



# CAPITAL IMPROVEMENT PROGRAM

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## PROPOSED FY 2014 – 2023

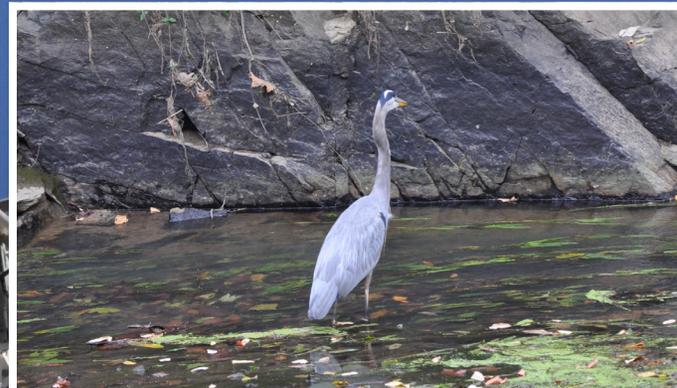
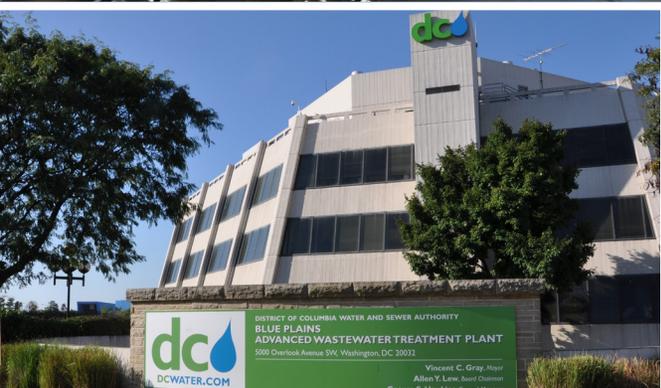
Submitted November 7, 2013

Allen Y. Lew, *Chairman of the Board*

George S. Hawkins, *General Manager*

Mark Kim, *Chief Financial Officer*

**STRATEGIC • TRANSPARENT • INNOVATIVE**





## **DC WATER's VISION**

To be a world-class utility

## **DC WATER's VALUES**

**Respect:** Serve with a positive attitude, courtesy, and respect that engender collaboration and trust.

**Ethics:** Maintain high ethical standards, accountability, and honesty as we advance the greater good.

**Vigilance:** Attend to public health, the environment, quality, efficiency, and sustainability of our enterprise.

**Accountability:** Address challenges promptly, implement effective solutions, and provide excellent service as a committed team.

## **DC WATER's MISSION**

Exceed expectations by providing high quality water services in a safe, environmentally friendly, and efficient manner.

## **DC WATER's GOALS**

The goals, presented on the following pages and the accompanying strategic plan framework, represent the core strategies that DC Water will pursue. The Board and Executive Management believe that they are essential to the achievement of the mission and to becoming a world-class water utility.

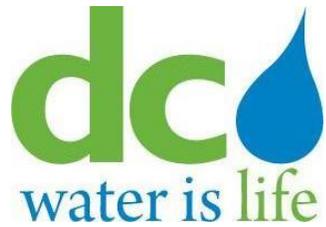
## **DC WATER's OBJECTIVES**

Objectives are the strategic measures that will enable the Board AND Executive Management to evaluate achievement of the goals. Some of the specific measures will need to be further researched and refined as the organization implements the plan and obtains additional insight and information.

## **DC WATER's INITIATIVES**

Initiatives are the allocation of resources (time and money) to achieve the objectives and the goals.

*(Adopted by the DC Water Board of Directors on March 7, 2013)*



## **BOARD OF DIRECTORS**

(As of November 7, 2013)

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## **ACKNOWLEDGEMENTS**

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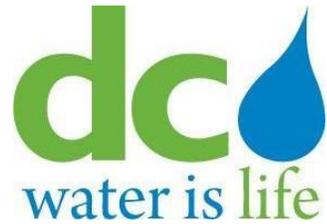
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*The Finance, Accounting and Budget Department would like to extend its appreciation to all the departmental staff members whose hard work and dedication helped make this document possible.*

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# CAPITAL IMPROVEMENT PROGRAM

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## SECTION I INTRODUCTION



dc CLEAN RIVERS PROJECT

Division A - Blue Plains Tunnel • 24,200 Linear Feet

*Lady Bird*

DCWATER.COM/CLEANRIVERS

7  
pre-cast concrete  
segments  
(tunnel liner)



