

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):

DC -	54.93%	
EPA/Fed -	45.07%	
WSSC -	0.00%	
Fairfax -	0.00%	wat
Loudoun/PL-	0.00%	

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

ıdget	79,900,723
udget	79,900,723
ease)	0

Phase

Design:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	75,514	591	4	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget											

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2004 Apr 2005

Aug 2015

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Program Title: **Combined Sewer Projects**

K3 - East Side Pumping Station / Nine Minimium Controls Activity Group/Project Title

Managing Department: **Engineering and Technical Services** EPMC3C - Sewer Program Manager EPMC:

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% 0.00% Fairfax -Loudoun/PI -0.00%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

dget	17,193,005
dget	17,193,005
ease)	0

Phase

Design:

Project Completion:

Construction:

Start Date

Mar 2003

Aug 2004

Aug 2013

Disbursements Budget	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments	16,152 Pre FY 2013	191 FY 2013 FY	0 2014	0 EV 2015	U EV 2016	0 EV 2017	U EV 2019	U EV 2010	0 EV 2020	FY 2021	Post FY 2021
Budget	17,193	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

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 -	87.02%	
EPA/Fed -	7.35%	
WSSC -	5.63%	uc
Fairfax -	0.00%	water is life
Loudoun/PI -	0.00%	

FY2013 Approved Life Budget
FY2013 Revised/FY2014Approved Life Budget
Increase/(Decrease)

get 5,751,001 get 5,751,001 se) 0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,584	374	68	5	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,686	65	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2005

Jan 2010

Dec 2014

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Sep 2013

Start Date

Dec 2000

Mar 2000

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. 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 - 68.95%
EPA/Fed - 31.05%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

12,128,271

Increase/(Decrease)

Disbursements	Pre FY 2013		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	9,954	35	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	12,128	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 Capital Improvement Program

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

EPMC: EPMC5 - LTCP Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project

Phase

Design:

Construction:

Completion: Dec 2025

Start Date

Apr 2009

Feb 2010

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, an intercepting sewer along the east side of the Anacostia River to capture overflows from two CSO outfalls. 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.

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 - 90.66%
EPA/Fed - 4.27%
WSSC - 4.01%
Fairfax - 0.69%
Loudoun/PI - 0.38%

water is life

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

1,714,719,926 42,437,910

Increase/(Decrease)

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	176,193	150,901	126,262	164,913	138,415	87,569	42,108	48,666	76,184	58,913	234,693
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	469,549	414,016	124,127	30,587	101,742	4,587	179,280	116,865	2,467	263,02	8,478
	ı									1	ı

(projected disbursements do not include contingencies)

(dollars in thousands)

1,672,282,016

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow

Program Title: DC Clean Rivers Project

CZ - CSO LTCP Potomac Projects Activity Group/Project Title

Managing Department: **Engineering and Technical Services**

EPMC5 - LTCP Program Manager EPMC:

Court Ordered, Stipulated Agreements, Etc. **Priority:**

Project

Phase

Design:

Construction:

Completion: Dec 2025

Start Date

Mar 2018

Mar 2021

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 -92.64% EPA/Fed -0.28% WSSC -5.53% Fairfax -1.01% Loudoun/PI -0.55% water is life

FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

418,700,000 383,700,000 Increase/(Decrease) -35,000,000

Disbursements	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,811	1,384	540	1,586	4,913	4,968	7,963	11,072	11,432	24,364	216,110
Commitments	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,866	0	0	20,935	0	0	54,232	0	2,864	284,57	16,229
	,									3	Į.

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 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

Priority: Court Ordered, Stipulated Agreements, Etc.

EPMC5 - LTCP Program Manager

Court Ordered, Stipulated Agreements, Etc.

Project
Completion: Dec 2025

Project Description:

EPMC:

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 - 99.26%
EPA/Fed - 0.74%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%

water is life

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

pproved Life Budget 70,341,600

Approved Life Budget 65,341,600

Increase/(Decrease) -5,000,000

Phase

Design:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	935	227	89	0	222	732	757	1,348	1,926	1,952	40,172
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,399	0	0	0	3,086	0	0	10,551	0	0	50,306

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2019

Mar 2022

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

Service Area Title: Combined Sewer Overflow

Program Title: DC Clean Rivers Project

LJ - DC Clean Rivers Green Infrastructures Activity Group/Project Title

Engineering and Technical Services Managing Department: EPMC5 - LTCP Program Manager

Priority: High Profile, Good Neighbor Policy

Phase **Start Date** Design: Jul 2013 Construction:

Project

Completion: Jun 2017

Project Description:

EPMC:

This project proposes to construct green infrastructure demonstration projects in these watersheds of the Potomac and Rock Creek to test its effectiveness in controlling CSOs. The demonstration projects will be large scale comprising over 50 acres in the Potomac and Rock Creek area with monitoring for effectiveness over 2 years. Additionally, it involves assessment of other benefits provided by green infrastructure such as improved air quality, increased property values and others. With public and EPA input, DC Water will determine whether to control CSOs in these watersheds using green infrastructure, a hybrid green-gray solution, or continue with the tunnels as currently planned. If EPA determines that one or more of the sustainable alternatives will achieve compliance with water quality standards while providing overall superior environmental effects. DC Water will propose a second consent decree amendment to substitute the selected alternative(s) and schedules for their implementation otherwise the tunnels will go ahead as planned.

Impact on Operations:

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

Effective Funding by User (percent):

DC -92.90% EPA/Fed -0.00% WSSC -5.54% Fairfax -1.01% Loudoun/PI -0.55%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget Increase/(Decrease)

40,000,000 40,000,000

NEW

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	409	6,021	12,693	8,944	2,032	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	40,000	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

APPENDIX

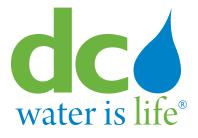
COMBINED SEWER OVERFLOW SERVICE AREA PROJECT NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
A7	Supplemental Environmental Projects	V-7
AV	CSO Program Management	V-5
BA	WASA Low Impact Development Projects	V-8
BB	Potomac Pumping Station Rehab	V-9
ВН	Rock Creek CSO Projects	V-10
BK	CSO Nine Minimum Control Projects	V-11
CI CY CZ	O Street - Facility Projects	V-12
CY	Anacostia LTCP Projects	V-32
CZ	Potomac LTCP Projects	V-33
D2	Outfall Sewer Rehabiliation	V-13
DD	O Street Development Effort	V-14
DS	New Headquarters Building	V-15
DZ	Rock Creek CSS LTCP Project	V-34
EJ	Potomac Pumping Station-Ph III Rehab	V-16
EK	Long Term Rehab-Main & O Pump Sta	V-17
EL	Swirl Facility Rehabilitation	V-18
EQ	Potomac Pumping Station-PH IV Rehab	V-19
FQ	Main & O St. PS Intermediate Upgrade	V-20
FX	Rehab Northeast Boundary Sewer-PH 1	V-21
FZ	Tiber Creek Sewer Lining -Ph 1	V-22
G7	Combined Sewers Under Buildings	V-23
ΙΗ	Combined Sewer Rehabilitation 2	V-24
IJ	Combined Sewer Rehabilitation 3	V-25
IP	Tiber Creek Trunk Sewer Rehabilitation	V-26
JT	Combined Sewer Rehabilitation 4	V-27
K1	Main & O St. Pump Stations	V-28

APPENDIX

COMBINED SEWER OVERFLOW SERVICE AREA PROJECT NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
K2	CSO-Long Term Control Plan	V-6
K3	East Side Pumping Station	V-29
K4	Poplar Point Pumping Station	V-30
K5	Dry-Weather Overflow Elimination	V-31
LJ	DC Clean Rivers Green Infrastructures	V-35



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

SECTION VI

STORMWATER SERVICE AREA

APPROVED FY 2012 - 2021



STORMWATER

The District's stormwater system, not including the 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.

In other locations, those served by separate storm sewers, the tasks are shared by several agencies, with DC Water 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.

On October 7, 2011, EPA Region III issued a new MS4 NPDES Permit to the District of Columbia. Several provisions of the permit were objectionable to DC Water. Among these were provisions that made DC Water a co-permmittee, and allowed the MS4 Administrator the authority to impose on DC Water tasks without its consent, and with budgetary impact on DC Water superseding the authority of DC Water Board of Directors. DC Water petitioned to the EPA's Environmental Review Board (ERB) contesting these provisions. ERB ordered the parties to try to negotiate settlement; it is anticipated a mutually agreeable settlement might be reached in the near future.

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. 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. Responsibility for capital upgrades to pumping stations has not been determined, and as a result, while DC Water expends considerable sums to maintain these facilities, nothing is included in the proposed CIP for needed capital upgrades.

DC Water's lifetime budget for the Stormwater Service Area is \$63.2 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.

Stormwater Local Drainage - \$22.8 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.

Stormwater On-Going Projects – \$11.3 million

(project pages VI-9 to VI-26)

These include projects carried out by DC Water's Department of Sewer Services, including storm sewer rehabilitation. These annual projects also provide funding to assist in immediate storm sewer construction to alleviate flooding.

Stormwater Pumping Facilities - \$0.0 million

As in previous year's budgets, 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 an ongoing discussion. DDOT has provided funds for rehabilitation of 3 of the 15 stations as part of larger highway construction projects. Those projects have been completed.

DDOT Stormwater Projects – \$3.2 million

(project pages VI-27 to VI-44)

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-45 to VI-45)

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. A study of the Federal Triangle area, requested by various federal agencies, is complete. These investigations are anticipated to be reimbursed through the MS4 fees and thus have no impact on the rate payers; however, the budget is included within this program. This also funds program management costs associated with studies and designs of DC Water facilities that may involve review of stormwater facilities.

Stormwater Trunk/Force Sewers - \$15.1 million

(project pages VI-46 to VI-46)

This program includes funds for major maintenance of the storm water piping system as well as funding for certain 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. The project was completed in early FY2012.

Other storm sewer projects (or jobs within a project) that are planned for design and construction in FY 2013 and FY 2014 include:

- GY01 Sewers under Buildings
- GY02 Abandoned Sewers under Buildings
- GY03 Storm Sewer Rehab 13
- GY04 Storm Sewer Rehab 14

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

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%

Fairfax - 0.00%

Loudoun/PI - 0.00%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

t	3,019,246
t	3,019,246

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	245	23	96	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	533	2,486	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2004

Aug 2013

Aug 2014

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



Increase/(Decrease)	Ī
FY2013 Revised/FY2014 Approved Life Budget	Γ
FY2013 Approved Life Budget	

et	6,580,000
et	6,580,000
۵)	U

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	5	19	67	197	126	39	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5	125	1,850	2,740	1,860	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2013

Jan 2014

Aug 2018

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	6,200,000
et	6,200,000
、	0

Start Date

Jun 2016

Jan 2017

Aug 2021

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	12	34	113	146	123	41	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	140	2,010	2,100	1,950	0	0	0

FY 2012 - 2021 Capital Improvement Program

Stormwater Service Area Service Area Title:

Program Title: Stormwater Local Drainage

Activity Group/Project Title IE - Storm Sewer Rehabilitation 3

Managing Department: **Engineering and Technical Services**

EPMC3C - Sewer Program Manager EPMC:

Good Engineering, Low, M&F over long term **Priority:**

Project

Phase

Design:

Construction:

Completion: Aug 2029

Start Date

Jun 2019

Jan 2020

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):

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

0

155

get	2,200,000
get	7,016,500
se)	4,816,500

Disbursements	Pre FY 2013	
Budget	0	
Commitments	Pre FY 2013	
Budget	0	

FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	<u>FY 2</u>
0	0	0	0	0	
FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2
0	0	0	0	0	

Post FY 2021	FY 2021	FY 2020	FY 2019	<u> 2018</u>
5,088	86	28	12	0
Post FY 2021	FY 2021	FY 2020	FY 2019	<u> 2018</u>

2.075

st FY 2021 0 4.787

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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. This project is in the process of being closed out.

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	247,000
et	247,000
۱۵	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	164	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	247	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2002

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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 FY2004 for storm water infrastructure improvements. Job numbers will be issued to identify location of projects. This project is in the process of being closed out.

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

approved Life Budget	497,000
Approved Life Budget	497,000
Increase/(Decrease)	0

(dollars in thousands)

Start Date

Jun 2004

Jul 2012

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	412	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	497	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	: [

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

get	497,000
lget	497,000
ise)	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	368	42	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	497	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2005

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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.

Phase

Design:

Project Completion:

Construction:

Start Date

Sep 2012

Oct 2013

Impact on Operations:

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

Effective Funding by User (percent): DC -100.00% FY2013 Approved Life Budget 497.000 EPA/Fed -0.00% FY2013 Revised/FY2014 Approved Life Budget 497,000 WSSC -0.00% Increase/(Decrease) 0 water is life 0.00% Fairfax -Loudoun/PI -0.00% FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements** Pre FY 2013 **Post FY 2021** Budget 73 263 0 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 497 0 0 0 (dollars in thousands) (projected disbursements do not include contingencies)

² Note: Facilities previously listed as Non-Joint Use. However, preliminary agreement has now been reached to classify as joint-use based on Facility Flow Analysis. The current user share depicted in this book is based on the March 2011 Multi- Jurisdictional Use Facility Flow Analysis, which is currently pending final review and approval by the users.

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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. This project is in the process of being closed out.

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	497,000
et	497,000
9)	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	479	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	497	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2008

Oct 2012

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget
Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Start Date

Sep 2009

Sep 2013

497,000

497,000

0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	415	42	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	497	0	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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. This project is in the process of being closed out.

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)	000,000
Approved Life Budget	600,000
Approved Life Budget	600,000

Start Date

Feb 2010

Aug 2013

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	495	52	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	600	0	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

BD - FY2011 - DSS Storm Sewer Projects Activity Group/Project Title

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

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

Disbursements



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Post FY 2021

618.000

618,000

0

0

0

Start Date

Jul 2011

Aug 2013

FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Pre FY 2013 **Budget** 528 0 0 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 618 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)	0
Approved Life Budget	637,000
ipproved Life Budget	037,000

Start Date

Oct 2011

Aug 2013

637 000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	231	227	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	637	0	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget	660,000
Approved Life Budget	660,000
Increase/(Decrease)	0

Start Date

Mar 2013

Jun 2014

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	187	242	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	660	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

get	680,000
get	680,000
50)	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	193	230	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	680	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2014

Jun 2015

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



Increase/(Decrease	e)
FY2013 Revised/FY2014 Approved Life Budge	et
FY2013 Approved Life Budge	et

et	701,000
et	701,000
٠,	0

Start Date

Mar 2015

Jun 2016

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	160	221	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	701	0	0	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)	0
Approved Life Budget	720,000
pproved Life Budget	720,000

Start Date

Feb 2016

May 2017

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	231	173	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	720	0	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

Buugei	745
ecrease)	
ciease)	

Phase

Design:

Project Completion:

Construction:

Start Date

Feb 2017

May 2018

745.000

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	234	181	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	745	0	0	0	0	0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	770,000
et	770,000
٥,	0

Start Date

Mar 2018

May 2019

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	241	192	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	770	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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 FY2019 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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)	0
Approved Life Budget	795,000
pproved Life Budget	795,000

Start Date

Mar 2019

Feb 2020

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	266	174	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	795	0	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Activity Group/Project Title JH - FY2020 - DSS Storm Sewer Projects

Managing Department: Sewer Services

(projected disbursements do not include contingencies)

EPMC: EPMC3C - Sewer Program Manager

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 FY2020 for stormwater infrastructure improvements. Job numbers will be issued to identify different jobs within the project.

Phase

Design:

Project Completion:

Construction:

Start Date

Feb 2020

Feb 2021

(dollars in thousands)

Impact on Operations:

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

Effective Funding by User (percent): DC -100.00% FY2013 Approved Life Budget 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 820,000 WSSC -0.00% Increase/(Decrease) 820,000 water is life 0.00% Fairfax -Loudoun/PI -0.00% **NEW Pre FY 2013** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements Post FY 2021 Budget** 0 0 0 0 0 0 0 0 282 179 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 0 820 0 0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area

Program Title: Stormwater On-Going

Activity Group/Project Title LO - FY2021 - DSS Storm Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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 FY2021 for stormwater infrastructure improvements. Job numbers will be issued to identify different jobs within the project.

Phase

Design:

Project Completion:

Construction:

Start Date

Feb 2021

Feb 2022

Impact on Operations:

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

Effective Funding by User (percent): DC -100.00% FY2013 Approved Life Budget 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 845,000 WSSC -0.00% Increase/(Decrease) 845,000 water is life 0.00% Fairfax -Loudoun/PI -0.00% **NEW Pre FY 2013** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements Post FY 2021 Budget** 0 0 0 0 0 0 0 0 0 288 230 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 0 0 845 0 (projected disbursements do not include contingencies) (dollars in thousands)

District of Columbia Wa	ater and Sewer Authority						
FY 2012 - 2021 Capital I	Improvement Program						
Service Area Title:	Stormwater Service Area	Phase Start Date					
Program Title:	DDOT Stormwater	Design:					
Activity Group/Project Title P1 - FY2000 - DDOT Stormwater Projects		Construction:					
Managing Department:	•						
EPMC:	DETS - Engineering & Tech Services	Project					
Priority:	Board Policy, DC Water's commitment to outside agencies	Completion:					
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. Project is complete.							
Impact on Operations: This project will have no mate	rial impact on the operating budget.						

WSSC - Fairfax -		Q(FY2013 Re		• •		Budget		
Loudoun/PI -		water	Sille				`	, F	DRO	PPED
Disbursements Budget	Pre FY 2013	FY 2013 FY 201	4 FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments Budget	Pre FY 2013	FY 2013 FY 201	4 FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

District of Columbia W	ater and Sewer Authority		
FY 2012 - 2021 Capital	Improvement Program		
Service Area Title:	Stormwater Service Area		Phase Start Date
Program Title:	DDOT Stormwater		Design:
Activity Group/Project Title	r Projects	Construction:	
Managing Department:			
EPMC:	DETS - Engineering & Tech Serv	vices	Project
Priority:	Board Policy, DC Water's commi	tment to outside agencies	Completion:
	n annual program for planned proj provements. Project is complete.	jects by the District of Columbia Departme	nt of Transportation in FY2001 for
Impact on Operations: This project will have no mate	erial impact on the operating budge	et.	
Effective Funding by User (percent):		
DC -		FY2013 Approved Life	Rudget
EPA/Fed -		• •	
WSSC -		FY2013 Revised/FY2014 Approved Life	
Fairfax -	water is life	Increase/(De	crease)
Loudoun/PI -			DROPPED

Disbursements Pre FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Post FY 2021 Budget

Commitments Budget

Pre FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Post FY 2021 Budget

(projected disbursements do not include contingencies)

(dollars in thousands)

	Water and Sewer Authority tal Improvement Program				
Service Area Title: Program Title: Activity Group/Project T Managing Department:	Stormwater Service Area DDOT Stormwater itle P3 - FY2002 - DDOT Stormwater F	Projects	Phas Desi Con		o <u>ate</u>
EPMC: Priority: Project Description:	Proj Com	ect npletion:			
infrastructure improvement impact on Operations:	as an annual program for planned project nts. Project is complete. naterial impact on the operating budget.		ortation in FY200	2 for stormwater	
Effective Funding by Us DC - EPA/Fed - WSSC -	de	FY2013 Appro FY2013 Revised/FY2014 Appro	ved Life Budget oved Life Budget		— ∃

water is life Loudoun/PI -**DROPPED Disbursements Pre FY 2013** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** Commitments Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Post FY 2021 **Budget**

Increase/(Decrease)

(projected disbursements do not include contingencies)

Fairfax -

(dollars in thousands)

District of Columbia	a Water and Sewer Authority						
FY 2012 - 2021 Cap	ital Improvement Program						
Service Area Title:	Stormwater Service Area		Phase Start Date				
Program Title:	DDOT Stormwater		Design:				
Activity Group/Project	Title P4 - FY2003 - DDOT Stormwat	er Projects	Construction:				
Managing Department:							
EPMC:	DETS - Engineering & Tech Sel	rvices	Project				
Priority:	Board Policy, DC Water's comn	nitment to outside agencies	Completion:				
	as an annual program for planned pronts. Project is complete.	ojects by the Department of Transporta	ation in FY2003 for stormwater				
Impact on Operations: This project will have no	material impact on the operating budg	get.					
Effective Funding by U	ser (percent):						
DC -		FY2013 Approved	1 Life Budget				
EPA/Fed -		FY2013 Revised/FY2014 Approved					
WSSC -							
Fairfax -	water is life	water is life Increase/(Dec					

Disbursements Pre FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Post FY 2021 Budget

Commitments Budget

Pre FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Post FY 2021 Budget

(projected disbursements do not include contingencies)

Loudoun/PI -

(dollars in thousands)

DROPPED

FY 2012 - 2021 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 - Engineering & Tech Services**

Board Policy, DC Water's commitment to outside agencies **Priority:**

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

Disbursements



FY2013 App	roved Life Budget
FY2013 Revised/FY2014 App	proved Life Budget
_	

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

Budget 0 1 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 20 0 0 0 0 0 0 0 0 0

(projected disbursements do not include contingencies)

Pre FY 2013

(dollars in thousands)

20.000

20,000

0

0

Start Date

Aug 2004

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Stormwater Service Area

Program Title: **DDOT Stormwater**

P8 - FY2007 - DDOT Stormwater Projects Activity Group/Project Title

Managing Department: DC Dept. of Transportation

EPMC: **DETS - Engineering & Tech Services**

Board Policy, DC Water's commitment to outside agencies **Priority:**

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. This project is in the process of being closed out.