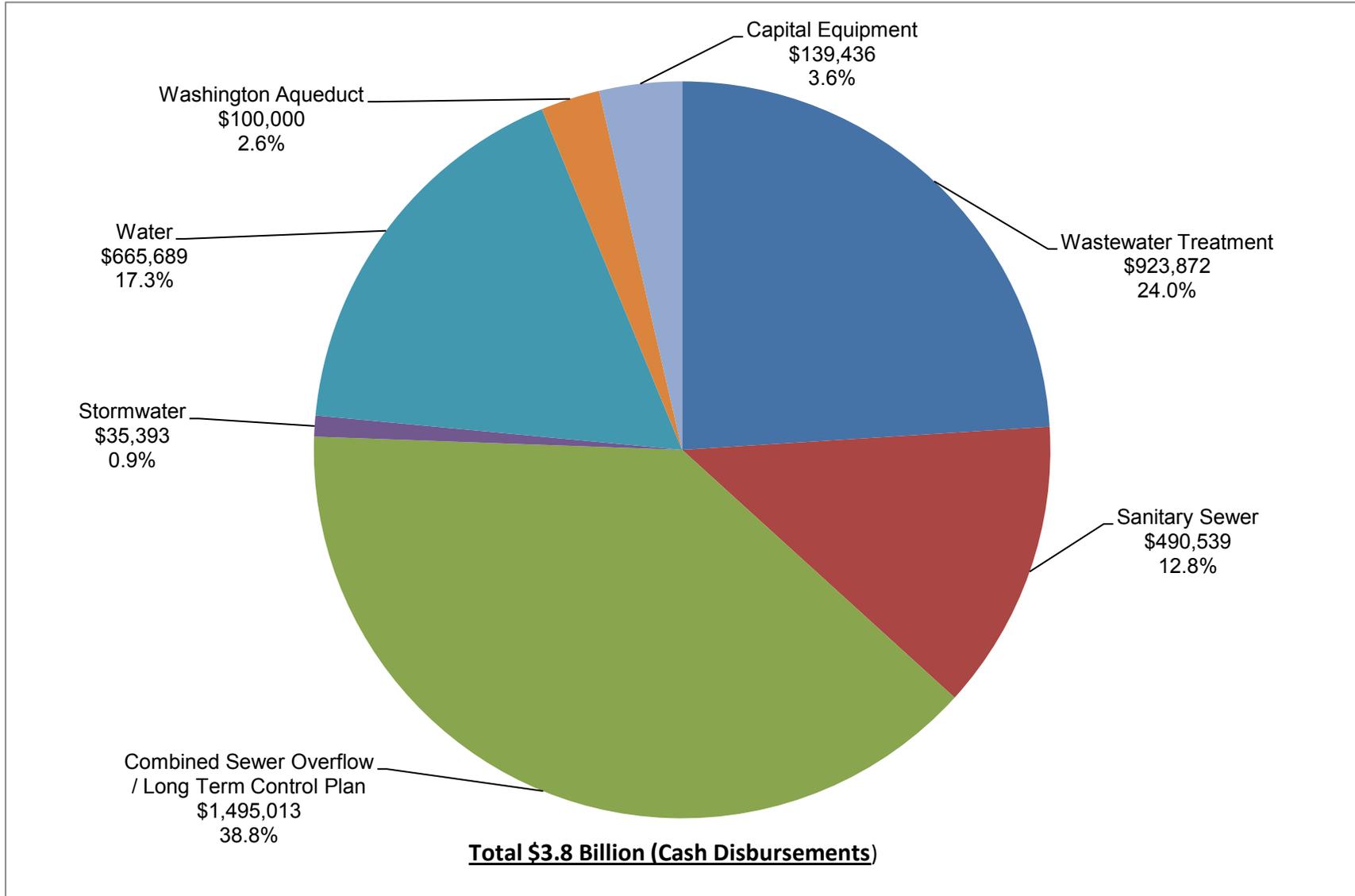
A large-scale construction site under a clear blue sky. In the foreground, several construction workers wearing white hard hats and high-visibility yellow safety vests are visible. One worker in the center-left has a 'dc' logo on their vest. The middle ground features two large, cylindrical concrete structures, likely water storage tanks, with yellow safety railings along their top edges. Scaffolding and rebar are visible around these structures. To the right, a tall blue tower crane with a long horizontal jib extends across the upper right portion of the frame. The background shows more construction activity and a clear sky.

**dc** water is life<sup>®</sup> **CAPITAL IMPROVEMENT PROGRAM**

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

**SECTION II**  
**CAPITAL IMPROVEMENT PROJECTS OVERVIEW**

## FY 2014 - FY 2023 Capital Improvement Program (\$ in 000's)



## **FY 2014 – FY 2023 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 in the aggregate amount of \$911 million resulting in a total lifetime budget of \$9.4 billion. The Congressional Capital Authority request for FY 2015 is \$554.3 million.

While all mandates and immediate critical needs are incorporated into this ten-year plan, there is approximately \$219 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 ten-year planning period. In addition, disbursements for existing work have been accelerated in the Combined Sewer Overflow Long-Term Control Plan (CSO-LTCP). These proposed changes for the 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 disbursements of \$206 million. The CSO ten-year disbursement increase along with increases to Sanitary Sewer, Water, Stormwater and Capital Equipment Service Areas are offset by the decrease in the Wastewater Treatment Area.