Impact on Operations:

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

Effective Funding by User (percent):

Pre FY 2013

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

Disbursements

Budget



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
0	0	0	0	0	0	0	0	0	0

Start Date

Oct 2012

Aug 2013

155.000

155,000

Post FY 2021

0

0

0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Budget** 0 0 0 0 0 0 0 155 0 0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Stormwater Service Area

Program Title: **DDOT Stormwater**

P9 - FY2008 - DDOT Stormwater Projects Activity Group/Project Title

Managing Department: DC Dept. of Transportation

EPMC: **DETS - Engineering & Tech Services**

Board Policy, DC Water's commitment to outside agencies **Priority:**

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. This project is in the process of being closed out.

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%

Disbursements



FY2013 Approved Life Budget	Į	
FY2013 Revised/FY2014 Approved Life Budget	Ī	
	Г	_

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
0	0	0	0	0	0	0	0	0	0

1.000.000

1,000,000

0

0

Start Date

Oct 2012

Aug 2013

Budget 0 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 1.000 0 0

(projected disbursements do not include contingencies)

Pre FY 2013

(dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Stormwater Service Area

Program Title: **DDOT Stormwater**

Activity Group/Project Title AR - FY2009 - DDOT Stormwater Projects

Managing Department:

EPMC: **DETS - Engineering & Tech Services**

Board Policy, DC Water's commitment to outside agencies **Priority:**

Project Description:

Oct 2012 Design: Construction: DC Dept. of Transportation **Project**

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. This project is in the process of being closed out.

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%



FY2013 Ap	proved	Life Budget	ŧ
FY2013 Revised/FY2014 A	pproved	Life Budge	t [
		"	ιг

160.000 160,000 0

Phase

Completion:

Increase/(Decrease)

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 160	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

FY 2012 - 2021 Capital Improvement Program

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 - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

t 165,000 t 165,000

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	1	8	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	165	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2013

FY 2012 - 2021 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 - Engineering & Tech Services

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):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
L (/D)

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

e)	0

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	1	8	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	170	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

170.000

170.000

Start Date

Oct 2014

FY 2012 - 2021 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 - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

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%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	

et	175,000
et	175,000
_ [

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014 0	FY 2015	FY 2016 15	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013	FY 2013 0	FY 2014 0	FY 2015 175	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2015

FY 2012 - 2021 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 - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

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%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	

Increase/(Decrease)	0
Approved Life Budget	180,000
pproved Life Budget	180,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	1	14	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	180	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2016

FY 2012 - 2021 Capital Improvement Program

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 - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
L (/D)

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 FY	<u> 2014</u>	<u>FY 2015</u>	FY 2016	<u>FY 2017</u>	FY 2018	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	Post FY 2021
Budget	0	0	0	0	0	1	14	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	<u>/ 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	185	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

185.000

185,000

Start Date

Sep 2017

FY 2012 - 2021 Capital Improvement Program

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 - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

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/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

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191,000

191,000

Start Date

Oct 2014

Sep 2015

Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	10	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	191	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Stormwater Service Area

Program Title: **DDOT Stormwater**

DT - FY2016 - DDOT Stormwater Projects Activity Group/Project Title

Managing Department: DC Dept. of Transportation

EPMC: **DETS - Engineering & Tech Services**

Board Policy, DC Water's commitment to outside agencies **Priority:**

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

Disbursements

Commitments

Budget

Budget



0

0

0

Increase/(Decrease)	

0

0

Phase

Design:

Project Completion:

Construction:

FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
0	0	0	16	0	0	0	0	0	0
FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

0

96.000

96.000

Start Date

Oct 2015

Sep 2016

(projected disbursements do not include contingencies)

Pre FY 2013

Pre FY 2013

0

0

0

(dollars in thousands)

0

196

0

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

Priority: Board Policy, DC Water's commitment to outside agencies

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

t	205,000
ŧ	205,000
	0

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 14	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 205	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2016

Sep 2017

FY 2012 - 2021 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 - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

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%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

ť	215,000
et	215,000
	_

Start Date

Oct 2017

Sep 2018

Phase

Design:

Project Completion:

Construction:

Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements Post FY 2021 Budget** 0 0 0 0 0 0 16 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 215 0 0 0

FY 2012 - 2021 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: EPMC3C - Sewer Program Manager

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 FY2019 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%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

ŧ	220,000
et	220,000
	٥

Start Date

Oct 2018

Sep 2019

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 16	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019 220	FY 2020	FY 2021	Post FY 2021
J	O	U	U	U	U	U	U	220	U	U	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Stormwater Service Area

Program Title: Stormwater Research & Program Mgmt

Activity Group/Project Title AT - Stormwater Program Management

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

Project Description:

Construction: Managing Department: **Engineering and Technical Services** EPMC3C - Sewer Program Manager EPMC: **Project** Completion:

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% 0.00% Fairfax -Loudoun/PI -0.00%

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wat	er is life

FY2013 Approved Life Budget	I
FY2013 Revised/FY2014 Approved Life Budget	·

Increase/(Decrease)

Phase

Design:

20	FY 2021	Post FY 2021
<u>′ </u>		

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,858	289	237	140	119	140	192	234	186	143	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	9,030	0	0	0	1,600	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

10.630.190

10,630,190

Start Date

Dec 2020

Sep 2021

FY 2012 - 2021 Capital Improvement Program

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: EPMC3C - Sewer Program Manager

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 - 96.39%
EPA/Fed - 3.61%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%

Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	15,504,370
et	15,162,370
۱۵	-342 000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,921	2,120	2,883	337	47	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,285	5,974	2,904	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2006

Oct 2009

Mar 2016

APPENDIX

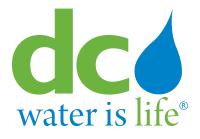
STORMWATER SERVICE AREA PROJECT ID NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
A5	Georgetown West Relief Sewer (Sec 1)	VI-5
AN	FY2010 - DSS Storm Sewer Projects	VI-15
AO	FY2009 - DSS Storm Sewer Projects	VI-14
AR	FY2009 - DDOT STORMWATER PROJECTS	VI-34
AT	Stormwater Program Management	VI-45
B3	B3 FY2010 - DDOT Stormwater Projects	VI-35
BD	FY2011 - DSS Storm Sewer Projects	VI-16
ВМ	FY2011 - DDOT Stormwater Projects	VI-36
ВО	Future Stormwater Projects	VI-46
C1	FY2001 - DSS Storm Sewer Project	VI-9
C4	FY2004- DSS Storm Sewer Project	VI-10
C6	FY2006- DSS Storm Sewer Project	VI-11
C7	FY2007- DSS Storm Sewer Project	VI-12
C8	FY2008 - DSS Storm Sewer Project	VI-13
СВ	FY2012 - DDOT Stormwater Projects	VI-37
CD	FY2012 - DSS Storm Water Projects	VI-17
CL	FY2013 - DDOT Stormwater Projects	VI-38
CN	FY2013 - DSS Stormwater Projects	VI-18
D7	FY2014 - DSS Stormwater Projects	VI-19
D8	FY2014 - DDOT Stormwater Projects	VI-39
DJ	FY2015 - DSS Stormwater Projects	VI-20
DK	FY2015 - DDOT Stormwater Projects	VI-40
DT	FY2016 - DDOT Stormwater Projects	VI-41
DX	FY2016 - DSS Stormwater Projects	VI-21
FM	FY2017 - DDOT Stormwater Projects	VI-42

APPENDIX

STORMWATER SERVICE AREA PROJECT ID NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
FN	FY2017 - DSS Stormwater Projects	VI-22
GY	Storm Sewer Rehab @ Various Location	VI-6
H4	FY2018 - DDOT Stormwater Projects	VI-43
H5	FY2018 - DSS Stormwater Projects	VI-23
HM	FY2019 - DSS Stormwater Projects	VI-24
HP	FY2019 - DDOT Stormwater Projects	VI-44
ID	Storm Sewer Rehabilitation 2	VI-7
IE	Storm Sewer Rehabilitation 3	VI-8
JH	FY2020 - DSS Storm Sewer Projects	VI-25
LO	FY2021 - DSS Storm Sewer Projects	VI-26
P1	FY2000 - DDOT STORMWATER PROJECTS	VI-27
P2	FY2001 - DDOT STORMWATER PROJECTS	VI-28
P3	FY2002 - DDOT STORMWATER PROJECTS	VI-29
P4	FY2003 - DDOT STORMWATER PROJECTS	VI-30
P5	FY2004 - DDOT STORMWATER PROJECTS	VI-31
P8	FY2007 - DDOT STORMWATER PROJECTS	VI-32
P9	FY2008 - DDOT STORMWATER PROJECTS	VI-33



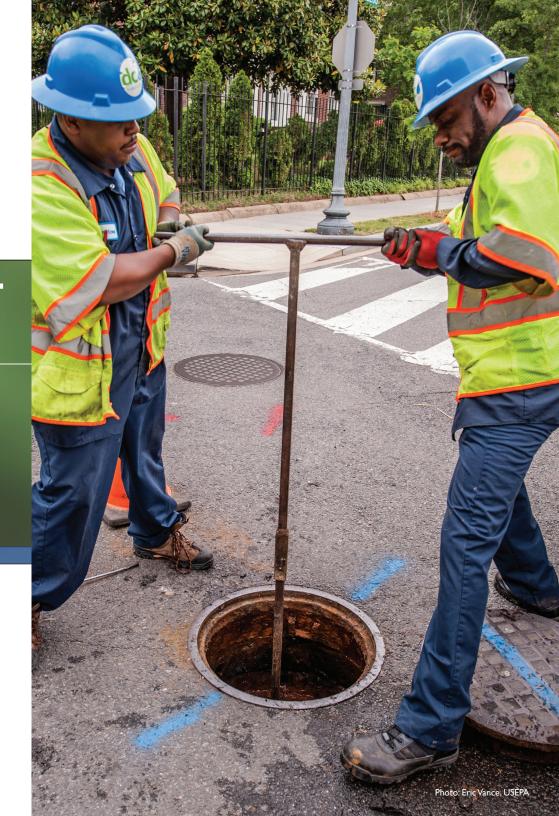
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

SECTION VII

WATER SYSTEM SERVICE AREA

APPROVED FY 2012 - 2021



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 water main draining, permit flow in only one direction, and allow water transfer between service areas during emergencies. The system also includes over 9,000 public hydrants for water main system operational requirements and to support DC Fire and Emergency Services.

The lifetime budget for the Water Service Area (including Meter Replacement / AMR installation) is \$1.6 billion, an increase of \$163.4 million from last year's CIP. The water service area CIP includes a majority of the projects recommended in the 2009 Water Facilities Plan Update, which are designed to maintain an adequate and reliable potable water supply to customers, and fire protection.

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's efforts was to make critical repairs to the water and wastewater infrastructure. In 2009, a Water Facilities Plan Update was completed, which 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.

In FY 2013, the Water Program will develop and submit a draft water system facilities plan update. The new revised Facilities Plan will outline recommendations for the water service infrastructure renewal needs through FY2035 and include:

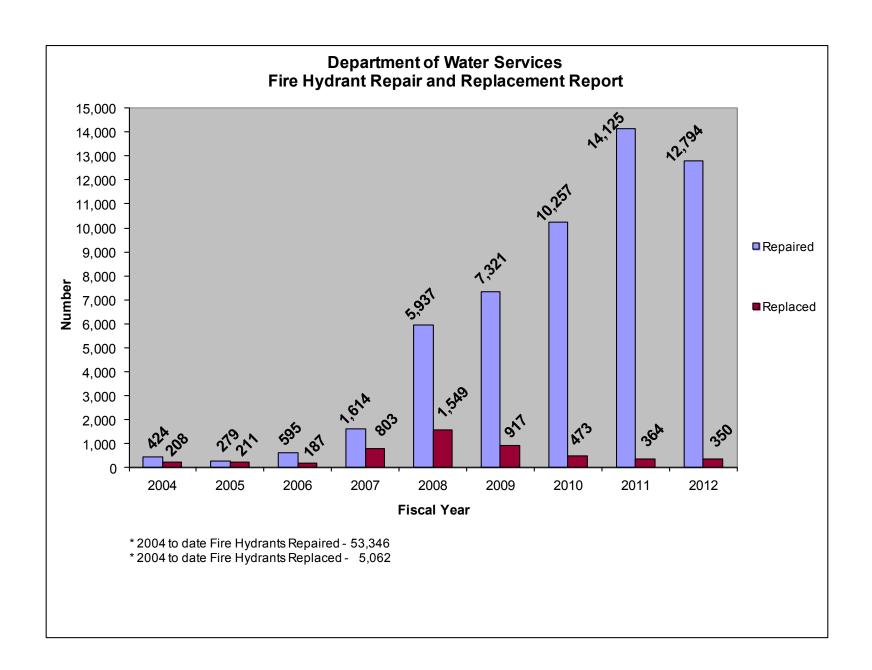
- Population and demand projections through the year 2035;
- Current and proposed water quality regulations;
- Evaluations of pumping, storage, transmission and distribution infrastructure systems; and
- Present a prioritized Capital Improvement Program (CIP).

Water Distribution System – \$857.2 million

(project pages VII-8 to VII-48)

This program provides for rehabilitation, replacement or extension of the water distribution system through several projects. 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. Through FY2012, 214 valves have been replaced or selected for replacement in the Large Valve Replacement Program and additional contracts to replace approximately 20 large valves annually are programmed into the 10-yr CIP.
- Fire Hydrant Program Through FY 2012, over 5,000 hydrant replacements in public space were completed by DC Water as shown in the graph below. On-going discussions with the District (for updating the existing 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 per year thus extending the life of the program.



In addition, repairs and maintenance are ongoing. As the cost is borne by the District of Columbia (DC) and not the rate payers, the new MOU 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 of this program 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 contracts are prepared following a holistic approach to the water main rehabilitation. 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 galvanized or lead services, valves and hydrants will be accomplished at the same time as required. The concept is to complete all needed improvements to a block at one time to minimize disruption and costs. In FY 2012, DC Water prioritized and selected over 8 miles of small mains for replacement and commenced the transition of completing designs with in-house staff. Currently, DC Water is on schedule to meet goal of 1% renewal starting construction in FY 2015.
- Large Diameter Water Main Replacement DC Water has started evaluating the condition of its' large diameter (16-inch and larger) water mains in a systematic manner. The purpose of this pipeline condition assessment program is to better identify large diameter pipe rehabilitation or replacement needs in order to assign capital funds where the need is most critical. The current plan includes capital funds for an annual large diameter rehabilitation/replacement program starting in FY2021.

Water On-Going Projects - \$127.9 million

(project pages VII-49 to VII-62)

The ongoing program includes small projects for extension of water mains to serve 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 were previously contracted out.

Water Pumping Facilities – \$155.9 million

(project pages VII-63 to VII-77)

This program includes several projects to rehabilitate or replace water-pumping stations in the system.

• The Fort Reno Pumping Station is being 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 two (2) remote pressure monitoring stations at critical locations in the 4th High West service area, which will improve system operations. Construction commenced in FY 2011 at a total project budget of \$11 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 \$4.5 million. Construction is scheduled to commence in FY 2013.

DDOT Water Program – \$38.2 million

(project pages VII-78 to VII-89)

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. Starting in FY2014, this program will be included under the Water Distribution System Program Area as part of the Small Diameter Water Main Rehabilitation Program so that work can be more closely coordinated and funding more effectively utilized.

Water Storage Facilities – \$75.8 million

(project pages VII-90 to VII-94)

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 is on-going, and construction is scheduled to be completed in FY 2016. 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).

In coordination with the triennial cleaning & disinfection schedule, detailed inspection of each facility is completed with recommended rehabilitations completed from FY 2013 to FY 2015. 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) is on-going and is scheduled to be completed in early FY2013. 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 Projects Program- Management – \$78.8 million

This program 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 2013, the Water Program will develop and submit a draft water system facilities plan update. The new revised Facilities Plan will outline recommendations for the water service infrastructure renewal needs through FY2035

Meter Replacements / AMR – \$91.3 million

(project pages VII-99 to VII-101)

DC Water is also in the process of upgrading the automated meter reading (AMR) equipment. This planned upgrade is part of DC Water's preventative maintenance program for the Meter Read Transmission Units and Data Collection Units (MTUs and DCUs), which collect approximately 260,000 meter readings per day and are an essential asset to our billing process. The upgrade allows DC Water to move to the current version of AMR software in addition to providing two-way communication between the meter transmitting units (MTUs) and the data collection units (DCUs). The two-way nature of the communication will allow DC Water to retrieve information from any meter or group of meters at any time, which will help with a number of operations functions, including leak detection, meter status, and billing. It will also help provide data to consider other rate designs, such as demand rates, seasonal rates, and minimum usage rates. DC Water's original AMR installation began in 2002, and 88,000 of the transmission units (MTUs) attached to the individual meters are past the middle of their expected service life and will need to be replaced. Funding for replacement of the new MTUs is included in this year's CIP, commencing in FY 2015 and extending through FY2022 to allow for an orderly, cycle-based replacement plan. For small diameter service line properties, DC Water will simultaneously replace the customer's water meter along the new MTU, which reduces the chance of lost water for billing purposes due to meter degradation

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

get	2,637,688
get	2,726,030
se)	88,342

Start Date

Dec 2008

Jan 2013

Jun 2014

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	899	481	646	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,043	1,683	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 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 - Water Program Manager

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

Project Description:

Replacement of approximately 60 broken large diameter valves under separate contracts throughout the water distribution system. Replacement of inoperable valves will improve the reliability of the system by reducing the number of valves that would need to be closed under emergency conditions. Increasing the number of operable valves in the system will also reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

This project will improve valve operations thus increasing schedule efficiences. O & M cost avoidance will be realized.

Effective Funding by User (percent):

DC -66.85% EPA/Fed -33.15% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%

1	
	FY2013 Ap
	FY2013 Revised/FY2014 Ap
is life	I

FY2013 Approved Life Budget	12,072,857
Y2013 Revised/FY2014 Approved Life Budget	12,293,597
Increase/(Decrease)	220,740

Phase

Design:

Project Completion:

Construction:

Start Date

Mar 2009

Feb 2010

Apr 2015

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,052	1,384	2,883	725	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	7,504	4.790	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	0

FY 2012 - 2021 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 - Water Program Manager

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%

0	Increase/(Decrease)	
	FY2013 Revised/FY2014 Approved Life Budget	
۱	FY2013 Approved Life Budget	
1		

dget	18,400,000
dget	18,400,000
ase)	0

Start Date

Dec 2014

Apr 2016

Oct 2018

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	55	533	395	1,018	5,354	4,001	274	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	900	0	1,370	16,130	0	0	0	0	0	0

FY 2012 - 2021 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 - Water Program Manager

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.

Phase

Design:

Project Completion:

Construction:

Start Date

Mar 2007

Nov 2009

Oct 2012

Impact on Operations:

This project realize O & M cost avoidance in future budgets.

Effective Funding by User (percent): DC -37.95% FY2013 Approved Life Budget 1,201,608 EPA/Fed -62.05% FY2013 Revised/FY2014 Approved Life Budget 757,191 WSSC -0.00% Increase/(Decrease) -444,417 water is life 0.00% Fairfax -Loudoun/PI -0.00% **CLOSED** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements** Pre FY 2013 **Post FY 2021** Budget 741 0 0 0 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 1.224 -467 0 0 0 0 0 0 (dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Activity Group/Project Title DE - Small Diameter Water Main Rehab 12

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority: Good Engineering, Low, M&F over long term

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:

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

38,405,000 e) 6,600,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	4,679	1,360	6,349	9,444	2,537	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	9,210	29,195	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

31,805,000

Start Date

Apr 2015

Sep 2016

Feb 2019

FY 2012 - 2021 Capital Improvement Program

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

Priority: Good Engineering, Low, M&F over long term

EPMC2 - Water Program Manager

Project Description:

EPMC:

This project provides for the installation of cathodic protection systems on the 24-inch low service steel main under the ramp of the Whitehurst Freeway and Rock Creek in vicinity of K and 30th Streets, NW.

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

get	601,608
get	645,818
se)	44,210

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	262	11	184	29	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	296	350	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2011 Jul 2013

Jul 2015

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

DL - City Wide Fire Hydrant Program Activity Group/Project Title

Managing Department: Water Services

EPMC: EPMC2 - Water Program Manager

Board Policy, DC Water's commitment to outside agencies **Priority:**

Project Description:

This project provides funding for the replacement and upgrade of over 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:

Disbursements

Commitments

Budget

Budget

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%

Pre FY 2013

Pre FY 2013

23,307

25,370



0

0

170

25,	FY2013 Approved Life Budget
25,	FY2013 Revised/FY2014 Approved Life Budget
	Increase//Decrease)

0

increase/(Decrease)

0

0

Phase

Design:

Project Completion:

Construction:

FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
201	63	41	2	0	0	0	0	0	0
FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

0

(projected disbursements do not include contingencies)

(dollars in thousands)

0

Start Date

Jul 2007

Oct 2015

0

0

FY 2012 - 2021 Capital Improvement Program

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

EPMC: EPMC2 - Water Program Manager

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%



Increase/(Dec	rease)
FY2013 Revised/FY2014 Approved Life B	Budget
FY2013 Approved Life E	Budget

21 32,560,000 21 39,560,000 21 7,000,000

Start Date

Apr 2016

Sep 2017

Feb 2020

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	4,845	1,380	6,585	9,776	2,581	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	9,670	29,890	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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:

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%



Increase/(Decrease)	Î
FY2013 Revised/FY2014 Approved Life Budget	Ī
FY2013 Approved Life Budget	I

et	33,170,000
et	40,470,000
۵)	7 300 000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	4,997	1,419	6,753	9,927	2,631	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	10,020	30,450	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2017

Sep 2018

Feb 2021

FY 2012 - 2021 Capital Improvement Program

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**

Potential Failure/Ability to continue meeting permit requirement **Priority:**

EPMC2 - Water Program Manager

Project Description:

EPMC:

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 -77.21% EPA/Fed -22.79% WSSC -0.00% Fairfax -0.00% Loudoun/PI -0.00%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

get	8,988,333
get	9,253,206
se)	264,873

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	741	2,478	2,577	551	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,593	3,660	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2010

Aug 2012

Mar 2015

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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

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%



Increase/(Decrease)	Ī
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

ŧ	4,910,000
et	4,910,000
i	

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013	FY 2013 231	FY 2014 1,893	FY 2015 990	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 400	FY 2013	FY 2014 4,510	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2012

Oct 2013

Apr 2015

FY 2012 - 2021 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 - Water Program Manager

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):

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



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	38,500,000
et	38,500,000
、	0

Start Date

Apr 2017

Aug 2018

Mar 2022

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	559	1,628	4,055	9,801	6,058	2,829
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	3,200	35,300	0	0	0	0

FY 2012 - 2021 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: Water Services

EPMC: EPMC2 - Water Program Manager

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 pavers.

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

 Approved Life Budget
 29,635,476

 Approved Life Budget
 28,244,481

 Increase/(Decrease)
 -1,390,995

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,770	2,248	5,090	3,957	3,475	1,528	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	8,844	5,252	5,252	5,252	5,344	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2011

Nov 2010

Dec 2018

FY 2012 - 2021 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 - Water Program Manager

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:

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

t 32,000,000 t 39,750,000 7,750,000

Start Date

Apr 2018

Sep 2019

Feb 2022

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	5,508	1,387	6,503	9,545	2,890
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	10,380	29,370	0	0	0

FY 2012 - 2021 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 - Water Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

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 - 69.42%
EPA/Fed - 30.58%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



FY2013 Approved Life Budg FY2013 Revised/FY2014 Approved Life Budg	L
Increase/(Decreas	

t 12,613,790 t 12,746,265) 132,475

Phase

Design:

Project Completion:

Construction:

Pre FY 2013 **Disbursements** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 2.844 3.569 117 0 0 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 12.746 0 0 0 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2009

Aug 2011

Apr 2014

FY 2012 - 2021 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 - Water Program Manager

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%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budg FY2013 Revised/FY2014 Approved Life Budg	L
Increase/(Decreas	

20,000,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	269	817	3,991	5,869	1,774
Commitments	<u>Pre FY 2013</u>	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	1,600	18,400	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2018

Sep 2019

Feb 2022

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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%



FY2013 Approved Life Budget	I
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	Ī

et	33,500,000
et	41,500,000
e)	8,000,000

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018				Post FY 2021
Budget	0	0	0	0	0	0	0	5,619	1,416	6,704	14,283
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	10,820	30,680	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2019

Sep 2020

Feb 2023

FY 2012 - 2021 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 - Water Program Manager

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

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

Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



	FY2013 Approved Life Budget
	FY2013 Revised/FY2014 Approved Life Budget
-	Increase/(Decrease)

et	17,700,000
et	17,700,000
۱ ،	0

Start Date

Jun 2012 Oct 2013

Sep 2017

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	304	1,472	2,908	2,814	1,338	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	450	550	11,400	5,300	0	0	0	0	0	0	0

FY 2012 - 2021 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 - Water Program Manager

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

Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2013 Approved Life Budget	I
FY2013 Revised/FY2014 Approved Life Budget	I

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

et	18,390,000
e)	0

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	39	208	1,488	2,904	2,836	1,492	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	500	5,970	6,140	5,780	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2015

Sep 2016

Sep 2020

18,390,000

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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

Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	Ī
L (/D)	Г

20,130,000 t 20,130,000

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013	FY 2013	FY 2014 0	FY 2015	FY 2016 0	FY 2017 0	FY 2018 43	FY 2019 233	FY 2020 1,658	FY 2021 3,195	Post FY 2021 5,374
Commitments Budget	Pre FY 2013 0	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 550	FY 2019 6,530	FY 2020 6,720	FY 2021 6,330	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2018

Sep 2019

Sep 2023

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Activity Group/Project Title J7 - Small Diameter Water Main Rehabilitation 17

Managing Department: **Engineering and Technical Services**

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

Project Description:

EPMC:

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. Also, included are the elimination of dead end pipelines in the system, 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:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

EPMC2 - Water Program Manager

Effective Funding by User (percent):

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



Increase/(Decrease)	Ī
FY2013 Revised/FY2014 Approved Life Budget	I
FY2013 Approved Life Budget	I

et	36,250,000
et	46,650,000
رم	10 400 000

Start Date

Apr 2020

Sep 2021

Feb 2024

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	7,454	1,502	23,884
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	13,380	33,270	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Activity Group/Project Title JZ - Large Dia Water Main Repl 3, 4, & 5

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project is part of the large diameter water main program included in the draft DC Water's Water System Facility Plan Update. Based upon the age and condition of the large mains in DC, the program serves to gradually replace/ rehabilitate large diameter (16-inch and larger) pipe based upon age, break history and condition assessment information.

Phase

Design:

Project Completion:

Construction:

Start Date

Apr 2021

Aug 2022

Feb 2027

Impact on Operations:

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

Effective Fund	ing by User (perce	ent):									
DC -	100.00%					FY2	013 Appro	oved Life	Budget F		
EPA/Fed -	0.00%				EV2012 Da				· •		62 710 000
WSSC -	0.00%		-		FY2013 Re	eviseu/r i z	Budget				
Fairfax -	0.00%	wat	er is	life			Inc	rease/(De	crease)		63,710,000
Loudoun/PI -	0.00%									NI	≡W
Disbursements	s <u>Pre FY 2013</u>	FY 2013 FY	<u>′ 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	C	0	0	0	0	0	292	43,995
Commitments	Pre FY 2013	FY 2013 FY	<u>′ 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	C	0	0	0	0	0	1,720	61,990
(projected disburs	(projected disbursements do not include contingencies) (dollars in thousands)										

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Activity Group/Project Title KA - Large Valve Repl Contracts 20, 21, & 22

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

Phase

Design:

Project Completion:

Construction:

Start Date

May 2021

Sep 2022

Sep 2026

Impact on Operations:

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

DC -	ing by User (perce	ent):				FY2	013 Appro	oved Life I	Budget		
EPA/Fed - WSSC -	0.00% 0.00%			6	-Y2013 Re	vised/FY	Budget	17,610,000			
Fairfax -	0.00%	wat	er is	life			Inc	rease/(De	crease)		17,610,000
Loudoun/PI -	0.00%			1110						NI	EW
Disbursements	Pre FY 2013	FY 2013 F	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	0	46	12,195
Commitments	Pre FY 2013	FY 2013 F	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	0	480	17,130
projected disbursements do not include contingencies) (dollars in thousands)											

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Activity Group/Project Title | KE - Small Dia Water Main Rehab18

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project

Phase

Design:

Construction:

Completion: Feb 2025

Start Date

Apr 2021

Sep 2022

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. Work includes the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O&M cost avoidance.

Effective Funding by User (percent): DC -100.00% FY2013 Approved Life Budget 0.00% EPA/Fed -FY2013 Revised/FY2014 Approved Life Budget 46,340,000 WSSC -0.00% Increase/(Decrease) 46,340,000 water is life 0.00% Fairfax -Loudoun/PI -0.00% **NEW Disbursements Pre FY 2013** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 0 0 0 0 0 0 0 5.094 27.710 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 0 0 0 12.070 34.270 (dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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** EPMC2 - Water Program Manager

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

Project Description:

EPMC:

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.

Phase

Design:

Project Completion:

Construction:

Start Date

Aug 2002

Sep 2007

Apr 2013

Impact on Operations:

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

Effective Fund	ing by User (perce	ent):									
DC -	100.00%					FY2	013 Appro	oved Life	Budget F		16,676,969
EPA/Fed -	0.00%				FY2013 Re						16,365,329
WSSC -	0.00%			Tec	1 1201011	, v 1000, 11	• •	rease/(De	Ŭ 		-311,640
Fairfax -	0.00%	wa	ter is	life			IIIC	rease/(De	crease)	01.0	,
Loudoun/PI -	0.00%									CLC	SED
Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	16,065	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F		FY 2015				FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	16,699	-334	0	0	0	0	0	0	0	0	0
(projected disburs	sements do not include	contingencie	s)							(dolla	rs in thousands)

District of Columbia W	ater and Sewer Authority		
FY 2012 - 2021 Capital	Improvement Program		
Service Area Title:	Water Service Area	Phase	Start Date
Program Title:	Water Distribution Systems	Desig	n:
Activity Group/Project Title	MT - Small Diameter Watermain Rehab. (01)	Const	truction:
Managing Department:			
EPMC:	EPMC2 - Water Program Manager	Projec	 ct
Priority:	Good Engineering, High pay back, Mission / Function	Comp	oletion:
condition warrants replacement elimination of dead end pipeling. The program will serve to grate by-products from the inside of can impair the quality of potal impact on Operations:	rehabilitation of small diameter (12-inch and smaller) water p nt, or to clean and line unlined cast iron pipe provided the pip nes in the system, and the replacement of appurtenances, so dually replace pipe that has exceeded the useful service life, if the pipe improving water quality and reducing the potential of the pipe water.	e is in serviceable conditi ich as valves, fire hydrant improve available fire flow	on. Also included is the s and house service lines. vs, and remove corrosion
Effective Funding by User (percent):		
DC -	EV2013	Approved Life Budget	
EPA/Fed -	FY2013 Revised/FY2014		
WSSC -		Increase/(Decrease)	
Fairfax - Loudoun/PI -	water is life	iliciease/(Declease)	DROPPED
Disbursements Pre FY 2 Budget	2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY	2018 FY 2019 FY 2020	Post FY 2021 Post FY 2021
Commitments Pre FY 2 Budget	2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY	2018 FY 2019 FY 2020	Post FY 2021 Post FY 2021
(projected disbursements do not	nclude contingencies)		(dollars in thousands)

FY 2012 - 2021 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 - Water Program Manager

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

Project Completic

Phase

Design:

Construction:

Completion: Dec 2012

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:

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%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et 14,977,076 et 15,043,352 e) 66,276

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	12,587	762	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	15,043	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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

Project

Phase

Design:

Construction:

Completion: Nov 2015

Start Date

May 2006

Mar 2009

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:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

DC -49.05% EPA/Fed -50.95% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

15,533,139 Increase/(Decrease)

Budget	12,167	96	420	FY 2015 613	FY 2016 56	FY 2017 0	FY 2018 0	FY 2019 0	0	FY 2021 0	Post FY 2021
Commitments <u>Pre</u> Budget	13,795	FY 2013	FY 2014 1.738	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

15,466,863

66,276

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

DC - 69.40%
EPA/Fed - 30.60%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



FY2013 Approved Life Budget	
sed/FY2014 Approved Life Budget	FY2013 R
Increase/(Decrease)	

et	7,626,072
et	7,713,453
e)	87.381

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	5,255	209	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	7,713	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2008

Oct 2007

Dec 2012

FY 2012 - 2021 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 - Water Program Manager

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

Project

Phase

Design:

Construction:

Completion: Jan 2016

Start Date

Jan 2008

Oct 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:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

DC - 62.39%
EPA/Fed - 37.61%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et 13,138,168 et 13,313,815 e) 175,647

Pre FY 2013 **Disbursements** FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 7.029 1.381 791 736 164 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 10,522 2.791 0 0 0 0 0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Colu	mbia Water	and Sewer Author	ority							
FY 2012 - 2021	Capital Impi	rovement Progra	m							
Service Area Title:	Wat	er Service Area						Phase		Start Date
Program Title:	Wat	er Distribution Systen	ns					Design	ı:	
Activity Group/Pro	ject Title MY	- Elim. Dead Ends (C	ontract 3	and 4)				Constr	uction:	
Managing Departm	nent:									
EPMC:	EPN	/IC2 - Water Program	Manager					Project	t	
Priority:	Hea	Ith Safety						Compl	etion:	
	and fourth of fo	our contracts to eliminate the dead end to al				vater at de	ad ends by	looping c	of the water	distribution
Impact on Operation This project will have		npact in the operating	j budget.							
Effective Funding	by User (perce	<u></u> ent):								
DC -			1		EV2	013 Appr	oved Life E	Rudget		
EPA/Fed -				V2013 Da			oved Life I	· L		
WSSC -		uc		12013116	VISCU/I I	• • •	rease/(Dec	· ·		
Fairfax - Loudoun/PI -		water is	life			IIIC	lease/(Dec	lease)	DDO	
Loudoun/P1 -									DROI	
Disbursements Budget	Pre FY 2013	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments Budget	Pre FY 2013	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

(dollars in thousands)

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

DC - 41.00%
EPA/Fed - 59.00%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

13,246,599 175,647

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	10,186	1,311	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	13,247	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

13,070,952

Start Date

Apr 2009

Jan 2010

Dec 2013

FY 2012 - 2021 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 - Water Program Manager

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

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:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

DC -39.76% EPA/Fed -60.24% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life E Increase/(Dec

Budget	18,512,243
crease)	263,911

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,019	4,574	3,160	668	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	18,512	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

18,248,332

Start Date

Aug 2010

Jan 2012

Jan 2015

FY 2012 - 2021 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 - Water Program Manager

Priority: Good Engineering, Low, M&F over long term

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%
Fairfax - 0.00%
Loudoun/PI - 0.00%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

ŧ	4,507,544
et	4,529,689
	22 145

Start Date

Nov 2003

Mar 2009

Oct 2014

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,966	91	226	3	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	4,030	500	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Activity Group/Project Title O0 - Small Diameter Watermain Rehab. (08)

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project

Phase

Design:

Construction:

Completion: Jul 2015

Start Date

Jun 2011

Apr 2013

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:

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%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

18,425,000 et 18,779,435 e) 354,435

Disbursements Budget	Pre FY 2013 993	FY 2013 1,483	FY 2014 7,929	FY 2015 3,502	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021	Post FY 2021
Commitments Budget	Pre FY 2013 1,429	FY 2013 17,350	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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

Project

Phase

Design:

Construction:

Completion: May 2016

Start Date

Jun 2012

Nov 2013

23,700,000

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:

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%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget 23,700,000
Increase/(Decrease) 0

Disbursements Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Budget 0 494 4.119 7.552 2.577 0 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 1.950 0 21.750 0 0 0 0 0 0

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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

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:

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% 0.00% Fairfax -Loudoun/PI -0.00%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

ŧ	28,450,000
et	28,450,000
	0

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	440	1,318	5,764	8,436	2,217	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	2,340	26,110	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2013

Sep 2014

Feb 2017

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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

Project Completion:

Construction:

Phase

Design:

Feb 2018

Start Date

Apr 2014

Sep 2015

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:

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%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

t 31,205,000 t 37,505,000 6,300,000

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	4,795	1,352	6,314	9,133	2,454	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	8,860	28,645	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 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 - Water Program Manager

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.

Phase

Design:

Project Completion:

Construction:

Start Date

Sep 2002

Jul 2004

Oct 2012

3,050,262

2,830,723

-219,539

Impact on Operations:

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

Effective Funding by User (percent): DC - 38.87% EPA/Fed - 61.13% WSSC - 0.00% Fairfax - 0.00% Increase/(Decrease)

Loudoun/PI - 0.00% CLOSED

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,794	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,050	-220	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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

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 - 60.86%
EPA/Fed - 39.14%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



FY2013 Approved Life Budget	I
FY2013 Revised/FY2014 Approved Life Budget	Į

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Œ	22,906,049
et	22,972,325
))	66,276

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	18,292	1,038	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	22,972	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

20,000,040

Start Date

Jul 1999

Jan 2004

Aug 2015

FY 2012 - 2021 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 - Water Program Manager

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

Jei	14,319,179
get	14,451,654
se)	132,475

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,214	2,603	1,390	2,128	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	9,685	340	4,426	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

1/ 210 170

Start Date

Mar 2010

Mar 2011

Sep 2015

FY 2012 - 2021 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 - Water Program Manager

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%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

et	6,967,611
et	6,967,611
رم	0

Start Date

May 2008

Dec 2012

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,820	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,968	0	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 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 - Water Program Manager

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.

Phase

Design:

Project Completion:

Construction:

Start Date

Apr 2009

Oct 2012

Impact on Operations:

This project will result in cost avoidance to future O & M budgets and improved customer service.