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 has increased by \$362 million to \$3.1 billion. This increase is driven primarily by the Liquid Processing (\$199 million), Plantwide (\$86 million) and Nitrogen Processing Projects (\$58 million). Planned upgrades to the Control System accounts for \$37 million increase in Plantwide Projects. The increases in the Liquid Processing Program Area, are attributable to the addition of new projects to rehabilitate the effluent filters (\$108 million) and Replace/Upgrade the influent Screens (\$40 million). Increases to Filtrate Treatment, Div D Bolling Overflow & Diversion and Program Management are responsible for the increases to the Nitrogen Program Area.

As indicated above, this service 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 processed 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 10 MW that can be utilized at

### ***Capital Improvement Program Overview, Cont.***

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 within the Nitrogen Processing Program Area that are underway include Secondary Treatment Facility Upgrades/Enhanced Nitrogen Removal North (Project BI) and Filtrate Treatment Facilities (Project EE), with construction anticipated to start in FY 2014 as well as The Enhanced Clarification Facility (Project E8).

### **COMBINED SEWER OVERFLOW**

The lifetime budget for the Combined Sewer Overflow (CSO) Service Area has increased by \$101 million to \$2.9 billion, which includes the twenty-year DC Clean Rivers Project (CSO Long Term Control Plan). This budget increase is due to the accelerated North East Boundary Tunnel work included within the Anacostia River Tunnel portion of the Long Term Control Plan, which will now start three years earlier in order to provide flooding relief to the residents of the Bloomingdale neighborhood of DC than previously planned.

As has been noted over the past few years there are additional risks and contingencies associated with the twenty-year DC Clean Rivers Project that exist and need to be evaluated over time. Given the long time frame of this project and the uncertainties associated with tunneling projects, we are continually monitoring the costs and risks with the expectation of continuing to update the budget projections when certain milestones have been reached.

### **STORMWATER**

The lifetime budget for the Stormwater Service Area is \$91 million which is an increase of \$28 million from last year primarily as a result of the rehabilitation of the Stormwater Pumping Stations (Project NG \$25 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 District of Columbia stormwater management. The District of Columbia 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 District of Columbia 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 the City's 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. We are in the process of negotiating a new Agreement with DDOE.

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 National Pollutant Discharge Elimination System (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. The Authority 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 twenty-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).

An update to the facility plan is underway and expected to be complete in mid to late FY 2014.

The lifetime budget in this area has increased by \$230 million resulting in a lifetime budget of \$1.15 billion. The main increase is due primarily to Sanitary Interceptor/Trunk Force Sewers, an increase of \$119 million. The proposed ten-year CIP reflects disbursements at just over \$490 million of which more than fifty percent is attributable to projects within the Sanitary Interceptor/Trunk Force Sewers.

Also, there are approximately \$111 million in sanitary collection sewer projects identified in the ten-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. DC 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 per the Technical Memorandum No. 1 'Multi-Jurisdictional Use Facilities Capital Cost Allocation' dated June 20, 2013. The suburban share of these projects is consistent with the new Blue Plains Intermunicipal Agreement (IMA),

effective April 3, 2013 as well as the newly adopted Multi Jurisdictional Use Facilities Technical Memorandum No. 1, effective June 27, 2013.

## **WATER**

The lifetime budget for the Water Service Area (including Meter Replacement/AMR installation/CIS) is \$1.7 billion or an increase of \$62 million from last year's CIP. Also, this years' increase includes accelerating replacement of existing AMR installations and the procurement, installation and implementation of a new Customer Information System (CIS) beginning in FY 2014.

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 is \$286 million. The budget reflects the prioritized need for infrastructure improvements over the next ten years. The main driver of this number is the lifetime costs attributable to each project.

## **CAPITAL EQUIPMENT**

DC Water's Capital Equipment disbursements budget totals approximately \$139.4 million for FY 2014 – FY 2023 plan, an increase of approximately \$43.4 million compared to the last ten-year plan. The main drivers of this increase can be attributed to reallocation of resources for Fleet Management, to make necessary upgrades to DC Water's Fleet; and, Maintenance Services, for the maintenance

of a great portion of our current CIP program facilities such as – Digesters, Tunnel Dewatering Pump Station, and the Enhanced Clarification Facility. There are smaller increases in Facilities and Security and Sewer Services.

Approximately thirty five percent or \$48.7 million of spending in the capital equipment area is on major maintenance services projects, including Major Pump Rebuild/Replacements, Large Electric Motors and Centrifuge Rebuild. DC Water increases its commitment to scheduled replacement of its aging vehicle fleet with a budget of \$25.3 million, representing eighteen percent of the Capital Equipment disbursement budget. Finally, Information Technology totals \$28 million, or twenty percent of the ten-year plan. Other equipment including hydrant and valve equipment necessary for the maintenance of the District’s public fire hydrant system, and Sewer Services total \$11.8 million or nine percent of the Capital Equipment disbursement budget.

## **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 staff from the Office of the Chief Financial Officer (OCFO) 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 ten-year planning period.

This review process spans over several months and culminates with the presentation of the updated CIP to DC Water’s Board of Directors’ Environmental Quality and Sewerage Services, Water Quality and Water Services, Finance and Budget and DC Retail Water and Sewer Rates Committees in November. The Committees complete their review from November through December. The operating budgets, capital improvement program, and ten-year financial plan are then forwarded to the full Board for its consideration and action in December.

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 amounts, 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 2015 request totals \$554.3 million, and reflects the following:

- Remaining authority from prior years’ appropriations;
- Projected commitments in FY 2014 and FY 2015;
- Planned FY 2016 and FY 2017 commitments, to ensure adequate authority exists, in the event that any projects are accelerated.

Due to the timing of the Congressional appropriations process, authority requests must be made well in advance of commitment execution. Including planned FY 2016 and FY 2017 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 System (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.

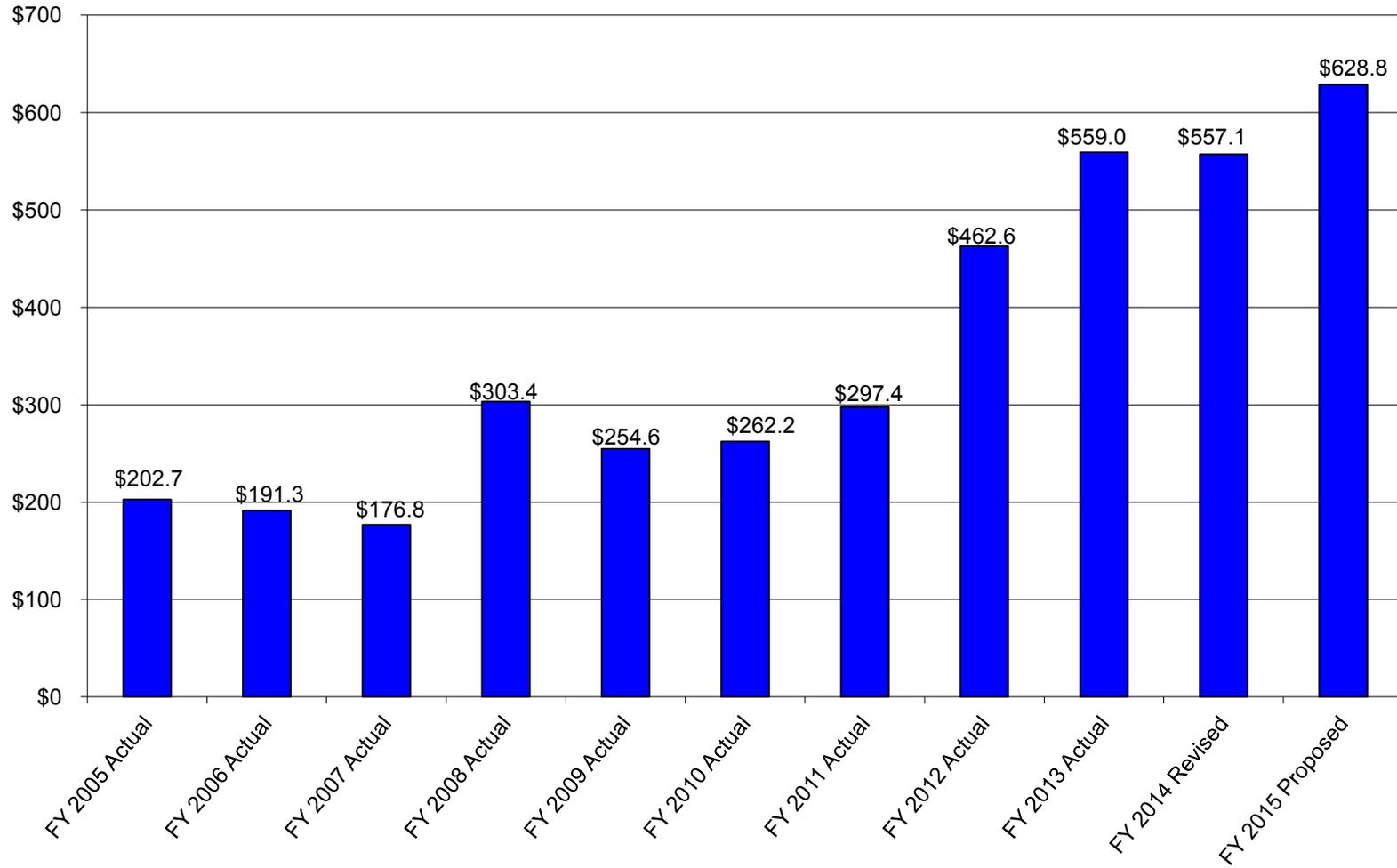
**Disbursements / Commitments Plan** – projected disbursements and commitments for various projects are shown by fiscal year in which they are anticipated. Commitments budgets are based on total project budgets, which reflect the fully loaded, anticipated costs of a project, including project contingencies. 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 2005 - FY 2015  
(\$ in 000's)**