Effective Fund	ing by User (perce	<u>nt):</u>									
DC -	100.00%					FY2	013 Appro	oved Life I	Budaet F		7,922,869
EPA/Fed -	0.00%				FY2013 Re				ĭ <u>L</u>		7,916,787
WSSC - Fairfax -	0.00% 0.00%	wate	ric	lifa				rease/(De			-6,082
Loudoun/PI -	0.00%	watt	21 18	me				•	´ L	CLC	SED
Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	7,690	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	7,923	-6	0	0	0	0	0	0	0	0	0
(projected disburs	sements do not include	contingencies)								(dolla	rs in thousands)

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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%
Loudoun/PI - 0.00%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

et	8,772,856
e)	0

Disbursements	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	8,338	37	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	<u>′ 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	8,773	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2009

May 2013

FY 2012 - 2021 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 - Engineering & Tech Services

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%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

get	11,150,000
get	11,238,342
(02	88 342

Start Date

Oct 2010

Sep 2013

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	10,583	4	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	11,238	0	0	0	0	0	0	0	0	0	0

FY 2012 - 2021 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 - Engineering & Tech Services**

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

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

wat	er is life

Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

t	8,083,000
ŧ	8,083,000
	_

Start Date

Jan 2012

Jan 2014

Phase

Design:

Project Completion:

Construction:

Disbursements Budget	Pre FY 2013 1,700	FY 2013 5,155	FY 2014 266	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 8,083	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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 - Engineering & Tech Services**

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

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% 0.00% Fairfax -Loudoun/PI -0.00%

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

FY2013 Approved Life Budget	8,673,000
FY2013 Revised/FY2014 Approved Life Budget	8,673,000
Increase/(Decrease)	0

Phase

Design:

Project Completion:

Construction:

Start Date

Jul 2013

Jul 2014

Disbursements	<u>Pre FY 2013</u>	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	5,125	2,565	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	8,673	0	0	0	0	0	0	0	0	0

(dollars in thousands) (projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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 - Engineering & Tech Services

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 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%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

Budget	8,935,000
rease)	0

Phase

Design:

Project Completion:

Construction:

Start Date

Jul 2014

Jul 2015

8,935,000

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	5,244	2,158	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	8,935	0	0	0	0	0	0	0	0

FY 2012 - 2021 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 - Engineering & Tech Services

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%



	FY2013 Approved Life Budget
	FY2013 Revised/FY2014 Approved Life Budget
-	Increase/(Decrease)

et	9,180,000
et	9,180,000
- \	٥

Start Date

Jul 2015

Jun 2016

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	4,649	1,840	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	9,180	0	0	0	0	0	0	0

FY 2012 - 2021 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 - Engineering & Tech Services

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:

Disbursements

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%

Pre FY 2013



FY2013 Revised/FY2014 Approved Life Budget	FY2013 Approved Life Budget	
	FY2013 Revised/FY2014 Approved Life Budget	

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

FY 2021	Post FY 2021

9.295.000

9,295,000

0

Start Date

Jul 2016

Jun 2017

Budget 0 0 0 3.836 1.768 0 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 0 9.295 0 0 0 0

FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020

FY 2012 - 2021 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 - Engineering & Tech Services

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:

Disbursements

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%

Pre FY 2013



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Inorocco//Decrees

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

Start Date

Feb 2017

Feb 2018

9,412,000

9,412,000

0

Budget 0 0 0 4.865 788 0 0 0 0 **Commitments** Pre FY 2013 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 0 0 0 0 0 9.412 0 0 0 0

FY 2012 - 2021 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 - Engineering & Tech Services

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%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

et	9,535,000
et	9,535,000
e)	0

Start Date

Feb 2018

Feb 2019

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	4,980	797	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	9,535	0	0	0	0

FY 2012 - 2021 Capital Improvement Program

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 - Engineering & Tech Services

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%



FY2013 Appro	ved Life Budget
FY2013 Revised/FY2014 Appro	oved Life Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

	, ,
et	9,660,000
∍)	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	5,529	391	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	9,660	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

9,660,000

Start Date

Dec 2018

Dec 2019

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Activity Group/Project Title JA - FY2020 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the FY2020 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 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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

ŧ	9,955,000
et	9,955,000
	0

Start Date

Dec 2019

Dec 2020

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	5,666	399	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	9,955	0	0

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Activity Group/Project Title KW - FY2021 - DWS Water Projects

Managing Department: Water Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project is for the FY2021 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.

Phase

Design:

Project Completion:

Construction:

Start Date

Jan 2021

Jan 2022

Impact on Operations:

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

Effective Fund	ing by User (perc	ent):								
DC -	100.00%			FY2	013 Appro	oved Life	Budget F			
EPA/Fed -	0.00%			FY2013 Re		· · ·				
WSSC -	0.00%			1 12010110	, v 1000/1 17	• •		ĭ þ		
Fairfax -	0.00%	water is	lite			Inc	rease/(De	crease)		10,255,000
Loudoun/PI -	0.00%								N	EW
Disbursements	Pre FY 2013	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0 0	0	0	0	0	0	0	5,667	688
Commitments	Pre FY 2013	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0 0	0	0	0	0	0	0	10,255	0
(projected disburs	sements do not includ	e contingencies)							(dolla	ars in thousands)

FY 2012 - 2021 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 - Water Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project

Phase

Design:

Construction:

Completion: Jul 2016

Start Date

Jun 2009

May 2011

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 - 72.46%
EPA/Fed - 27.54%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

get	11,020,151
get	11,329,156
se)	309.005

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,657	1,287	717	195	483	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	8,205	1,754	0	1,370	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2012 - 2021 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 - Water Program Manager

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%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et	633,869
et	642,772
e)	8.903

Start Date

Aug 2013

Jan 2015

Jul 2016

Phase

Design:

Project Completion:

Construction:

Disbursements	<u>Pre FY 2013</u>	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	186	0	14	50	136	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	193	60	0	390	0	0	0	0	0	0	0

FY 2012 - 2021 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 - Water Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

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 - 80.32%
EPA/Fed - 19.68%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	

Approved Life Budget 4,486,428
Approved Life Budget 4,618,903
Increase/(Decrease) 132,475

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	377	427	1,082	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	669	3,950	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2011

Mar 2013

Sep 2014

FY 2012 - 2021 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 - Water Program Manager

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

et	1,915,476
et	1,959,686
e)	44,210

Phase

Design:

Project Completion:

Construction:

Disbursements	<u>Pre FY 2013</u>	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	77	2	22	136	451	251	57	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	80	120	1,760	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2013

Jun 2014

Dec 2017

FY 2012 - 2021 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 - Water Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

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



FY2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

 Approved Life Budget
 13,188,332

 Approved Life Budget
 13,409,073

 Increase/(Decrease)
 220,741

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,065	762	2,013	1,165	895	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	13,409	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2009

Sep 2012

Mar 2016

FY 2012 - 2021 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 - Water Program Manager

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

Approved Life Budget
Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

CLOSED

Disbursements Budget	Pre FY 2013 402	FY 2013	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 410	FY 2013 0	FY 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

396,542

409,672

13,130

Start Date

Jul 2009 Apr 2010

Oct 2012

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Activity Group/Project Title HA - DWS Water Pumping Project

Managing Department: Water Services

EPMC: EPMC2 - Water Program Manager

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.

Project	
Completion:	Sep 2015
Completion.	3CD 2013

Start Date

Apr 2010

Phase

Design:

Construction:

Effective Funding by User (percent):

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



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

approved Life Budget	1,560,000
Approved Life Budget	1,560,000
Increase/(Decrease)	0

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	287	218	106	90	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	780	260	260	260	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

Priority: Good Engineering, Low, M&F over long term

Project Description:

This project was to relocate the customer service group. An alternative rental space has been identified in SE Washington and this project is no longer required.

Impact on Operations:

Effective Funding by User (percent):

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



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

get	5,980,500
lget	502,173
ise)	-5,478,327

Start Date

Mar 2011 May 2013

Jul 2014

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	134	15	22	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	396	106	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 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

EPMC2 - Water Program Manager

Engineering and Technical Services Managing Department:

Good Engineering, Low, M&F over long term **Priority:**

Phase **Start Date** Design: Jan 2016 Construction: Feb 2017

Project

Completion: Aug 2018

Project Description:

EPMC:

This project will construct 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%



FY2013 Approved Life Budg FY2013 Revised/FY2014 Approved Life Budg Increase/(Decreas

get	13,546,000
get	13,546,000
se)	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	800	2,207	5,091	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	2,060	11,486	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

Priority: Good Engineering, Low, M&F over long term

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 minimum 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%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	L
FY2013 Approved Life Budget	I

get	2,966,000
get	2,966,000
se)	0

Start Date

Sep 2016

Aug 2017

Jul 2018

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	17	565	1,071	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	359	2,607	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

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. Also, this project includes the installation flow meters to more accurately track water pumping from this pumping station.

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%



FY2013 Appro	ved Life Budget
FY2013 Revised/FY2014 Appro	oved Life Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

et	1,360,000
∍)	0

Disbursements Budget	Pre FY 2013	FY 2013 11	FY 2014 36	FY 2015 288	FY 2016 157	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013	FY 2013 1		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Baagot	U	115	1,245	U	U	U	U	U	U	U	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2013

Sep 2014

Feb 2016

1,360,000

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Activity Group/Project Title JB - Bryant Street PS Improvements - Phase II

Managing Department: **Engineering and Technical Services**

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project removes, reconstructs and structurally reinforces the top portions of the walls at the Warehouse and Shops building on the Bryant Street Pump Station site. Also, this project includes repair or replacement of select structural roof members, windows, gutters, flashing, sealant, roofing slate and masonry facade at the Bryant Street PS building.

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%

	C
wat	er is life

Increase/(Decreas	e)
FY2013 Revised/FY2014 Approved Life Budg	et
FY2013 Approved Life Budg	et

get	2,800,000
get	7,020,000
se)	4,220,000

(dollars in thousands)

Start Date

Apr 2012

Sep 2013

Aug 2016

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	31	297	625	2,265	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	80	720	520	5,700	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Activity Group/Project Title JJ - Bryant Street PS Improvements - Phase III

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project removes and replaces the slate roof on the Bryant Street PS building that was originally installed in the 1900s. This project also includes the replacement of the parking deck wearing surface and membrane on the Warehouse and Shops building at the Bryant Street PS site.

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

get	6,100,000
get	1,100,000
se)	-5,000,000

(dollars in thousands)

Start Date

Apr 2013 Sep 2014

Apr 2023

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	-7	13	-14	0	0	0	8	36	722
Commitments	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	90	0	1,010

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Water Program Manager

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

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 -70.34% EPA/Fed -29.66% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%



FY2013 A	Approve	d Life Bud	get
FY2013 Revised/FY2014	Approve	d Life Bud	get

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

44,210

62,704,257

62,748,467

Start Date

Mar 1999

Mar 2002

Aug 2014

Disbursements	Pre FY 2013	FY 2013 FY	<u>/ 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	58,773	360	40	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	<u>/ 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	62.748	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Water Program Manager

Priority: High Profile, Good Neighbor Policy

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 - 46.24%
EPA/Fed - 53.76%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

lget	32,714,210
lget	32,736,354
ase)	22,144

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	31,100	113	16	47	1	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	32,516	25	195	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2004

Mar 2007

Oct 2015

District of Columbia (water and Sewer Authorn	.Y			
FY 2012 - 2021 Capita	I Improvement Program				
Service Area Title:	Water Service Area		Phase)	Start Date
Program Title:	DDOT Water Projects		Desig	n:	
Activity Group/Project Tit	e AS - FY2009 - DDOT Water	Projects	Const	truction:	
Managing Department:					
EPMC:	EPMC2 - Water Program Ma	nager	Projec	ct	
Priority:	Good Engineering, High pay	back, Mission / Function		letion:	
work performed by the Disti	ict Department of Transportation	structure jobs that are coordinated n (DDOT). This project is needed to numbers will be issued to identify th	minimizes public inc	onvenience d	
Impact on Operations: This project will have no ma	terial impact on the operating bu	udget.			
Effective Funding by Use	(percent):				
DC -		FY2013 Ann	roved Life Budget		
EPA/Fed -		FY2013 Revised/FY2014 App	ŭ ,		
WSSC -			crease/(Decrease)		
Fairfax - Loudoun/PI -	water is lif	e	ciease/(Deciease)	DRO	PED
Disbursements Pre FY Budget	2013 FY 2013 FY 2014 FY	2015 FY 2016 FY 2017 FY 201	8 FY 2019 FY 2020	FY 2021	Post FY 2021
Commitments Pre FY Budget	2013 FY 2013 FY 2014 FY	2015 FY 2016 FY 2017 FY 201	8 FY 2019 FY 2020	FY 2021	Post FY 2021

(dollars in thousands)

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title:

Activity Group/Project Title B0 - FY2010 - DDOT Water Projects

Managing Department: DC Dept. of Transportation

EPMC: EPMC2 - Water Program Manager

Board Policy, DC Water's commitment to outside agencies **Priority:**

Project Description:

Phase Start Date DDOT Water Projects Design: Construction: Nov 2004

Project

Completion: Apr 2015

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% 0.00% Fairfax -Loudoun/PI -0.00%



Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Life Budget	
FY2013 Approved Life Budget	

-	
ife Budget	17,171,132
(Decrease)	0

Disbursements Budget	Pre FY 2013 12,228	FY 2013 F 946	Y 2014 266	FY 2015 3	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021
Commitments Budget	Pre FY 2013 16,200	FY 2013 F 971	Y 2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020	FY 2021 0	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

17,171,132

FY 2012 - 2021 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 - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

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%



Increase/(Decrease)
FY2013 Revised/FY2014 Approved Life Budget
FY2013 Approved Life Budget

lget	8,650,000
lget	8,738,342
ase)	88.342

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,716	1,418	1,017	217	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	8,738	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2010

Apr 2015

FY 2012 - 2021 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 - Engineering & Tech Services**

Board Policy, DC Water's commitment to outside agencies **Priority:**

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



FY2013 Approv	ved Life Budget
FY2013 Revised/FY2014 Appro	ved Life Budget
_	

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

6,275,000
0

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	714	688	569	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,275	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

6,275,000

Start Date

Oct 2012

Sep 2015

FY 2012 - 2021 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 - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

Project

Phase

Design:

Construction:

Completion: Sep 2013

Start Date

Oct 2012

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%



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	

approved Life Budget	6,000,000
Approved Life Budget	6,000,000
Increase/(Decrease)	0

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	2,712	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	6,000	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area Program Title:

Activity Group/Project Title D9 - FY2014 - DDOT Water Projects

Managing Department: DC Dept. of Transportation

DETS - Engineering & Tech Services EPMC:

Priority: Board Policy, DC Water's commitment to outside agencies

DDOT Water Projects

Project Completion:

Start Date

Phase

Design:

Construction:

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 paying cost. Work will be incorporated within the Small Diameter Water Main Rehabilitation program.

Impact on Operations:

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

Effective Fundin		<u>ent):</u>		1							
DC -	0.00%			4		FY2	Budget	6,300,000			
EPA/Fed -	0.00%			_	- - - - - - - - - - - - - - - - - - -	vised/FY:	Budget	0			
WSSC -	0.00%				12010110	. V 10 C G / 1 1 2	• • •		ř		2 222 222
Fairfax -	0.00%	wat	er is	life			Inc	rease/(De	crease)		-6,300,000
Loudoun/PI -	0.00%									CLC	SED
Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 F	<u>Y 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	0	0	0
(projected disburse	ments do not include	contingencies)							(dolla	rs in thousands)

FY 2012 - 2021 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

DETS - Engineering & Tech Services EPMC:

Priority:

Project Description:

Project Completion: Board Policy, DC Water's commitment to outside agencies

Phase

Design:

Construction:

Start Date

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 paying cost. Work will be incorporated within the Small Diameter Water Main Rehabilitation program.

Impact on Operations:

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

Budget	0	0	0	FY 2015 0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	•	FY 2014	· ·	•	FY 2017	FY 2018	FY 2019	•	FY 2021	Post FY 2021
Budget	Pre FY 2013	0	FY 2014	FY 2015	FY 2016	0	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Disbursements		EV 2042	EV 2044	EV 2045	EV 2046	FY 2017	EV 2049	EV 2040	EV 2020		Doct EV 2024
Loudoun/PI -	0.00%	VV	atel 18	IIIC				•	´ L	CLC	NCED.
Fairfax -	0.00%	XAT	ter is	life			Inci	rease/(Ded	crease)		-6,600,000
WSSC -	0.00%				FY2013 Re	vised/FY2	2014 Appro	oved Life I	Budget		0
EPA/Fed -	0.00%				-) (00 (0 5		ř	0,000,000			
DC -	0.00%			4		FY2	013 Appro	ved Life I	Budget F		6,600,000
Effective Fundin	g by User (perce	<u>ent):</u>	_								

FY 2012 - 2021 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 - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

Project Completion:

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. Work will in incorporated within the Small Diameter Water Main Rehabilitation Program.

Impact on Operations:

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

Effective Fundin	g by User (perce	ent):									
DC -	0.00%					FY2	013 Appro	oved Life I	Budget		7,000,000
EPA/Fed -	0.00%			A	- FY2013 Re		ř	0			
WSSC -	0.00%			100			• •	rease/(De	Ŭ ,		-7,000,000
Fairfax - Loudoun/PI -	0.00% 0.00%	wat	er is	life			1110	icasc/(Dc/	orease,	CLC	
	1									CLC	SED
Disbursements Budget	Pre FY 2013 0	FY 2013 FY 0	2014 0	FY 2015 0	FY 2016 0	FY 2017 0	FY 2018 0	FY 2019 0	FY 2020 0	FY 2021 0	Post FY 2021
Commitments	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	0	0	0
(projected disbursements do not include contingencies)										(dolla	rs in thousands)

FY 2012 - 2021 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:

EPMC:

Priority: Board Policy, DC Water's commitment to outside agencies

Project Description:

DC Dept. of Transportation **DETS - Engineering & Tech Services Project** Completion:

Phase

Design:

Construction:

Start Date

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. Work will in incorporated within the Small Diameter Water Main Rehabilitation Program.

Impact on Operations:

No significant O&M cost impact.

Effective Fundin	g by User (perce	ent):									
DC -	0.00%			1		FY2	Budget	7,300,000			
EPA/Fed -	0.00%				V2012 Da		ř	7,000,000			
WSSC -	0.00%				Y2013 Re	:viseu/Fiz	ř	U			
Fairfax -	0.00%	wat	er is	life			Inc	rease/(De	crease)		-7,300,000
Loudoun/PI -	0.00%									CLC	OSED
Disbursements	Pre FY 2013	FY 2013 FY	<u>/ 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	<u>/ 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	0	0	0
(projected disbursements do not include contingencies)										(dolla	ars in thousands)

FY 2012 - 2021 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 - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

Project Description:

Phase Start Date

Design:

Construction:

Project Completion:

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. Work will in incorporated within the Small Diameter Water Main Rehabilitation Program.

Impact on Operations:

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

Effective Fundin	g by User (perce	ent):									
DC -	0.00%					FY2	013 Appro	oved Life I	Budget		7,750,000
EPA/Fed -	0.00%			F	- FY2013 Re		ř	0			
WSSC -	0.00%		-	100	0 . 0		• •		Ŭ ,		-7,750,000
Fairfax -	0.00%	wate	er is	life			IIIC	rease/(De	Jiease)		-1,130,000
Loudoun/PI -	0.00%									CLC	SED
Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	0	0	0
(projected disbursements do not include contingencies)										(dolla	rs in thousands)

FY 2012 - 2021 Capital Improvement Program

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 - Engineering & Tech Services

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. Work will in incorporated within the Small Diameter Water Main Rehabilitation Program.

Phase

Design:

Project Completion:

Construction:

Start Date

Impact on Operations:

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

Effective Fundin	g by User (perce	ent):										
DC -	0.00%					FY2	Budget	8,000,000				
EPA/Fed -	0.00%			A	Y2013 Re		ř	0				
WSSC - Fairfax -	0.00% 0.00%			1970			• • •	rease/(De	Ŭ ,			
Loudoun/PI -	0.00%	wate	er is	lire				0000/(20		CLC	SED	
Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	0	0	0	0	0	0	0	0	0	0	
Commitments	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	0	0	0	0	0	0	0	0	0	0	
(projected disburser	ments do not include	contingencies)								(dolla	rs in thousands)	

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: DDOT Water Projects

Activity Group/Project Title J8 - FY2020 - DDOT Water Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

Priority: Board Policy, DC Water's commitment to outside agencies

Project Completion:

Start Date

Phase

Design:

Construction:

Project Description:

This project is for the FY2020 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. Work will in incorporated within the Small Diameter Water Main Rehabilitation Program.

Impact on Operations:

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

Effective Fundin		<u>ent):</u>		-								
DC -	0.00%					FY2	013 Appro	oved Life	Budget	10,400,000		
EPA/Fed -	0.00%				- - - - - - - - - - - - - - - - - - -		ř					
WSSC -	0.00%				12013110	VISCU/I IZ	• •		ř			
Fairfax -	0.00%	wa	ter is	life			Inc	rease/(De	crease)		-10,400,000	
Loudoun/PI -	0.00%									CLC	SED	
Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	0	0	0	0	0	0	0	0	0	0	
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021	
Budget	0	0	0	0	0	0	0	0	0	0	0	
(projected disburse	ments do not include	e contingencie	s)							(dolla	rs in thousands)	

FY 2012 - 2021 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 - Water Program Manager

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, repairing the damage caused by an embankment failure near Fort Stanton Reservoir No. 2 and installation of impermeable membranes over three underground water storage reservoirs.

Impact on Operations:

Disbursements

Commitments

Budget

Budget

This project will reduce water loss, thus slowing the growth in water purchase costs.

781

3.180

Effective Funding by User (percent):

DC -20.00% EPA/Fed -80.00% WSSC -0.00% 0.00% Fairfax -Loudoun/PI -0.00%



1.829

3.365

1.393

0

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget

1.403

0

499

9.625

Increase/(Decrease)

2.704

0

0

Phase

Design:

Project Completion:

Construction:

22,512,098
23,433,402

Start Date

Dec 2008

Jan 2010

Feb 2021

FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** 1.483 589 0 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021**

0

(projected disbursements do not include contingencies)

Pre FY 2013

Pre FY 2013

3,425

5,248

(dollars in thousands)

0

921,304

394

2.015

FY 2012 - 2021 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 - Water Program Manager

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%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/Pl - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et	7,000,000
et	7,000,000
۵)	0

Start Date

Apr 2019 Sep 2020

Feb 2024

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	95	267	637	3,859
Commitments	Pre FY 2013	FY 2013 F	Y 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	580	6,420	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

Priority: High Profile, Good Neighbor Policy

right folia, dood iver

PhaseStart DateDesign:Nov 2010Construction:Jun 2014

Project

Completion: Jan 2017

Project Description:

The project includes the construction of a 2.0 million gallon elevated water storage tank. The new storage tank will provide additional potable water storage for the Anacostia 1st High South service area, increasing pressures to the higher elevation areas and improving fire protection in the distribution system served by this storage tank. St. Elizabeth's Hospital has agreed to allow the tank to be located on the Hospital complex as this new facility will improve the reliability of the Hospital's water supply system.

Impact on Operations:

New tank will require periodic (10 to 15 year) maintenance involving painting.

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et 21,658,564 et 21,923,436 ee) 264,872

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	2,555	567	1,233	5,158	4,128	964	0	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	3,873	1,800	16,250	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

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:

Good Engineering, Low, M&F over long term **Priority:**

Project Description:

EPMC2 - Water Program Manager **Project** Completion: Aug 2018

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



FY2013 Approved Life Budget	
FY2013 Revised/FY2014 Approved Life Budget	
Increase/(Decrease)	

et	7,915,558
et	7,915,558
ν,	0

Phase

Design:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	185	0	62	131	276	1,725	2,193	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	191	0	324	600	0	6,800	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2015

Nov 2016

FY 2012 - 2021 Capital Improvement Program

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 - Water Program Manager

Priority: Good Engineering, Low, M&F over long term

Project

Phase

Design:

Construction:

Completion: Oct 2017

Start Date

Nov 2013

Oct 2015

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%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

15,225,000 et 15,489,872 e) 264,872

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	346	5	543	346	3,394	4,489	170	0	0	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	360	205	1,105	0	13,820	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Service Area Program Mgmt

Activity Group/Project Title KV - Water Program Mgt. Services 2F

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project

Phase

Design:

Construction:

Completion: May 2025

Start Date

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:

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%



FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

30,610,000

NEW

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	1,308	3,122	17,208
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	30,610	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area

Program Title: Water Service Area Program Mgmt

Activity Group/Project Title LQ - Water Service Area Asset Management

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

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

Phase

Design:

Project Completion:

Construction:

Start Date

Mar 2018

Impact on Operations:

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

Effective Fund	ing by User (perc	ent):									
DC -	100.00%					FY2	013 Appro	oved Life I	Budget F		
EPA/Fed -	0.00%				Y2013 Re		• •		ř		5,000,000
WSSC -	0.00%		-		12010110				, ,		
Fairfax -	0.00%	wate	er is	lite			inci	rease/(De	crease)		5,000,000
Loudoun/PI -	0.00%									N	EW
Disbursements	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	534	913	854	695	688	298	0	0	0	0
Commitments	Pre FY 2013	FY 2013 FY	2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	5,000	0	0	0	0	0	0	0	0	0
(projected disburs	sements do not includ	e contingencies)								(dolla	ars in thousands)

FY 2012 - 2021 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 - Water Program Manager

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

Project

Phase

Design:

Construction:

Completion: Apr 2020

Start Date

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% water is life

FY2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Life Budget
Increase/(Decrease)

et 47,559,220 et 43,145,961 e) -4,413,259

Disbursements	Pre FY 2013	FY 2013 FY 2	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	6,460	3,799 3	,807	4,210	3,275	3,241	3,283	3,318	1,923	0	0
Commitments	Pre FY 2013	FY 2013 FY 2	<u> 2014</u>	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	18,446	0	0	24,700	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

FY 2012 - 2021 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 - Lead Services Program Manager

Priority: Board Policy, DC Water's commitment to outside agencies

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 - 93.15%
EPA/Fed - 6.85%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%

Increase/(De	crease)
FY2013 Revised/FY2014 Approved Life	Budget
FY2013 Approved Life	Budget

lget	191,040,000
lget	191,040,000
ase)	0

Start Date

Aug 2004

Dec 2004

Sep 2026

Phase

Design:

Project Completion:

Construction:

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	131,713	1,860	1,373	1,051	1,792	1,764	1,893	2,002	1,967	0	0
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	150,424	2,769	8,972	5,282	5,407	5,886	6,012	6,288	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

FY 2012 - 2021 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:

This Project is to fund the replacement of existing AMR system.

Impact on Operations:

This project will provide for the continuation of accurate monthly billing.

Funding by User (percent):

DC - 100.00%

EPA -

WSSC -

Fairfax -

water is life

FY 2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

32,421,628 42,192,877

Start Date

Sept 2021

9,771,249

Loudoun/PI -

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	8,503	2,029	1,571	4,153	4,242	4,395	4,283	4,318	4,339	4,360	
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	8,503	2,029	1,571	4,153	4,242	4,394	4,283	4,318	4,339	4,360	

(projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

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 is completed, and will be closed in FY 2013.

Impact on Operations:

This project has reduced the cost of manual meter reading.

Funding by User (percent):

DC - 100.00%

EPA -

WSSC -

Fairfax -

Loudoun/PI -



FY 2013 Approved Life Budget FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

et 41,112,878 et 41,071,355 se) -41,523

Start Date

3/4/2002

Nov 2012

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	41,071	0	0	0	0	0	0	0	0	0	
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	0	0	0	0	0	0	0	0	

(projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority FY 2012 - 2021 Capital Improvement Program

Service Area Title: Water Service Area **P**hase **Start Date** Program Title: Metering Design: Construction: Activity Group/Project Title: EM6 AMR/Billing System Managing Department: EPMC: **Project** Completion:

Priority:

Project Description:

This project provides for the procurement and implementation of a new Customer Information and Billing System (CIS).

Impact on Operations:

Costs related to the monthly leasing of the current third-party billing system will be eliminated.

Funding by User (percent):

DC -

EPA -

WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2013 Approved Life Budget

FY2013 Revised/FY2014 Approved Life Budget

Increase/(Decrease)

8,000,000	8,000,000
	 8,000,000

Disbursements Budget	Pre FY 2013	FY 2013 6.500	FY 2014 1.500	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments Budget	Pre FY 2013	-,	,	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

(projected disbursements do not include contingencies)

APPENDIX

WATER SERVICE AREA

PROJECT ID NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
AF	FY2010 - DWS Water Projects	VII-51
Al	FY2008 - DWS Water Projects	VII-49
AK	WSSC Interconnections	VII-8
AQ	FY2009 - DWS Water Projects	VII-50
AS	FY2009 - DDOT Water Projects	VII-78
AY	Upgrades to Ft. Reno Pumping Station	VII-63
B0	B0 FY2010 - DDOT Water Projects	VII-79
BE	FY2011 - DWS Water Projects	VII-52
BN	FY2011 - DDOT Water Projects	VII-80
BW	Lead Service Replacement Program	VII-98
BZ	Large Valve Repl. (Contracts 8 & 9)	VII-9
C9	Large Diameter Water Mains 1	VII-10
CC	FY2012 - DWS Water Projects	VII-53
CJ	FY2012 - DDOT WATER PROJECTS	VII-81
СМ	FY2013 - DDOT Water Projects	VII-82
СР	FY2013 - DWS Water Projects	VII-54
D4	Small Valve Replacements 5	VII-11
D5	FY2014 - DWS Water Projects	VII-55
D9	FY2014 - DDOT Water Projects	VII-83
DE	Small Diameter Water Main Rehab 12	VII-12
DF	Rehab 24 Steel Main - Rock Creek	VII-13
DG	FY2015 - DWS Water Projects	VII-56
DH	FY2015 - DDOT Water Projects	VII-84
DL	Citywide Fire Hydrant Program	VII-14
DU	Water System Laboratory Facilities	VII-64

APPENDIX

WATER SERVICE AREA

PROJECT ID NAMES AND PAGE NUMBERS

Dunio et ID	Duncie of Nove o	D = 0 = #
Project ID	Project Name	Page #
DV	FY2016 - DDOT Water Projects	VII-85
DY	FY2016 - DWS Water Projects	VII-57
EM1	Future Meter Replacements	VI-99
EM2	Automated Meter reading	VI-100
F1	Small Diameter Water Main Rehab 13	VII-15
F2	Small Diameter Water Main Rehab 14	VII-16
F6	Steel Water Main Rehab - Phase I	VII-17
F8	16th & Alaska Ave Pump Sta Upgrades	VII-65
FA	Water Storage Facility Upgrades	VII-90
FD	Water Fac Security System Upgrades	VII-66
FE	20 Low Service Main & PRV	VII-18
FH	Discharge Piping Bryant St. Pump Sta	VII-67
FJ	Parking Ramp Rehab - Bryant St. PS	VII-68
FK	FY2017 - DWS Water Projects	VII-58
FL	FY2017 - DDOT Water Projects	VII-86
FT	Steel Water Mains Rehab Phase II	VII-19
GQ	Fire Hydrant Replacement Program - Phase II	VII-20
GR	Small Diameter Water Main Rehab. 15	VII-21
GS	FY2018 - DWS Water Projects	VII-59
GT	FY2018 - DDOT Water Projects	VII-87
GU	Crosstown Water Main Rehabilitation	VII-22
GX	Large Dia. Water Main Repl. II	VII-23
НА	FY 2011 DWS Water Pumping	VII-69
HD	Conversion of Anacostia PS to Customer Service	VII-70
HE	New Parking Structure & Building Modications @ E	VII-71

APPENDIX

WATER SERVICE AREA

PROJECT ID NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
HF	New Maintenance Facility at Fort Reno	VII-72
HV	Bryant St Pump Station - Spill Header Flow Contol	VII-73
HW	Rehabilitation of Elevated Water Tanks	VII-91
HX	Small Diameter Water Main Rehabilitation 16	VII-24
HY	FY2019 - DWS Water Projects	VII-60
HZ	FY2019 - DDOT Water Projects	VII-88
18	Large Valve Replacement (Contract 11-13)	VII-25
IA	Large Valve Replacement (Contract 14-16)	VII-26
IB	Large Valve Replacement (Contract 17-19)	VII-27
JB	Bryant Street PS Improvements - Phase II	VII-74
JZ	Large Dia Water Main Repl 3, 4, & 5	VII-29
KA	Large Valve Repl Contracts 20, 21, & 22	VII-30
KE	Small Dia Water Main Rehab18	VII-31
KV	Water Program Mgt. Services 2F	VII-95
KW	FY2021 - DWS Water Projects	VII-62
LQ	Water Service Area Asset Management	VII-96
M6	WPFA1- Rehab. Bryant St. Pump Sta.	VII-76
M7	WPFA3 - Replacement of Anacostia Pump Sta.	VII-77
MA	St. Elizabeth Water Tank	VII-92
ME	Water System Program Management Services	VII-97
MK	877A1 - 24 Wtrmain Ft. Stanton Res to MLK AVE	VII-32
MQ	878A1 - 2MG 4th High Storage Tank	VII-93
MR	5MG 2nd High Reservoir	VII-94
MT	Small Diameter Watermain Rehab. (1)	VII-33
MU	Small Diameter Watermain Rehab. (2)	VII-34

APPENDIX

WATER SERVICE AREA

PROJECT ID NAMES AND PAGE NUMBERS

Due in et ID	Due is at Name	D 4
Project ID	Project Name	Page #
MV	Small Diameter Watermain Rehab. (3)	VII-35
MW	Small Diameter Watermain Rehab. (4)	VII-36
MX	Small Diameter Watermain Rehab. (5)	VII-37
MY	Elim. Dead Ends (Contract 3 & 4)	VII-38
N8	Small Diameter Watermain Rehab. (6)	VII-39
N9	Small Diameter Watermain Rehab. (7)	VII-40
NA	863A1 - Clean & Line 20 4th High Wtrmain	VII-41
O0	Small Diameter Watermain Rehab. (8)	VII-42
O1	Small Diameter Watermain Rehab. (9)	VII-43
O2	Small Diameter Watermain Rehab. (10)	VII-44
O3	930B5 -Cln & Line Wtrmains (13)	VII-45
QM	Small Valve Replacements - Contract 4	VII-46
S3	Large Valve Replacement (Contract 3-7)	VII-47
S5	WDSC6 - Lg.Dia.Wtrmain Int. Repairs	VII-48



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

SECTION VIII
WASHINGTON AQUEDUCT

APPROVED FY 2012 - 2021



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 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan treatment plants, and thus is responsible for 73 percent of the Aqueduct's operating and capital costs (The exact allocation varies from year to year based upon DC Water's share of peak use). 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 Aqueduct CIP is broken into seven primary areas with specific Projects under each area:

Basin Waste Recovery/Residuals Disposal - \$98.1 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 sought and EPA granted 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 project is complete and the facility is in operation.

Dalecarlia Pumping Station Improvements - \$7.9 Million

(project pages VIII-6)

Beginning in FY2013, 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 2013); overhead crane replacements (FY 2014 - FY 2016); mechanical upgrades (FY 2016- FY 2018); SCADA upgrades (FY 2017 - FY 2019); valve and piping replacement (FY 2018 - FY 2020).

Cabin John Bridge Repairs - \$.9 Million

(project pages VIII-7)

Beginning in FY 2015 through FY 2017 are future improvements including roadway and parapet repairs. The most recent improvements to the bridge were completed in FY 2001.

(project pages VIII-8)

McMillian Water Treatment Plant Improvements - \$26.3 Million

The immediate focus, in this area will be on current projects including the transformer/switchgear building renovation, fire protection system improvements and east shaft pumping station pumping station renovation. Major projects include: clearwell maintenance & improvements north & south (FY 2012 - FY 2013, FY 2016-FY 2017 and FY 2020-FY2021); security improvements improvements (FY2021);boat dock/chemical storage building renovation (FY 2014 - FY 2016); GIS system (FY 2017 - FY 2019); roof replacements (FY 2016 - FY 2018); SCADA upgrade (FY 2017 -FY 2019); instrumentation improvements (FY 2015, FY2020); process improvements (FY 2017 - FY 2019); EASA building renovation (FY 2017 - FY 2019); mcmillan building renovations ph2 & ph3 (FY 2014 - FY 2016, FY 2020 - FY 2021);and roadway repairs (FY 2018 - FY 2020).

Appurtenant Transmission & Storage Facility - \$45.2 Million

(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 and reservoir maintenance & improvements - 1st high. Future projects include: reservoir maintenance & improvements - 1st, 2nd & 3rd high (FY 2019 – FY 2020, FY 2017 – FY 2018 and FY 2015 - FY 2016); transmission main improvements (FY2013 – FY 2015); city tunnel repairs (FY 2020- FY 2021); conduit repairs (FY 2016 – FY 2021); 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 2021); Rock Creek Blow-Off Valve Replacements (FY 2018 – FY 2020); Sluice Gate Replacements (FY 2020 - FY 2021); Warehouse No.6 & 8 Improvements (FY 2016 - FY 2017 & FY 2015 – FY 2016); Georgetown Reservoir Building Improvements (FY 2014 - FY 2015 and FY 2021); Security Improvements Ph II (FY 2021) and Little Falls Pumping Station Architectural Improvements in FY 2021.

Dalecarlia Water Treatment Plant Improvements - \$52.2 Million

(project pages VIII-10)

Dalecarlia WTP will continue to improve its infrastructure with current projects including: maintenance building renovation, fire protection system improvements, chemical building electrical upgrades and east filter building renovation - phll. Future projects include: visitors center exhibits (FY 2014 – FY 2016); administration building improvements (FY 2015 - FY 2017); basin no. 3 & no. 4 flocculation/sedimentation improvements (FY2018 - FY 2020); carbon facility tank renovations (FY 2017 - FY 2019); clearwell maintenance & improvements – 15 & 30 MG (FY 2014 – FY 2015 & FY 2018 – FY 2019); GIS System (FY 2017 - FY 2019); intake building renovation (FY 2014 – FY 2016); 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 2018 - FY 2019); west filter building improvements (FY 2015 - FY 2017); fuel line replacements (FY 2015 - FY 2016); process improvements (FY 2020 - FY 2021) and security improvements Ph III improvements will start in FY 2021.

<u>Alternate Treatment Methods - \$1.2 Million</u>

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 2020.

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 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

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 received a time extension on the completion of this project. The Aqueduct selected a process to meet the Compliance Agreement, which dewaters the residual on site and trucks them off-site for disposal. The project is currently 99% complete and in beneficial use.

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 chemical use, electrical consumption and contract trucking for disposal. Funding is included in FY 2013.

Funding by User (percent):

DC - 100.00%

EPA -

WSSC -

Fairfax -

Budget

Loudoun/PI -

FY 2
FY2013 Revised

FY 2013 Approved Life Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

Pre FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Post FY 2021

94,906,321

98,118,029

3,211,708

Post FY 2021

Start Date

10/1/2007

10/1/2011

Disbursements Budget

98.119

Commitments

<u>Pre FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

98,118

(projected disbursements do not include contingencies)

Service Area Title: Washington Aqueduct

Program Title: Washington Aqueduct

Activity Group/Project Title: WAD122 Dalecarlia Pumping Station

Managing Department: EPMC:

Priority: Good Engineering Practices

Project Description:

The Dalecarlia Pumping Station was built over forty years ago and beginning in FY2012, 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 & building renovations (FY 2013); overhead crane & elevator replacements (FY 2014 - FY 2016); mechanical upgrades (FY 2016- FY 2018); SCADA upgrades (FY 2017 - FY 2019) and valve and piping replacement (FY 2018 - FY 2020).