**FY 2014 - FY 2023 PROJECTED CAPITAL IMPROVEMENT PLAN (CIP) - DISBURSEMENTS BASIS (\$ in 000's)**

	FY 2014 Revised	FY 2015 Proposed	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total FY '14 (Rev'd) - '23
<b>Wastewater Treatment</b>											
Liquid Processing Projects	18,072	18,443	19,676	29,426	23,742	11,130	4,596	8,595	10,958	15,389	160,028
Plantwide Projects	18,782	17,311	13,826	12,520	20,339	14,012	6,216	5,360	15,434	13,302	137,103
Solids Processing Projects	138,221	46,240	14,668	10,024	2,555	1,512	6,170	1,486	972	-	221,848
Enhanced Nitrogen Removal Facilities	93,116	92,370	97,943	66,418	45,054	4,899	2,581	878	539	1,097	404,893
<b>Sub-total</b>	<b>268,192</b>	<b>174,364</b>	<b>146,112</b>	<b>118,387</b>	<b>91,690</b>	<b>31,552</b>	<b>19,563</b>	<b>16,320</b>	<b>27,904</b>	<b>29,789</b>	<b>923,872</b>
<b>Sanitary Sewer</b>											
Sanitary Collection Sewers	1,478	9,562	11,422	4,543	7,533	6,260	6,760	7,585	9,337	11,618	76,099
Sanitary On-Going Projects	9,653	11,273	7,237	9,051	7,903	8,832	6,937	9,051	8,275	14,868	93,081
Sanitary Pumping Facilities	957	635	1,030	549	1,205	2,324	-	-	-	-	6,700
Sanitary Sewer Projects Program Management	4,739	4,993	4,866	5,192	5,498	5,863	4,973	4,071	2,460	3,027	45,683
Sanitary Interceptor/Trunk Force Sewers	12,990	22,813	45,001	36,731	29,179	43,694	27,750	23,207	14,356	13,257	268,977
<b>Sub-total</b>	<b>29,818</b>	<b>49,276</b>	<b>69,556</b>	<b>56,066</b>	<b>51,318</b>	<b>66,973</b>	<b>46,420</b>	<b>43,915</b>	<b>34,428</b>	<b>42,770</b>	<b>490,539</b>
<b>Combined Sewer Overflow / Long Term Control Plan</b>											
CSO Program Management	2,280	2,017	1,472	1,887	2,035	2,612	2,203	1,727	1,845	2,399	20,476
Combined Sewer Projects:Nine Minimum Controls	11,903	10,298	40,465	35,827	18,488	21,182	16,547	25,720	29,977	16,499	226,905
D.C. Clean Rivers Project ( <i>Long-Term Control Plan</i> )	152,325	271,593	160,600	111,962	128,441	115,903	82,311	70,665	57,087	96,746	1,247,632
<b>Sub-total</b>	<b>166,508</b>	<b>283,908</b>	<b>202,536</b>	<b>149,676</b>	<b>148,964</b>	<b>139,697</b>	<b>101,061</b>	<b>98,111</b>	<b>88,908</b>	<b>115,644</b>	<b>1,495,013</b>
<b>Stormwater</b>											
Stormwater Local Drainage	122	57	796	1,097	1,036	760	295	692	628	249	5,733
Stormwater On-Going Program	446	581	451	418	442	493	515	545	681	656	5,227
Stormwater Pumping Facilities	-	-	1,222	7,827	8,888	-	-	-	-	-	17,937
DDOT Stormwater Program	1	35	17	18	19	19	2	-	-	-	110
Stormwater Research and Program Management	436	190	138	171	192	258	227	171	177	227	2,186
Stormwater Trunk/Force Sewers	1,839	1,173	1,190	-	-	-	-	-	-	-	4,201
<b>Sub-total</b>	<b>2,843</b>	<b>2,035</b>	<b>3,813</b>	<b>9,531</b>	<b>10,577</b>	<b>1,529</b>	<b>1,039</b>	<b>1,408</b>	<b>1,486</b>	<b>1,132</b>	<b>35,393</b>
<b>Water</b>											
Water Distribution Systems	31,493	48,577	43,117	33,889	44,046	48,829	46,902	39,176	38,022	42,286	416,337
Water On-Going Projects	8,770	9,377	6,815	8,156	6,476	6,787	6,123	6,188	5,929	6,760	71,380
Water Pumping Facilities	3,710	5,386	5,760	4,263	6,798	850	286	152	80	0	27,286
DDOT Water Projects	4,869	2,123	1,109	-	-	-	-	-	-	-	8,100
Water Storage Facilities	2,173	11,387	8,707	5,153	10,607	3,799	840	773	2,076	1,223	46,739
Water Projects Program Management	3,565	5,245	4,375	4,379	4,346	3,645	3,618	3,508	5,528	5,658	43,867
Water Lead Program	2,823	2,010	1,384	1,377	1,440	1,534	1,632	476	-	-	12,678
Meter Replacement /AMR Installation +CIS	5,734	7,900	5,537	4,442	2,185	2,686	2,615	3,130	2,454	2,619	39,302
<b>Sub-total</b>	<b>63,136</b>	<b>92,006</b>	<b>76,804</b>	<b>61,660</b>	<b>75,898</b>	<b>68,131</b>	<b>62,015</b>	<b>53,404</b>	<b>54,088</b>	<b>58,546</b>	<b>665,689</b>
<b>Washington Aqueduct</b>	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	100,000
<b>Capital Equipment</b>	16,627	17,191	14,099	14,749	14,499	12,112	12,924	12,740	12,772	11,723	139,436
<b>Total FY 2015 DC Water CIP</b>	<b>\$557,125</b>	<b>\$628,779</b>	<b>\$522,921</b>	<b>\$420,070</b>	<b>\$402,945</b>	<b>\$329,994</b>	<b>\$253,022</b>	<b>\$235,898</b>	<b>\$229,586</b>	<b>\$269,603</b>	<b>\$3,849,942</b>