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 -

water is life

FY 2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 13,415,549 et 7,883,770 se) -5,531,779

Start Date

10/1/2010

10/1/2017

Phase

Design:

Project Completion:

Construction:

Loudoun/PI -

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,934	1,826	292	475	949	438	1,168	803			
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,934	1,826	292	475	949	438	1,168	803			

(projected disbursements do not include contingencies)

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. 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 -

water is life

FY 2013 Approved Life Budget FY2013 Revised/FY2014 Approved Budget

14 Approved Budget 912,750
Increase/(Decrease) -4,000

916,750

Start Date

10/1/2010

10/1/2015

Phase

Design:

Project Completion:

Construction:

Loudoun/PI -

Disbursements Pre FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Post FY 2021

Budget 146 183 584

Commitments Pre FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Post FY 2021

Budget 146 183 584

(projected disbursements do not include contingencies) (dollars in thousands)

Service Area Title: Washington Aqueduct
Program Title: Washington Aqueduct

Activity Group/Project Title: WAD126 McMillian WTP Improvements

Managing Department: EPMC:

Priority: Good Engineering Practices

Project Description:

Phase Start Date
Design:
Construction: 10/1/2007

Project
Completion: 10/1/2017

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, in this area will be on current projects including the transformer/switchgear building renovation, fire protection system improvements and east shaft pumping station pumping station renovation. Major projects include: clearwell maintenance & improvements north & south (FY 2012 - FY 2013, FY 2016-FY 2017 and FY 2020-FY2021); security improvements improvements (FY2021); boat dock/chemical storage building renovation (FY 2014 - FY 2016); GIS system (FY 2017 - FY 2019); roof replacements (FY 2016 - FY 2018); SCADA upgrade (FY 2017 - FY 2019); instrumentation improvements (FY 2015, FY2020); process improvements (FY 2017 - FY 2019); EASA building renovation (FY 2017 - FY 2019); mcmillan building renovations ph2 & ph3 (FY 2014 - FY 2016, FY 2020 - FY 2021); and roadway repairs (FY 2018 - FY 2020).

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 -

Loudoun/PI -



FY 2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et	37,931,778
et	26,314,175
se)	-11,617,603

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	10,444	3,053	1,168	745	1,168	1,862	2,702	2,614	1,000	1,241	
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	10,444	3,053	1,168	745	1,168	1,862	2,702	2,614	1,000	1,241	

(projected disbursements do not include contingencies) (dollars in thousands)

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:

Phase Start Date
Design:
Construction: 10/1/2010

Project
Completion: 10/1/2017

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 and reservoir maintenance & improvements - 1st high. Future projects include: reservoir maintenance & improvements - 1st, 2nd & 3rd high (FY 2019 – FY 2020, FY 2017 – FY 2018 and FY 2015 - FY 2016); transmission main improvements (FY2013 – FY 2015); city tunnel repairs (FY 2020- FY 2021); conduit repairs (FY 2016 – FY 2021); 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 2021); Rock Creek Blow-Off Valve Replacements (FY 2018 – FY 2020); Sluice Gate Replacements (FY 2020 - FY 2021); Warehouse No.6 & 8 Improvements (FY 2016 - FY 2017 & FY 2015 – FY 2016); Georgetown Reservoir Building Improvements (FY 2014 - FY 2015 and FY 2021); Security Improvements Ph II (FY 2021) and Little Falls Pumping Station Architectural Improvements in FY 2021.

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 -

water is life

FY 2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 43,074,617 et 45,164,000 se) 2,089,383

Loudoun/PI -	L	οι	ıd	OI	ur	ı/F	기 -	-
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Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	7,883	2,373	2,154	2,592	3,322	4,126	4,381	1,424	5,535	6,182	
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	7,883	2,373	2,154	2,592	3,322	4,126	4,381	1,424	5,535	6,182	

(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

Project Description:

Phase Start Date
Design:
Construction: 10/1/2007

Project
Completion: 10/1/2017

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: maintenance building renovation, fire protection system improvements, chemical building electrical upgrades and east filter building renovation - phll . Future projects include: visitors center exhibits (FY 2014 – FY 2016); administration building improvements (FY 2015 - FY 2017); basin no. 3 & no. 4 flocculation/sedimentation improvements (FY2018 - FY 2020); carbon facility tank renovations (FY 2017 - FY 2019); clearwell maintenance & improvements – 15 & 30 MG (FY 2014 – FY 2015 & FY 2018 – FY 2019); GIS System (FY 2017 - FY 2019); intake building renovation (FY 2014 – FY 2016); 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 2018 - FY 2019); west filter building improvements (FY 2015 - FY 2017); west filter building improvements (FY 2015 - FY 2017); fuel line replacements (FY 2015 - FY 2016); process improvements (FY 2020 - FY 2021) and security improvements Ph III improvements will start in FY 2021.

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 -

water is life

FY 2013 Approved Life Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 65,518,590 et 52,160,000 se) -13,358,590

Loudoun/PI -

Disbursements	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	15,378	2,300	7,083	7,521	5,498	4,673	2,738	4,856	1,278	1,336	
Commitments	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	15,378	2,300	7,083	7,521	5,498	4,673	2,738	4,856	1,278	1,336	

(projected disbursements do not include contingencies)

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 2020.

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 -

Loudoun/PI -

water is life

FY 2013 Approved Life Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

Phase

Design:

Project Completion:

Construction:

1,241,000 -1,554,515

2,795,515

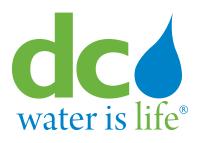
Start Date

10/1/2008

10/1/2017

Pre FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements Post FY 2021 Budget** 146 475 256 365 Commitments Pre FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Budget** 475 256 365 146

(projected disbursements do not include contingencies) (dollars in thousands)



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

SECTION IX

CAPITAL EQUIPMENT

APPROVED FY 2012 - 2021





CAPITAL EQUIPMENT

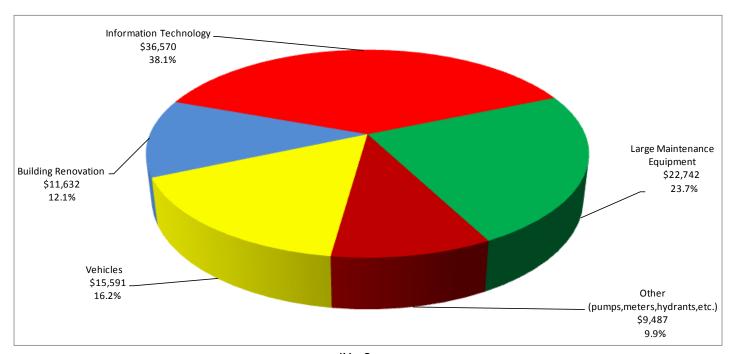
DC Water's Capital Equipment disbursements budget totals approximately \$96 million for FY 2012 – FY 2021 plan, a decrease of approximately \$2.3 million compared to the last ten-year plan. Approximately thirty eight percent of spending in the capital equipment area is on major information technology projects, including infrastructure upgrade (budget of \$6.7 million) and desktop replacements (budget of \$5.0 million). DC Water continues its commitment to scheduled replacement of its vehicle fleet with a budget of \$15.6 million, representing sixteen percent of the Capital Equipment disbursement budget. Finally, maintenance of large equipment totals \$22.7 million, or twenty four percent of the ten-year budget. Other equipment including hydrant and valve equipment necessary for the maintenance of the District's public fire hydrant system totals \$9.5 million or ten percent of the Capital Equipment disbursement budget.

The revised FY 2013 budget at \$18.4 million is \$3.1 million more than the FY 2013 approved budget. This variance is primarily attributable to increases in disbursement budgets for Fleet Management and Maintenance Services.

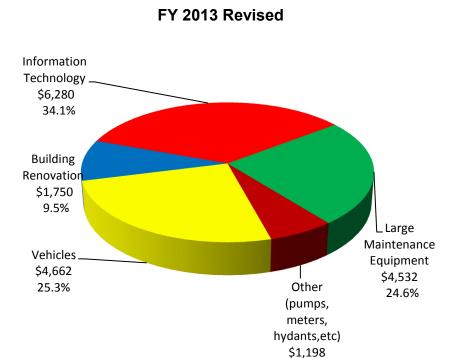
CAPITAL EQUIPMENT DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES

FY 2012 – FY 2021

(\$ in 000's)

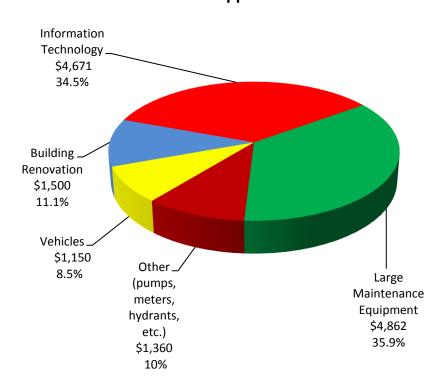


CAPITAL EQUIPMENT DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES FY 2013 Revised vs. FY 2014 Approved (\$ in 000's)



6.5%

FY 2014 Approved



FY 2013 Revised = \$18,422 FY 2014 Approved = \$13,543

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 - \$0.38 million

Capital equipment expenditures for this department are for laboratory equipment purchases to maintain a certified laboratory.

Department of Water Services - \$4.8 million

The Department of Water Services is responsible for replacing deteriorated or damaged 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 2013 revised and FY 2014 approved budgets largely remain the same as those carried out by the department in previous years for system valves and Water service replacements.

Department of Sewer Services - \$4.3 million

This department is responsible for replacing catch basins, manhole covers and frames, and rehabilitating regulators and outfall gates. The FY 2012 - 2021 budget plan reflects purchasing of Flow Meter Sensors, Catch Basin Tops and Sewer Cleaning and Repair Equipment. Activities planned for FY 2013 and FY 2014 include the purchase of additional safety equipment, new sewer videoing equipment and investment in trenchless technology equipment to increase the use of this cost-effective sewer lateral replacement process.

Department of Fleet Management - \$15.6 million

This year's capital budget emphasis is on replacing many of DC Water current vehicles/equipment (heavy duty trucks and equipment) with more fuel efficient and environmental friendly vehicles. In addition, to support the efforts in reducing the carbon footprint, Fleet is implementing comprehensive steps and coordinating with each Department within DC Water, to meet the needs of

each department for the acquisition of vehicles/equipment designed to perform and support the responsibilities within the organization.

Department of Facilities and Security - \$11.6 million

Capital equipment activities for this department include plumbing maintenance at various locations, fencing, photocopier purchase, elevator replacements, rollup doors replacements and fire suppression and detection systems. This year's budget focus will be on furniture and fixtures, HVAC at various locations, and facilities improvements.

Department of Maintenance Services - \$15.2 million

This department is responsible for rehabilitating and replacing large process equipment throughout the Authority, including pumps, screens, variable frequency drives, and large motors. A major emphasis has been placed on major pump rebuild/replacement at locations inside and outside of Blue Plains. Additionally, funding will focus on large electric motor purchase and the rebuild/replacement of centrifuges.

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 High Priority Rehab Program over the past several years, which ensures that large equipment will function properly until its scheduled replacement under the Capital Improvement Program.

Department of Process Engineering - \$6.7 million

This department is responsible for maintaining plant permit compliance for treatment processes. It has three sections: Process Engineering that reviews Capital Projects with regards to Process and associated equipment, Process Control that operates and maintains the Plants' Distributed Control System and its interface with Capital Projects, and Process Control Maintenance that maintains Process Instrumentation and interfacing equipment throughout Blue Plains plant, including actuators, flow meters, PLCs, including the new Biosolids Program related Process major equipment. A major emphasis has been placed on PLCs and actuators. Additionally, funding will focus on equipment replacement based on failures and those that are at the end of their useful lives.

Department of Information Technology - \$36.6 million

At DC Water, we focus all of our technology initiatives on improving both the quality of services we provide to our customers and organizational effectiveness. Our technology achievements 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 2012, as well as our investments in technology over the next several years is further evidence of our commitment. Technology is a vital tool to help DC Water move toward attainment of "Best in Class" utility and reengineering business processes in accordance with Board Strategic goals.

During FY 2012, DC Water management preformed a thorough review of the structure and mission of the Information Technology department. This information may result in recommended organizational restructuring and efficiencies.

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 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. The table on the following page depicts those capital equipment projects that have been closed from last year's budget. These projects may be reopened in future years, as needed.

List of Closed Capital Equipment Projects

Dunin et I D	Dunings Title
Project I.D.	Project Title
Closed Projects	<u> </u>
EB1	Software Applications/Licenses
EB2	Messaging Services
EB3	Windows 2003 Migration/Upgrade
EC6	Audio Video System
EC7	Interactive Voice Response
ED8	Wastewater Maximo
EG1	SQL Update
EG6	Skimmer Boat Dock Piles
EG9	Valve Identification Program
EH3	SCADA Upgrade - Phase III
EH5	Budget Tool
EI2	Large Electric Motors
EK1	MAXIMO SCADA Integration
EM5	AMR System Enhancements
EO1	AutoCAD
EO2	AutoCAD Lite
EO3	CIP Planner
EO5	IBM Watson Research
EO6	Optimization-Pilot: Daily Fleet
EO7	Water and Sewer SCADA
EO8	Board e-book
EO9	Permits Relocation
EQ1	Energy Management
ET1	Network Systems Security
ET2	Intranet
ET8	Video Conferencing
ET9	Mobile Service Support (Formerly Field Services Mgmt System-Automated Dispatch System)
EX8	Fire Hydrant Replacement
EY5	Oracle Upgrade
EZ1	Financial Management System
EZ2	Customer Information & Billing System
EZ9	Asset Management Hardware Support System/Fleet

FY 2012 - FY 2021 CAPITAL EQUIPMENT BUDGET DISBURSEMENTS BASIS (\$ in 000's)

	FY 2012	FY 2013	FY 2014								Total	Project Sheet	Project Sheet
Equipment Type	Actuals	Revised	Approved	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY '12 -'21	Ref.	Budget
Wastewater Treatment													
Lab Equipment for new Laboratory	\$0	\$275	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$375	ED9	\$375
Total	\$0	\$275	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$375		****
	•	•	,	•	•	• -	• -	•	•	, -	, -		
Water Services													
Water Service Replacement	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$2,600	EA2	\$2,600
System Valve Replacements	79	225	225	225	225	225	225	225	225	225	2,104	EW1	\$2,104
Fire Hydrant Replacements	137	-		-	-	-	-	-	-	-	137	EX8	\$137
Total	\$476	\$485	\$485	\$485	\$485	\$485	\$485	\$485	\$485	\$485	\$4,841		
Sewer Services	_{Ф20}	\$30	¢40	£40	£ 40	£40	£40	£ 40	£40	£ 40	6200	E 4 4	
Sewer Pipes/Fittings Sewer Inspection Equipment	\$30	\$3U -	\$40 10	\$380 80	EA4 EA4								
Manhole Covers/Frames	33	33	40	40	40	40	40	40	40	40	386	EA4	
Regulator and Gate Rehabilitation	10	10	10	10	10	10	10	10	10	10	100	EA4	
Regulator and Gate Renabilitation	10	10	10	10	10	10	10	10	10	10	100	EA4	
Sewer Cleaning and Repair Equipment	55	55	55	20	55	55	55	55	55	55	515	EA4	
Portable Pumps	15	15	50	20	-	20	20	20	20	-	180	EA4	
Sewer Flow Meters/Sensor													
Replacements	25		50	25	75	75	75	75	75	75	575	EA4	
Catch Basin Tops/Frames/Covers	60	60	60	60	60	60	60	60	60	60	600	EA4	
Safety Equipment (shoring)	0	150	150	50	50	50	50	50	50	50	650	EA4	
Sewer Lateral Eqquipment	50	-	-	-	-	-	-	-	-	-	50	EA4	\$3,516
100 W Emergency Generator & Load Center	_	_	50	_	_	_	_	_	_	_	50	ES4	\$50
CIPP Trenchless Equipment	_	_	200	25	25	25	25	25	25	25	375	EW6	\$375
TV for Jet Machine	_	60	60	30	30	30	30	30	30	30	330	EG5	\$330
Total	\$278	\$438	\$775	\$330	\$395	\$415	\$415	\$415	\$415	\$395	\$4,271		4000
Fleet Management	#0.070	04.000	04.450	64 400	04 400	64 400	645 504		A . = = A .				
Vehicles Total	\$2,079 \$2,079	\$4,662 \$4,662	\$1,150 \$1,150	\$1,100 \$1,100	\$15,591 \$15,591	EB6	\$15,591						
Total	Ψ2,010	Ψ-1,002	Ψ1,100	Ψ10,001									
Facilities and Security													
HVAC at Various Locations	\$225	\$250	\$250	\$300	\$160	\$160	\$160	\$160	\$160	\$160	\$1,985	EF3	\$1,985
Photocopier Purchase	-	300	200	200	90	90	90	90	90	90	1,240	EF5	\$1,240
Authority-wide fire suppress/detection	90	125	125	250	100	100	100	100	100	100	1,190	EF7	\$1,190
Elevator -various locations	-	300	75	74	50	50	50	50	50	50	749	EF8	\$7,130
Plumbing at Various Locations	37	50	50	50	10	10	10	10	10	10	247	EX6	Ψ1 40
Furniture and Fixtures	696	200	300	200	150	150	150	150	150	150	2,296	EX6	
Facilities Improvements	230	250	200	250	250	250	250	250	250	250	2,430	EX6	
Signage	-	25	-	25	-	-	-	-	-	-	50	EX6	
- 3 -3-		_5		_0							30	_,	

FY 2012 - FY 2021 CAPITAL EQUIPMENT BUDGET DISBURSEMENTS BASIS (\$ in 000's)

Equipment Type	FY 2012 Actuals	FY 2013 Revised	FY 2014 Approved	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total FY '12 -'21	Project Sheet Ref.	Project Sheet Budget
	37	100				50	50				637		Dauger
Rollup Doors Authority-wide Fencing	18	50	100 50	100 50	50 25	25	25	50 25	50 25	50 25	318	EX6 EX6	\$5,978
Roofing	10	50	150	50	25	25	25	25	25	25	250	EG7	\$250
Security- Misc. Enhancements	-	50	-	50	- 15	15	- 15	15	15	- 15	190	EG7	\$250 \$190
Appliances	_	-	-	-	-	-	-	50	-	-	50	EW7	\$190 \$50
Total	1,333	1,750	1,500	1,599	900	900	900	950	900	900	\$11,632		ΨΟΟ
. 5	.,	.,	.,	.,							4.1.,00		
Information Technology													
Desktop Replacements	\$502	\$500	\$500	\$565	\$500	\$500	\$500	\$500	\$500	\$500	\$5,067	EA6	\$5,067
Cabling	146	160	160	175	175	175	175	175	175	175	1,691	EA7	\$1,691
Telephone Systems Upgrades	300	110	150	325	130	160	360	160	160	160	2,015	EA8	\$2,015
Software Applications/Licenses	150	-	-	-	-	-	-	-	-	-	150	EB1	\$150
Radios	984	575	316	30	30	30	30	30	30	30	2,085	EB4	\$2,085
Redundant Data Center	200	200	200	210	450	200	60	60	60	60	1,700	EB8	\$1,700
Infrastructure Upgrade	318	405	585	1055	585	605	1035	605	605	605	6,403	EC4	\$6,403
Audio Visual System - IT	10	-	-	-	-	-	-	-	-	-	10	EC6	\$10
Enterprise Archiving	25	100	150	10	10	150	10	10	10	10	485	EG2	\$485
Enterprise Storage Upgrades	-	300	525	375	125	125	125	125	125	125	1,950	EG3	\$1,950
Finance/Procurement System	812	1200	200	-	-	-	-	-	-	-	2,212	EG4	\$2,212
AMR Equipment -Enhancements	207	-	-	-	-	-	-	-	-	-	207	EM5	\$207
Materials Management System	233	950	-	-	-	-	-	-	-	-	1,183	EP3	\$1,183
Network Systems Security	167	-	-	-	-	-	-	-	-	-	167	ET1	\$167
Intranet	225	-	-	-	-	-	-	-	-	-	225	ET2	\$225
Field Service / Mobile Equipment	100	325	275	175	100	100	100	100	100	100	1,475	ET5	\$1,475
Enterprise Backup Solution	100	100	300	240	100	100	100	100	100	100	1,340	ET7	\$1,340
Services Mgmt System -Automated	275	-	-	-	-	-	-	-	-	-	275	ET9	\$275
Web-Site Development	5	170	-	-	-	-	-	-	-	-	175	EX7	\$175
Financial Management System	53	-	-	-	-	-	-	-	-	-	53	EZ1	\$53
Customer Information & Billing System	325	-	-	-	-	-	-	-	-	-	325	EZ2	\$325
Ceridian	-	30	30	30	30	30	30	30	30	30	270	EZ4	\$270
Document Management System	575	600	550	275	100	300	100	100	100	100	2,800	EZ8	\$2,800
Asset Management Hardware Support	1350	-	-	-	-	-	-	-	-	-	1,350	EZ9	
Fleet Management System-	35	-	-	-	-	-	-	-	-	-	35	EZ9	\$1,385
Oracle Upgrade	70	-	-	-	-	-	-	-	-	-	70	EY5	\$70
Optimization- Pilot: Daily Fleet													
Operations-	97	-	-	-	-	-	-	-	-	-	97	EO6	\$97
Water and Sewer SCADA	265	-	-	-	-	-	-	-	-	-	265	EO7	\$265
Permits Relocation	6		-	-	-	-	-	-	-	-	6	EO9	\$6
MAXIMO SCADA Integration	150	-	-	-	-	-	-	-	-	-	150	EK1	\$150
CS-Leak Detection	69	50	-	-	-	-	-	-	-	-	119	EK2	\$119
Safety System-	-	100	-	-	-	-	-	-	-	-	100	EK3	\$100
Enterprise Performance Dashboard	-	275	375	100	-	-	-	-	-	-	750	EK4	\$750
Civil 3D	-	-	-	150	125	100	100	-	-	-	475	EK5	\$475