FY 2014 - FY 2023 Capital Improvement Plan

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

	FY 2014 Approved	FY 2014 Revised / FY 2015 Proposed	Variance
<b><u>Wastewater Treatment</u></b>			
Liquid Processing Projects	\$632,948	\$831,760	\$198,812
Plantwide Projects	360,994	446,508	85,514
Solids Processing Projects	772,912	793,044	20,132
Enhanced Nitrogen Removal Facilities	966,888	1,024,481	57,593
<b>Sub-total</b>	<b>2,733,742</b>	<b>3,095,793</b>	<b>362,051</b>
<b><u>Sanitary Sewer</u></b>			
Sanitary Collection Sewers	162,656	212,995	50,339
Sanitary On-Going Projects	173,757	200,741	26,984
Sanitary Pumping Facilities	30,458	44,193	13,735
Sanitary Sewer Projects Program Management	91,086	111,214	20,128
Sanitary Interceptor/Trunk Force Sewers	466,541	585,475	118,934
<b>Sub-total</b>	<b>924,498</b>	<b>1,154,618</b>	<b>230,120</b>
<b><u>Combined Sewer Overflow</u></b>			
CSO Program Management	55,239	68,464	13,225
Combined Sewer Projects: Nine Minimum Controls	213,388	208,968	(4,420)
Combined Sewer Projects: Others	339,926	340,657	731
D.C. Clean Rivers Project ( <i>aka Long-Term Control Plan</i> )			
Anacostia Tunnel	1,714,720	1,806,541	91,821
Potomac Tunnel	383,700	383,700	-
Rock Creek Tunnel	65,342	65,342	-
D.C. Clean Rivers Green Infrastructures	40,000	40,000	-
<b>Sub-total</b>	<b>2,812,315</b>	<b>2,913,672</b>	<b>101,357</b>
<b><u>Stormwater</u></b>			
Stormwater Extensions/Local Drainage	22,816	22,829	13
Stormwater On-Going Program	11,323	12,988	1,665
Stormwater Pumping Facilities	-	25,000	25,000
DDOT Stormwater Program	3,237	3,237	-
Stormwater Projects Program Management	10,630	12,051	1,421
Stormwater Trunk/Force Sewers	15,162	15,341	179
<b>Sub-total</b>	<b>\$63,168</b>	<b>\$91,446</b>	<b>\$28,278</b>

FY 2014 - FY 2023 Capital Improvement Plan

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

	<b>FY 2014 Approved</b>	<b>FY 2014 Revised / FY 2015 Proposed</b>	<b>Variance</b>
<b><u>Water</u></b>			
Water Distribution Systems	\$857,178	\$940,902	\$83,724
Water Lead Program	191,040	189,040	(2,000)
Water On-Going Projects	127,879	140,871	12,992
Water Pumping Facilities	155,908	167,217	11,309
DDOT Water Projects	38,184	38,775	591
Water Storage Facilities	75,762	76,358	596
Water Projects Program Management	78,756	74,781	(3,975)
Meter Replacement /AMR Installation	91,264	50,181	(41,083)
<b>Sub-total</b>	<b>1,615,971</b>	<b>1,678,125</b>	<b>62,154</b>
<b>Washington Aqueduct</b>	<b>203,138</b>	<b>286,358</b>	<b>83,220</b>
<b>Capital Equipment</b>	<b>96,022</b>	<b>139,436</b>	<b>43,414</b>
<b>Total DC Water CIP Lifetime (see notes)</b>	<b><u><u>\$8,448,854</u></u></b>	<b><u><u>\$9,359,448</u></u></b>	<b><u><u>\$910,594</u></u></b>

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 2013 will be dropped from the CIP next year.

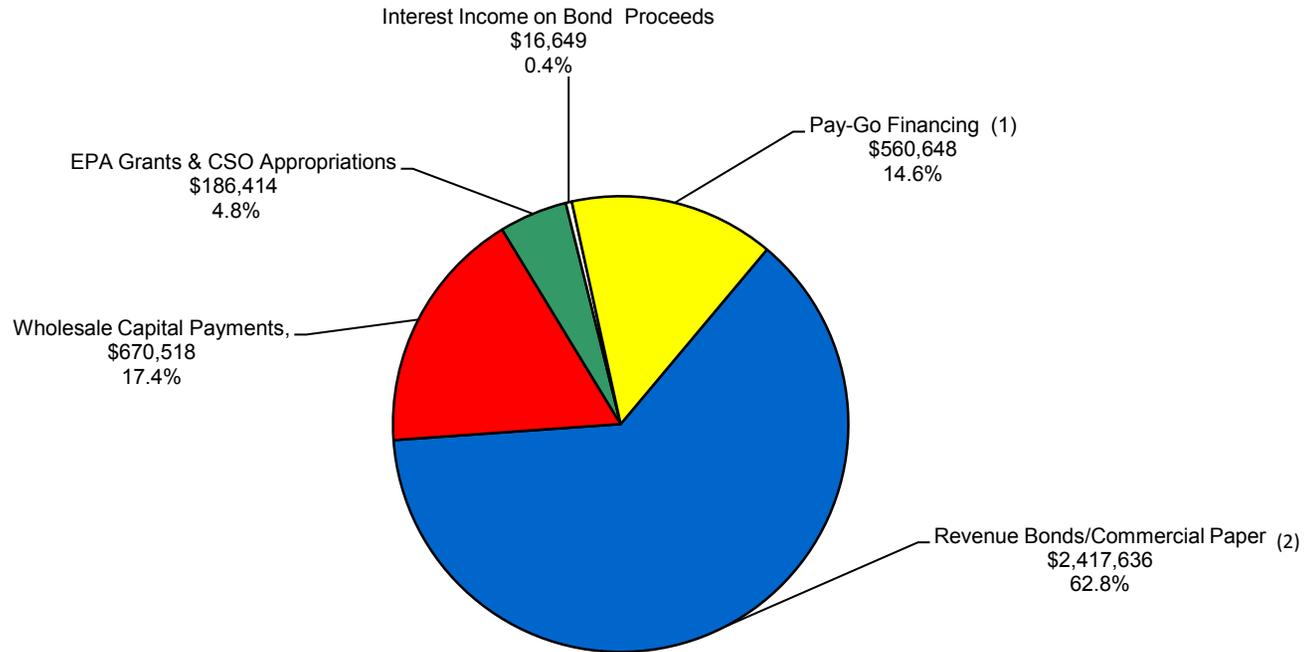
2 These budgets do not include inhouse labor costs, estimated to be in the \$14 to \$17 million range, annually, and are applicable to, primarily, the time charged to capital projects by employees in the Departments of Engineering and Technical Services, Sewer Services and Water Services.

**Fiscal Year 2015 Capital Authority Request  
(\$ 000's)**

<b><u>Service Areas</u></b>	<b><u>Amount</u></b>
Blue Plains Wastewater Treatment	\$0
Sanitary Sewer System	48,100
Combined Sewer Overflow	327,059
Stormwater	28,226
Water System	111,627
Washington Aqueduct (DC Water share)	6,154
Capital Equipment	<u>33,137</u>
<b>Total</b>	<b><u>\$554,303</u></b>

\* The authority request includes a 24 month look-ahead, i.e., it also takes into account projected commitments for FY 2016 and FY 2017.

**FY 2014 - FY 2023 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 \$140.5 million in FY 2014. These transfers reduce the amount of new debt issuance.

(2) Debt financing refers to the borrowing of funds through long-term revenue bonds, commercial paper and other short-term notes.