FY 2012 - FY 2021 CAPITAL EQUIPMENT BUDGET DISBURSEMENTS BASIS (\$ in 000's)

Equipment Type	FY 2012 Actuals	FY 2013 Revised	FY 2014 Approved	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Total FY '12 -'21	Project Sheet Ref.	Project Sheet Budget
Valve Identification Program	54	-	-	-	-	-	-	-	-	-	54	EG9	\$54
VoIP Upgrades		75	150	300	-	-	-	-	-	-	525	EH4	\$525
Time & Attendance Clocks	50	55	205	-	-	-	-	-	-	-	310	EH6	\$310
Total	\$7,858	\$6,280	\$4,671	\$4,015	\$2,460	\$2,575	\$2,725	\$1,995	\$1,995	\$1,995	\$36,570	_	
Maintenance Services													
Major Pump Rebuild/Replacement	\$487	\$2,497	\$1,000	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$6,084	EC1	\$6,084
Large Electric Motors	237	200	400	200	200	200	200	200	200	200	2,237	EC2	\$2,237
High Priority Rehab Program	550	500	500	-	-	-	-	-	-	-	1,550	EC3	\$1,550
Centrifuge Rebuild / Replace	415	400	630	400	400	400	400	400	400	400	4,245	EM4	\$4,245
Membrane Diffuser, Mechanical													
/Electrical Replacements	-	450	616								1,066	EW8	\$1,066
Total	\$1,689	\$4,047	\$3,146	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$15,182		
Sewer and Water Pumping													
Major Pump Rebuild/Replacement	\$0	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$900	EI1	\$900
Total	\$0	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$900	_	
Process Engineering													
Actuators	\$0	\$0	\$372	\$372	\$186	\$186	\$186	\$186	\$186	\$186	\$1.859	PE1	\$1,859
Flow Meters	Ψ0	Ψ0	209	209	104	104	104	104	104	104	1.044	PE2	\$1,039
PLCs		385	1.035	28	173	173	104	100	104	104	2,193	PE3	\$2,193
	-	303	1,000	20	173	173	100	100	100	100	2,193	r E3	Ψ 2 ,133
Digesters- Major Equipment Replacement				004	400	400	400	400	400	400	4.504		
·				391	196	196	196	196	196	196	1,564	PE4	\$1,564
Total	\$0	\$385	\$1,616	\$1,000	\$658	\$658	\$586	\$586	\$586	\$586	\$6,660		
Total Capital Equipment	\$13,713	\$18,422	\$13,543	\$9,529	\$6,998	\$7,133	\$7,211	\$6,531	\$6,481	\$6,461	\$96,022		

District of Columbia Water and Sewer Authority

FY 2012 - 2021 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:

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 -Loudoun/PI -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

2,600,000 92,000

2,508,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	260	260	260	260	260	260	260	260	260	260	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	260	260	260	260	260	260	260	260	260	260	

(projected disbursements do not include contingencies) (dollars in thousands)

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 -

water is life

FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

2,830,000 3,516,000 686,000

Loudoun/PI -

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	278	378	465	275	340	360	360	360	360	340	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	278	378	465	275	340	360	360	360	360	340	

(projected disbursements do not include contingencies)

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 -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

-188,000

5,274,000

5,086,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	521	500	500	565	500	500	500	500	500	500	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	521	500	500	565	500	500	500	500	500	500	

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EA7 Cabling**

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 -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

 3 Approved Budget
 1,590,000

 14 Approved Budget
 1,691,000

 Increase/(Decrease)
 101,000

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Disbursements Budget** 175 175 146 160 175 175 175 175 160 175 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021** Commitments **Budget** 146 160 175 175 175 175 175 160 175 175

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EA8 Telephone System Upgrades

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 -Loudoun/PI - water is life

FY 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

t 1,786,000 t 2,015,000 229,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	300	110	150	325	130	160	360	160	160	160	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	300	110	150	325	130	160	360	160	160	160	

(projected disbursements do not include contingencies)

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 -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

Loudoun/PI -**CLOSED**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget 150

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Commitments

Budget 150

(projected disbursements do not include contingencies)

Post FY 2021

(dollars in thousands)

1,583,000

-1,433,000

150.000

Post FY 2021

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 -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

14 Approved Budget
Increase/(Decrease)

CLOSED

Disbursements

Commitments

Loudoun/PI -

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

(projected disbursements do not include contingencies)

(dollars in thousands)

750,000

-750,000

Post FY 2021

Post FY 2021

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EB3 Windows 2003 Migration/Upgrade

Managing Department: Information Technology **EPMC**:

Priority: IT Best Practice

Project Description:

Windows server migration/upgrade based on 4-year life cycle. Included in annual maintenance costs.

Impact on Operations:

Funding by User (percent):

DC - Joint Use - Indirect Cost

(projected disbursements do not include contingencies)

EPA -WSSC -Fairfax -

Laudaus/DI



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 333,000 et 0 e) -333,000

Loudoun/PI - CLOSED

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

(dollars in thousands)

Post FY 2021

Post FY 2021

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. Current frequencies to be eliminated in FY 2014. Therefore, upgrades are required to ensure operating safety and security.

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 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	984	575	316	30	30	30	30	30	30	30	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	984	575	316	30	30	30	30	30	30	30	

(projected disbursements do not include contingencies)

(dollars in thousands)

2,017,000

2,085,000

68,000

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EB6 Vehicle Purchases

Managing Department: Fleet Services **EPMC:**

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 -

Budget

Budget

Disbursements

Commitments



1,150

1,150

FY 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

1.100

1,100

Increase/(Decrease)

1.100

1,100

Post FY 2021	FY 2021	FY 2020
	1,100	1,100
Post FY 2021	FY 2021	FY 2020
	1,100	1,100

(projected disbursements do not include contingencies)

2.079

2,079

4.662

4,662

(dollars in thousands)

12,249,000

15,591,000

3,342,000

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

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

1.100

1,100

1,100

1,100

1,100

1,100

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 -

Loudoun/PI -

Fairfax -

water is life

 FY 2013 Approved Budget
 1,850,000

 FY2013 Revised/FY2014 Approved Budget
 1,700,000

 Increase/(Decrease)
 -150,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	200	200	200	210	450	200	60	60	60	60	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	200	200	200	210	450	200	60	60	60	60	

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EC1 Pump Repair and Replacement

Managing Department: Maintenance Services EPMC:

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 -

Loudoun/PI -

water is life

FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 2,829,000 et 6,084,000 e) 3,255,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	487	2,497	1,000	300	300	300	300	300	300	300	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	487	2,497	1,000	300	300	300	300	300	300	300	

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EC2 Large Electric Motors

Managing Department: Maintenance Services EPMC:

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 -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

 3 Approved Budget
 2,015,000

 14 Approved Budget
 2,237,000

 Increase/(Decrease)
 222,000

Loudoun/PI -

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	237	200	400	200	200	200	200	200	200	200	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	237	200	400	200	200	200	200	200	200	200	

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EC3 High Priority Rehab Program

Managing Department: Maintenance Services EPMC:

Priority: Good Utility Practice

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.

Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 500,000
et 1,550,000
ee) 1,050,000

Disbursements Budget	FY 2012 550	FY 2013 500	FY 2014 500	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments Budget	FY 2012 550	FY 2013 500	FY 2014 500	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EC4 Infrastructure Upgrade**

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 - water is life

FY 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

get 6,403,000 se) 1,386,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	318	405	585	1,055	585	605	1,035	605	605	605	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	318	405	585	1,055	585	605	1,035	605	605	605	

(projected disbursements do not include contingencies)

(dollars in thousands)

5,017,000

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 -

. . . ._.



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 401,000 et 10,000 e) -391,000

Loudoun/PI - CLOSED

Disbursements FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget 10

Commitments <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget 10

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

Post FY 2021

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 -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

 3 Approved Budget
 676,000

 14 Approved Budget
 0

 Increase/(Decrease)
 -676,000

Loudoun/PI - CLOSED

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget

Commitments <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

Post FY 2021

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: **ED8** Wastewater Maximo

Managing Department: Wastewater Treatment EPMC:

Priority: Good Utility Practice

Project Description:

This project was used as a start up for Wastewater Treatment Maximo.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -

EPA -

WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

-503,000

503,000

Post FY 2021

Post FY 2021

0

0

CLOSED

Disbursements

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

(dollars in thousands)

(projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: ED9 Lab Equipment for New Laboratory

Managing Department: Wastewater Treatment **EPMC**:

Priority: Good Utility Practice

Project Description:

This project will be used to purchased lab equipment for DCWater's new laboratory.

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 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

1,063,000

375,000

-688,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		275	100								0
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		275	100								0

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: EF3 HVAC at Various Locations

Managing Department: Facilities and Security EPMC:

Good Utility Practice Priority:

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

FPA -

WSSC -

Fairfax -Loudoun/PI -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease

t	1,764,000
t	1,985,000
e)	221,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	225	250	250	300	160	160	160	160	160	160	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	225	250	250	300	160	160	160	160	160	160	
(projected disbursement	s do not include	contingenci	es)							(dolla	rs in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EF5 Photocopier Purchase

Managing Department: Facilities and Security 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 -

Loudoun/PI -

water is life

 FY 2013 Approved Budget
 1,064,000

 FY2013 Revised/FY2014 Approved Budget
 1,240,000

 Increase/(Decrease)
 176,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		300	200	200	90	90	90	90	90	90	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		300	200	200	90	90	90	90	90	90	

(projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EF7 Authority-wide fire supression/detection**

Managing Department: Facilities and Security EPMC:

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 -

Disbursements

water is life

FY 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

FY 2012 FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 FY 2021	Post FY 2021

952,000

238,000

1,190,000

Budget 100 90 125 125 250 100 100 100 100 100 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Commitments Budget** 90 125 100 125 250 100 100 100 100 100

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EF8 Elevator Repairs

Managing Department: Facilities and Security EPMC:

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 -Loudoun/PI - water is life

FY 2013 Approved Budget 650,000
FY2013 Revised/FY2014 Approved Budget 749,000
Increase/(Decrease) 99,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		300	75	74	50	50	50	50	50	50	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		300	75	74	50	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: EG1 SQL Update

Managing Department: Information Technology EPMC:

IT Best Practice (Life Cycle Management) **Priority:**

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 -

Loudoun/PI -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

CLOSED

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Commitments Budget**

(projected disbursements do not include contingencies)

(dollars in thousands)

167,000

-167,000

Post FY 2021

Post FY 2021

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EG2 Enterprise 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 -

Loudoun/PI -



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 716,000 et 485,000 se) -231,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	25	100	150	10	10	150	10	10	10	10	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	25	100	150	10	10	150	10	10	10	10	

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EG3 Enterprise Storage Upgrades

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 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

et	1,950,000
e)	-75,000

2,025,000

Loudoun/PI -

Disbursements	FY 2012									FY 2021	Post FY 2021
Budget		300	525	375	125	125	125	125	125	125	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		300	525	375	125	125	125	125	125	125	

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EG4 Finance/Procurement System

Managing Department: Information Technology EPMC:

Priority: IT Best Practice

Project Description:

Development and implementation of new budgeting and procurement management systems. New systems will provide automation of processes that are currently manual. The enhancements will include several other financial upgrades including cash management, 3-way matching and installation of a grants module, to name a few.

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 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

 3 Approved Budget
 2,700,000

 14 Approved Budget
 2,212,000

 Increase/(Decrease)
 -488,000

Disbursements				FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	812	1,200	200								
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	812	1,200	200								

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EG5 TV for Jet Machine

Managing Department: Sewer Services **EPMC**:

Priority: Good Utility Practice

Project Description:

This projects will be used to purchase TV's for Department of Sewer Service Jet Machines.

Impact on Operations:

This project will decrease need for seperated crew, thus increasing operations productivity.

Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA -WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2013 Approved Budget 60,000
FY2013 Revised/FY2014 Approved Budget 330,000
Increase/(Decrease) 270,000

Disbursements	FY 2012	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		60	60	30	30	30	30	30	30	30	0
Commitments	FY 2012	FY 2013 I	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		60	60	30	30	30	30	30	30	30	0

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EG6 Skimmer Boat Dock Piles

Managing Department: Sewer Services EPMC:

Priority: Good Utility Practice

Project Description:

This projects will be used to purchase dock piles for DC Water skimmer boats.

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 -



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

e) -60,000

Loudoun/PI - CLOSED

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget

Commitments <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

Post FY 2021

0

0

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EG7 Roofing**

Managing Department: Facilities and Security EPMC:

Priority: Good Utility Practice

Project Description:

This project will be used to replace all gutter seams on East Side, Bryant Street Main Pumping Station

Impact on Operations:

Failure to implement will result in interior building damage, with the possibility of catastrophic electrical failures caused by unexpected leaks.

Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA -WSSC -Fairfax -

Loudoun/PI -



FY 2013 Approved Budget 50,000
FY2013 Revised/FY2014 Approved Budget 250,000
Increase/(Decrease) 200,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		50	150	50							0
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		50	150	50							0
(projected disbursements do not include contingencies) (dollars in									rs in thousands)		

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EG8 Security- Miscellaneous

Managing Department: Facilities and Security EPMC:

Priority: Good Utility Practice

Project Description:

This project is for Security Enhancements throughout DC Water. Specifically, surveillance and access control equipment needed on major facilities due to chronic property loss.

Impact on Operations:

Failure to implement will allow for continuous property loss at several known problem locations potentially resulting in significant dollar value loss and possibly impacting DC Water operations by delaying repairs due to insufficient supplies caused by theft/property loss.

Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -

water is life

 FY 2013 Approved Budget
 105,000

 FY2013 Revised/FY2014 Approved Budget
 190,000

 Increase/(Decrease)
 85,000

Disbursements	FY 2012	FY 2013 FY 201	4 FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		50	50	15	15	15	15	15	15	0
Commitments	FY 2012	FY 2013 FY 201	4 FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		50 0	50	15	15	15	15	15	15	0

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: EG9 Valve Identification Program

EPMC: Managing Department: Water Services

Priority: Good Utility Practice

Project Description: Project to be dropped. **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 -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

550,000 54.000 -496,000

Loudoun/PI -**CLOSED**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget 54

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget 54

(dollars in thousands)

Post FY 2021

Post FY 2021

0

0

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: EH3 SCADA Upgrade - Phase III

Water Services Managing Department: **EPMC:**

Priority: Good Utility Practice

Project Description:

Work included within new asset management program.

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 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

650,000 -650,000

Loudoun/PI -**CLOSED**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget

Commitments

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

(dollars in thousands)

Post FY 2021

Post FY 2021

0

0

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EH4 VolP Upgrades

Managing Department: Information Technology **EPMC:**

Priority: Good Utility Practice

Project Description:

Unified communication is to enhance employees' interaction by leveraging all communication means. DC Water plans to use Instant Communication Suite (ICS) to provide unified messaging, audio and data conferencing, personal routing, instant messaging, sophisticated Softphone capabilities, universal directory access, and presence information. Unified Communications initiative will allow unification to enable a mobile workforce. This will set the foundation for remote user access of voice mails and set the starting point to facilitate a remote customer billing workforce. This will also integrate with the enterprise messaging system.

Impact on Operations:

This Project will have no effect on the operating budget, but will improve operations, communications and efficiency.

Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -Loudoun/PI -



FY 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

525,000

525.000

Disbursements Budget	FY 2012	FY 2013 75	FY 2014 150	FY 2015 300	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments Budget	FY 2012	FY 2013 75	FY 2014 150	FY 2015 300	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021 0

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: EH5 Budget Tool

Information Technology Managing Department: **EPMC:**

Good Utility Practice Priority:

Project Description:

This project has been collapsed into EG4.

Impact on Operations:

Funding by User (percent):

DC -Joint Use - Indirect Cost

EPA -WSSC -

Fairfax -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

88,000 -88,000

Loudoun/PI -**CLOSED**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

(dollars in thousands)

Post FY 2021

Post FY 2021

0

0

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EH6 Time & Attendance Clocks

Managing Department: Information Technology **EPMC**:

Priority: Good Utility Practice

Project Description:

Scheduled Time Clock Replacement Program

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 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

et 100,000
et 310,000
se) 210,000

Disbursements Budget		FY 2013		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments	50 FY 2012	55 FY 2013	205 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	50	55	205								0

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**:

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 -

Loudoun/PI -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

get	900,000
get	900,000
ase)	0

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		100	100	100	100	100	100	100	100	100	
Commitments Budget	FY 2012	FY 2013								FY 2021	Post FY 2021
Duaget		100	100	100	100	100	100	100	100	100	

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: Large Electric Motors

Managing Department: Sewer and Water Pumping EPMC:

Good Utility Practice Priority:

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 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

-8,000

8,000

Post FY 2021

Post FY 2021

CLOSED Loudoun/PI -

Disbursements

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

(dollars in thousands)

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: **EK1 MAXIMO SCADA Integration**

Information Technology Managing Department: EPMC:

Priority:

Project Description:

This project is incorporated into the new asset management program.

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 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

341,000 150.000 -191,000

Post FY 2021

0

0

Loudoun/PI -**CLOSED**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget 150

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Commitments**

Budget 150 **Post FY 2021**

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EK2 CS-Leak Detection**

Managing Department: Information Technology EPMC:

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 -

Loudoun/PI -

water is life

Increase/(Decrease)
FY2013 Revised/FY2014 Approved Budget
FY 2013 Approved Budget

et	150,000
et	119,000
se)	-31,000

Disbursements Budget	FY 2012 69	FY 2013 FY 2014 50	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Commitments Budget			FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EK3 Safety System

Managing Department: Information Technology **EPMC:**

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 -

water is life

FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

200,000 et 100,000 ee) -100,000

Loudoun/PI -

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget 100

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Budget

udget 100

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

Post FY 2021

0

0

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: **EK4** Enterprise Performance Dashboard

Managing Department: Information Technology EPMC:

275

Priority:

Project Description:

In an effort to support transparency as well as overall organizational efficiency, this project is to support a dsahboard view for executive staff as well as DC Water personnel into the successful resolution of key process indicators over time. Targeting first Authority wide measures, eventually this solution will allow individual departments to expose their activities and data points for success of meeting defined goals.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC -Joint Use - Indirect Cost

FPA -

WSSC -Fairfax -

Budget

Loudoun/PI -

Disbursements

water is life

375

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Commitments Post FY 2021 Budget** 275 375 100

100

(projected disbursements do not include contingencies)

(dollars in thousands)

0

900,000

750.000

-150,000

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EK5 Civil 3D**

Managing Department: Information Technology **EPMC**:

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 -

Loudoun/PI -

water is life

 FY 2013 Approved Budget
 275,000

 FY2013 Revised/FY2014 Approved Budget
 475,000

 Increase/(Decrease)
 200,000

Disbursements	FY 2012	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget			150	125	100	100				0
Commitments	FY 2012	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget			150	125	100	100				0

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EM4 Centrifuge Repair and Replacement

Managing Department: Maintenance Services EPMC:

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 -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

14 Approved Budget 4,245,000
Increase/(Decrease) 645,000

Loudoun/PI -

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	415	400	630	400	400	400	400	400	400	400	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	415	400	630	400	400	400	400	400	400	400	

(projected disbursements do not include contingencies)

(dollars in thousands)

3,600,000

Service Area Title: Water Service Area

Program Title: Metering

Activity Group/Project Title: **EM5 AMR System Enhancements**

Managing Department: **Customer Service** EPMC:

IT Best Practice (Life Cycle Management) **Priority:**

Project Description:

Project designed to update and maintain the 64 rooftop mounted Data Collection Units (DCU) that receive meter readings. Project moved to the Water Service Area.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -100.00%

EPA -WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

-1,206,000

1,413,000

207,000

Post FY 2021

Post FY 2021

CLOSED

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget 207

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget 207

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EO1 AutoCAD**

Managing Department: Information Technology **EPMC**:

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 -



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

Loudoun/PI - CLOSED

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget

Commitments

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

Post FY 2021

0

0

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: **EO2** AutoCAD Lite

Managing Department: Information Technology EPMC:

Good Utility Practice Priority:

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 -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

19,000 -19,000

Loudoun/PI -**CLOSED**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Commitments**

Budget

Post FY 2021 0

Post FY 2021

0

(projected disbursements do not include contingencies)

(dollars 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.

Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA -WSSC -

Fairfax -



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 80,000 et 0 -80,000

Loudoun/PI - CLOSED

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget

Commitments <u>FY 2012</u> <u>FY 2013</u> <u>FY 2014</u> <u>FY 2015</u> <u>FY 2016</u> <u>FY 2017</u> <u>FY 2018</u> <u>FY 2019</u> <u>FY 2020</u> <u>FY 2021</u> Budget

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

Post FY 2021

0

0

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: EO5 IBM Watson Research

Managing Department: Information Technology EPMC:

Good Utility Practice Priority:

Project Description:

This project was 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). The project is complete.

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 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

500,000 -500,000

Loudoun/PI -**CLOSED**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget

Commitments

Budget

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

(dollars in thousands)

Post FY 2021

Post FY 2021

0

0

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: EO6 Optimization-Pilot: Daily Fleet

Managing Department: Information Technology EPMC:

Good Utility Practice Priority:

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. The pilot is complete.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -100.00%

EPA -

WSSC -

Fairfax -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

250,000 97,000 Increase/(Decrease) -153,000

CLOSED Loudoun/PI -

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget 97

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget 97

(projected disbursements do not include contingencies)

Post FY 2021

0 **Post FY 2021**

0

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EO7 Water and Sewer SCADA

Managing Department: Information Technology **EPMC**:

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. Continuation of this work will be completed with the asset management project.

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 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 1,830,000 et 265,000 se) -1,565,000

Loudoun/PI - CLOSED

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget 265

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget 265

(projected disbursements do not include contingencies)

FY 2020 FY 2021 Post FY 2021

0 **Post FY 2021**

0

(dollars in thousands)

(aonaro in aroadanao

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EO8 Board e-book**

Managing Department: Information Technology **EPMC:**

Priority: Good Utility Practice

Project Description:

This project converted the current print media to eBook format. It was successful and is now implemented.

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 -



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

e) -3,000

Loudoun/PI - CLOSED

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

(dollars in thousands)

3,000

Post FY 2021

Post FY 2021

0

0

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: **EO9** Permits Relocation

Managing Department: Information Technology EPMC:

Good Utility Practice Priority:

Project Description:

This project facilitated the PERMITS department co-location with DC Regulatory Administration.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -100.00%

EPA -WSSC -

Fairfax -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

130,000 6,000 -124,000

Loudoun/PI -**CLOSED**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget

Commitments

6

6

Budget

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

Post FY 2021

0

0

District of Columbia Water and Sewer Authority

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EP3 Materials Management System

Managing Department: Information Technology **EPMC**:

Priority: Good Utility Practice

Project Description:

This project supports business process re-engineering for material management through Maximo and Lawson integration and system changes.

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 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

 3 Approved Budget
 750,000

 14 Approved Budget
 1,183,000

 Increase/(Decrease)
 433,000

Loudoun/PI -

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Post FY 2021</u>

Budget 233 950

Commitments <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget 233 950

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: **EQ1** Energy Management

Managing Department: Information Technology EPMC:

Good Utility Practice Priority:

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 -

Loudoun/PI -

Commitments



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

CLOSED

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget

(dollars in thousands)

373,000

-373,000

Post FY 2021

Post FY 2021

0

0

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: ES4 100W Emergency Generator & Load Center

Managing Department: EPMC:

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 -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

 3 Approved Budget
 79,000

 14 Approved Budget
 50,000

 Increase/(Decrease)
 -29,000

Loudoun/PI -

Disbursements <u>FY 2012</u> <u>FY 2013</u> <u>FY 2014</u> <u>FY 2015</u> <u>FY 2016</u> <u>FY 2017</u> <u>FY 2018</u> <u>FY 2019</u> <u>FY 2020</u> <u>FY 2021</u>

Budget 50

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget 50

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

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 -

water is life

FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 618,000 et 167,000 se) -451,000

CLOSED

Loudoun/PI -

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget 167

Commitments <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget 167

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

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 -



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 1,149,000 et 225,000 ee) -924,000

Loudoun/PI - CLOSED

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget 225

Commitments <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget 225

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

District of Columbia Water and Sewer Authority

FY 2012 - 2021 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: ET5 Field Service/Mobile Equipment

Managing Department: Information Technology EPMC:

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 -

Loudoun/PI -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

 3 Approved Budget
 602,000

 14 Approved Budget
 1,475,000

 Increase/(Decrease)
 873,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	100	325	275	175	100	100	100	100	100	100	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	100	325	275	175	100	100	100	100	100	100	

(projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority

FY 2012 - 2021 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**:

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 -

Loudoun/PI -

water is life

FY 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

et 1,259,000 et 1,340,000 se) 81,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	100	100	300	240	100	100	100	100	100	100	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	100	100	300	240	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: 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 -

. . . ._.



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

t 110,000 t 0 e) -110,000

Loudoun/PI - CLOSED

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget

Commitments <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>
Budget

2021 Post FY 2021

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: ET9 Mobile Service Support (Formerly Field Services Mgmt

Managing Department: Information Technology **EPMC**:

Priority: Good Utility Practice

Project Description:

Project cancelled and scope incorporated within ET5.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC - 100.00%

EPA -WSSC -

Fairfax -

water is life

FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

et 1,469,000 et 275,000 e) -1,194,000

Loudoun/PI - CLOSED

Disbursements <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget 275

Commitments <u>FY 2012</u> <u>FY 2013</u> <u>FY 2014</u> <u>FY 2015</u> <u>FY 2016</u> <u>FY 2017</u> <u>FY 2018</u> <u>FY 2019</u> <u>FY 2020</u> <u>FY 2021</u>

Budget 275

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

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 - water is life

Increase/(Decrease)	
FY2013 Revised/FY2014 Approved Budget	
FY 2013 Approved Budget	

et	2,162,000
et	2,104,000
se)	-58,000

Loudoun/PI -

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	79	225	225	225	225	225	225	225	225	225	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	79	225	225	225	225	225	225	225	225	225	

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EW6 CIPP Trenchless Equipment**

Managing Department: Water Services EPMC:

Priority: Good Utility Practices

Project Description:

This project will allow DCWater to repair defective main line sewers with no excavation and sewer laterals with digging a hole at the property line only but avoiding street cuts. Currently it takes 2 days for a crew to install one sewer lateral; with this equipment a crew can repair 2 or 3 laterals per day. This method is quicker, more cost effective and is conducted with significantly less disruption to surface conditions.

Impact on Operations:

This project will reduce the replacement cost of the average sewer lateral.

Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA -

WSSC -

Fairfax -



FY 2013 Approved Budget 0

FY2013 Revised/FY2014 Approved Budget 375,000

Increase/(Decrease) 375,000

Loudoun/PI - NEW

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	200	25	25	25	25	25	25	25	0
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	0	200	25	25	25	25	25	25	25	0

(projected disbursements do not include contingencies) (dollars in thousands)

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: **EW7 Appliances**

Managing Department: **EPMC:**

Priority:

Project Description:

This project will annually replace major appliances.

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 -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

50.000 50,000

0

Loudoun/PI -**NEW**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021 Disbursements Budget** 50

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Post FY 2021**

Budget 0 50

(projected disbursements do not include contingencies) (dollars in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EW8 Membrane Diffuser, Mechanical/Electrical**

Managing Department: **EPMC:**

Priority:

Project Description:

This project request is for an annual maintenance program and planned replacements for devices required to keep the facilities operational. the three Biosolids program related construction projects: Main Process Train, Final Dewatering Facility and Combined Heat and Power come on line in FY 2014 with over 1,000 assets that need to be maintained by Process Engineering Maintenance. The projected return on investment for the Biosolids Program is contigent on the facility not having shut downs.

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 -



 FY 2013 Approved Budget
 0

 FY2013 Revised/FY2014 Approved Budget
 1,066,000

 Increase/(Decrease)
 1,066,000

Loudoun/PI - NEW

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	450	616	0	0	0	0	0	0	0	0
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	0	450	616	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies) (dollars in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EX6 Facilities Improvements**

Managing Department: Facilities and Security EPMC:

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 -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

14 Approved Budget 5,978,000
Increase/(Decrease) 149,000

Loudoun/PI -

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1,018	675	700	675	485	485	485	485	485	485	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	1.018	675	700	675	485	485	485	485	485	485	

(projected disbursements do not include contingencies)

(dollars in thousands)

5,829,000

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

EPA -WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

t 1,032,000 t 175,000 e) -857,000

Disbursements FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Budget 5 170

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget 5 170

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: **EX8** Fire Hydrant Replacement

Water Services Managing Department: EPMC:

Priority: Good Utility Practice

Project Description:

Purchase of this equipment has been moved to the Water Service program area.

Impact on Operations:

Funding by User (percent):

DC -

EPA -WSSC -

Fairfax -

100.00% water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

2,904,000 137,000 -2,767,000

Post FY 2021

Post FY 2021

Loudoun/PI -**CLOSED**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget 137

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget 137

(projected disbursements do not include contingencies) (dollars in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: EY5 Oracle Upgrade

Managing Department: Information Technology **EPMC:**

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. Work now complete.

Impact on Operations:

Ongoing annual license maintenance cost.

Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA -WSSC -

Fairfax -



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

get 480,000
get 70,000
se) -410,000

Loudoun/PI - CLOSED

Disbursements FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Budget 70

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Budget 70

(projected disbursements do not include contingencies)

(dollars in thousands)

Post FY 2021

Post FY 2021

0

0

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: **EZ1** Financial Management System

Information Technology Managing Department: **EPMC:**

IT Best Practice **Priority:**

Project Description:

Scope incorporated within EG4.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -Joint Use - Indirect Cost

EPA -WSSC -

Fairfax -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget Increase/(Decrease)

1,033,000 53.000 -980,000

Post FY 2021

Post FY 2021

CLOSED

Loudoun/PI -

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget 53

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Commitments**

Budget 53

(projected disbursements do not include contingencies) (dollars in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EZ2 Customer Information & Billing System**

Managing Department: Information Technology **EPMC**:

Priority: Good Utility Practice

Project Description:

This project has been moved to the Water Service program area.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC - 100.00%

EPA -WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

dget

537,000

325,000

-212,000

Post FY 2021

Post FY 2021

Increase/(Decrease) CLOSED

Disbursements FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget 325

Commitments <u>FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021</u>

Budget 325

(projected disbursements do not include contingencies) (dollars in thousands)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EZ4 Ceridian**

Managing Department: Information Technology EPMC:

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 -

Loudoun/PI -



FY 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

et 291,000 et 270,000 se) -21,000

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		30	30	30	30	30	30	30	30	30	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		30	30	30	30	30	30	30	30	30	

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: **EZ8 Document Management System**

Managing Department: Information Technology **EPMC**:

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 -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

14 Approved Budget Increase/(Decrease)

-434,000

3,234,000

2,800,000

L	_0	u	ob	u	n/	Ы	-

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	575	600	550	275	100	300	100	100	100	100	
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget	575	600	550	275	100	300	100	100	100	100	

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment Program Title: Capital Equipment

Activity Group/Project Title: **Asset Management Hardware Support System/Fleet**

Managing Department: Information Technology EPMC:

Good Utility Practice Priority:

Project Description:

Future work associated with this project will be incorporated into the new assest management program.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC -100.00%

EPA -WSSC -

Fairfax -

water is life

FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

1,385,000 -5,247,000

6,632,000

Post FY 2021

Post FY 2021

Loudoun/PI -**CLOSED**

FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Disbursements**

Budget 1.385

Commitments FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021

Budget 1.385

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: PE1 Actuators

Managing Department: Process Engineering EPMC:

Priority: Good Utility Practices

Project Description:

This project will replace critical actuators at the end of their useful life in advance of failure, along with actuators that have failed. Actuators have an average life of 10 years and are at an average age of 7 years as of FY 2013. Their replacement asset value average \$6,000. The number of actuators on the plant presently is 1,239 based on available data.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC - Joint Use - Direct Cost

EPA -

WSSC -

Fairfax -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

14 Approved Budget 1,859,000
Increase/(Decrease) 1,859,000

Loudoun/PI - NEW

Disbursements	FY 2012	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		372	372	186	186	186	186	186	186	0
Commitments	FY 2012	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		372	372	186	186	186	186	186	186	0

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: PE2 Flow Meters

Managing Department: Process Engineering EPMC:

Priority: Good Utility Practices

Project Description:

This project will replace critical flow meters at the end of their useful life in advance of failure, alon with flow meters that have failed. Flow metering technoly changes with time and the replacement units will likely represent upgraded technology. Flow metering device around the plant also average \$6,000 as replacement asset value and will be 10 years in service in FY 2013 with an expected life of 15 years. The number of flow meters on the plant presently is 696 based on available data.

Impact on Operations:

This Project will have no impact on the operating budget.

Funding by User (percent):

DC - Joint Use - Direct Cost

EPA -

WSSC -

Fairfax -



FY 2013 Approved Budget

FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

1,044,000 e) 1,044,000

Loudoun/PI - NEW

Disbursements	FY 2012	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		209	209	104	104	104	104	104	104	0
Commitments	FY 2012	FY 2013 FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		209	209	104	104	104	104	104	104	0

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: PE3 PLCs

Managing Department: Process Engineering EPMC:

Priority: Good Utility Practices

Project Description:

This project is to start a replacement program targeting failed and problematic units in advance of their complete failure. PLCs are susceptible to hydrogen sulfide related corrosion and the repalcement units will have to be protected against corrosive gases. PLC systems average \$50,000 per installation and also have an average life of 10 years. These devices will also be 7 years in FY 2013. There will be 69 PLC systems remaining on the plant site in FY 2013 that need to be maintained.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC - Joint Use - Direct Cost

EPA -

WSSC -

Fairfax -



FY 2013 Approved Budget
FY2013 Revised/FY2014 Approved Budget
Increase/(Decrease)

2,193,000

Loudoun/PI - NEW

Disbursements	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		385	1,035	28	173	173	100	100	100	100	0
Commitments	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Post FY 2021
Budget		385	1,035	28	173	173	100	100	100	100	0

(projected disbursements do not include contingencies)

Service Area Title: Capital Equipment
Program Title: Capital Equipment

Activity Group/Project Title: PE4 Digesters - Major Equipment Replacement

Managing Department: Process Engineering EPMC:

Priority: Good Utility Practices

Project Description:

This project request is for annual maintenance program and planned replacement for devices required to keep the facilities operational. The three Biosolids program related construction projects; Main Process Train, Final Dewatering Facility, and Combined Heat and Power come on line in FY 2014 with over 1,000 assets that need to be maintained by Process Engineering Maintenance. The projected return on investment for the Biosolids Program is contigent on the facility not having shut downs.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC - Joint Use - Direct Cost

EPA -

WSSC -

Fairfax -



FY 2013 Approved Budget FY2013 Revised/FY2014 Approved Budget

Increase/(Decrease)

et 0 1,564,000 e) 1,564,000

Loudoun/PI - NEW

Disbursements Budget	FY 2012	FY 2013 FY 2014	FY 2015 391	FY 2016 196	FY 2017 196	FY 2018 196	FY 2019 196	FY 2020 196	FY 2021 196	Post FY 2021
Commitments	FY 2012	FY 2013 FY 2014						FY 2020	FY 2021	Post FY 2021
Budget			391	196	196	196	196	196	196	0

(projected disbursements do not include contingencies)

APPENDIX

CAPITAL EQUIPMENT SERVICE AREA PROJECT NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
EA2	Water Service Replacement Equipment	IX-11
EA4	Sewer Services	IX-12
EA6	Desktop Replacement Systems	IX-13
EA7	Cable Renewal	IX-14
EA8	Telephone Renewal	IX-15
EB1	Software Applications	IX-16
EB2	Lotus Infrasturcture Upgrade	IX-17
EB3	Windows NT Migration	IX-18
EB4	Radio Equipment	IX-19
EB6	Fleet Management	IX-20
EB8	Redundant Data Center	IX-21
EC1	Pump Repairs/Replacement	IX-22
EC2	Large Electric Motors	IX-23
EC3	High Priority Rehab Program	IX-24
EC4	Network System Renewal	IX-25
EC6	Audio Visual System	IX-26
EC7	Interactive Voice Response	IX-27
ED8	Maximo Support for Wastewater	IX-28
ED9	Lab Equipment for New Laboratory	IX-29
EF3	HVAC at Various Locations	IX-30
EF5	Photocopier Purchase	IX-31
EF7	WASA-Wide Fire Suppression System	IX-32
EF8	Canal Street Elevator Renovation	IX-33
EG1	SQL Upgrade	IX-34
EG2	Enterprise File System Archiving	IX-35

APPENDIX

CAPITAL EQUIPMENT SERVICE AREA PROJECT NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
EG3	Network Storage System Renewal	IX-36
EG4	ERP System	IX-37
EG8	Security Misc. Enhancements	IX-41
EG9	Valve Identification Program	IX-42
EH3	SCADA Upgrade - Phase II	IX-43
EH4	VOIP Upgrades (formerly Unified Communications	IX-44
EH6	Time & Attendance Clocks	IX-46
El2	Large Electric Motors (Sewer & Water Pumping)	IX-48
EK1	MAXIMO SCADA Integration- I.T.	IX-49
EK2	CS-Leak Detection	IX-50
EK3	Safety System	IX-51
EM4	Centrifuge Rehabilitation	IX-54
EM5	AMR System Enhancements	IX-55
EO1	AutoCAD	IX-56
EO2	AutoCAD Lite	IX-57
EO3	CIP Planner	IX-58
EO5	IBM Watson Research	IX-59
EO6	Optimization Pilot: Daily Fleet Operations	IX-60
EO7	Water and Sewer SCADA	IX-61
EO8	Board-eBook	IX-62
EO9	Permits relocation	IX-63
EP3	eProcurement System	IX-64
EQ1	Energy Management	IX-65
ES4	100 W Emergency Genertor & Load Center	IX-66
ET1	Network Systems Security	IX-67

APPENDIX

CAPITAL EQUIPMENT SERVICE AREA PROJECT NAMES AND PAGE NUMBERS

Project ID	Project Name	Page #
ET2	Intranet	IX-68
ET5	Handheld Inventory	IX-69
ET7	Enterprise Backup Solution	IX-70
ET8	Video Conferencing	IX-71
ET9	Automated Despatch System	IX-72
EW1	System Valve Replacements	IX-73
EX6	WASA-wide Fencing	IX-77
EX7	Web Development	IX-78
EX8	Fire Hydrants/Valves	IX-79
EY5	Oracle Upgrade	IX-80
EZ1	Financial Management System	IX-81
EZ2	CIS System	IX-82
EZ4	Payroll/HR System	IX-83
EZ8	Document Imaging System	IX-84
EZ9	Infrastructure Asset Management System	IX-85