**LIST OF NEW PROJECTS**

<b>Project ID</b>	<b>Project Title</b>	<b>Service Area</b>	<b>Lifetime Budget</b>
LY	Sewer Facilities Security Upgrades	Sanitary Sewer	\$2,000,000
LZ	Potomac Interceptor Projects - Rehab Phase 2	Sanitary Sewer	9,800,000
M9	FY 2022 - DSS Sanitary Projects	Sanitary Sewer	13,335,350
MB	3rd Street & Constitution Ave NW - Pumping Station	Sanitary Sewer	3,735,000
MC	Additional Sewer SCADA System Sites	Sanitary Sewer	8,000,000
MF	FY 2023 - DSS Sanitary Projects	Sanitary Sewer	13,735,411
MO	Small Local Sewer Rehabilitation 12	Sanitary Sewer	15,000,000
MP	Small Local Sewer Rehabilitation 13	Sanitary Sewer	18,475,000
MZ	Small Local Sewer Rehabilitation 14	Sanitary Sewer	19,029,250
N1	Large Sewer Rehabilitation 13	Sanitary Sewer	20,100,000
NC	Large Sewer Rehabilitation 14	Sanitary Sewer	20,703,000
NF	Large Sewer Rehabilitation 12	Sanitary Sewer	18,000,000
M8	FY 2022 - DSS Stormwater Projects	Stormwater	820,000
MG	FY 2023 - DSS Stormwater Projects	Stormwater	844,600
NG	Stormwater Pump Stations Rehabilitation	Stormwater	25,000,000
GW	Control Systems Replacement	Wastewater	37,000,000
I3	Biosolids Blending Development Center	Wastewater	700,000
I6	Combined Heat & Power as Backup Power	Wastewater	1,500,000
IV	Blue Plains IT Backbone FOC Tubes	Wastewater	2,775,000
IY	Effluent Filter Upgrade	Wastewater	107,714,000
IZ	Replace/Upgrade Influent Screens	Wastewater	40,433,000
JF	Construction of Flood Seawall	Wastewater	13,234,000
LD	Pre-Dewatering Additional Centrifuges	Wastewater	9,170,000
LX	Process Control System Upgrade	Wastewater	4,000,000
KF	Small Diameter Water Main Rehabilitation 19	Water	47,730,000
KG	Small Diameter Water Main Rehabilitation 20	Water	49,160,000
KX	FY 2022 - DWS Water Projects	Water	9,664,000
KY	FY 2023 - DWS Water Projects	Water	10,150,000
LT	Water System SCADA	Water	8,000,000
LU	Water Facilities Security System Upgrades 2	Water	2,000,000
	<b>Sub-total</b>		<b>\$531,807,611</b>
SS1	Replace CCTV	Capital Equipment	\$250,000
EH2	Succession Planning Module	Capital Equipment	100,000
HC1	Compensation Performance Management Syst	Capital Equipment	100,000
HC2	Talent Management	Capital Equipment	100,000
	<b>Sub-total</b>		<b>\$550,000</b>
	<b>TOTAL</b>		<b>\$532,357,611</b>

## LIST OF CLOSED / DROPPED PROJECTS

Project ID	Project Title	Service Area	Cost at Completion
<b><u>Closed Projects</u></b>			
BK	CSO Nine Minimum Control Projects	Combined Sewer Overflow	\$1,354,048
D2	Outfall Sewer Rehabilitation	Combined Sewer Overflow	51,035,833
AP	FY 2009 - DSS Sanitary Sewer Projects	Sanitary Sewer	5,609,337
I1	Selective Sewer Separation & I/I Sewer Rehabilitation	Sanitary Sewer	4,291,947
Q7	FY 2007 - DSS Sanitary Sewer Project	Sanitary Sewer	5,602,789
CK	WWTP Sampler Program	Wastewater	1,286,308
FF	WWTP Flood Protection	Wastewater	607,513
H9	Blue Plains Capital Equipment	Wastewater	2,239,898
TC	504B6 - Additional Chemical Systems	Wastewater	74,056,192
TM	504G6 - Influent Screen Facility	Wastewater	39,067,454
TN	504G9 - Primary Treatment Facility	Wastewater	38,658,735
TP	504H2 - Gravity Thickeners	Wastewater	19,958,237
TS	504H5 - IMP East Primary Effluent Excess Flow	Wastewater	1,684,749
XC	Additional Dewatering Facilities	Wastewater	81,635,535
AI	FY 2008 - DWS Water Projects	Water	6,967,611
DL	Citywide Fire Hydrant Program	Water	23,964,267
JJ	Bryant Street PS Improvements - Phase III	Water	0
			<b>\$358,020,453</b>
<b><u>Dropped Projects</u></b>			
CI	O Street - Facility Projects	Combined Sewer Overflow	612,704
AQ	FY 2009 - DWS Water Projects	Water	7,916,787
D4	Small Valve Replacements 5	Water	757,191
D9	FY 2014 - DDOT Water Projects	Water	6,300,000
DH	FY 2015 - DDOT Water Projects	Water	6,600,000
DV	FY 2016 - DDOT Water Projects	Water	7,000,000
FJ	Parking Ramp Rehab - Bryant St. PS	Water	409,672
FL	FY 2017 - DDOT Water Projects	Water	7,300,000
GT	FY 2018 - DDOT Water Projects	Water	7,750,000
HZ	FY 2019 - DDOT Water Projects	Water	8,000,000
J8	FY 2020 - DDOT Water Projects	Water	10,400,000
MK	877A1 - 24 Water main Ft. Stanton Res to MLK Ave.	Water	16,365,329
QM	Small Valve Replacements - Contract 4	Water	2,830,723
			<b>\$82,242,406</b>

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PROGRAM**

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

**SECTION III  
WASTEWATER  
TREATMENT  
SERVICE AREA**

## **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 processing 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. 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. Water is percolated down through dual-media effluent filters, removing most of the remaining suspended solids, next the water is disinfected and then treated to remove residual chlorine and discharged into the Potomac River. Removing solids from primary sedimentation tanks to gravity thickening process units where dense sludge settles to the bottom and thickens. Biological solids from the secondary and nitrification processes are thickened 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 \$3.1 billion dollars, a net increase of \$362.1 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. The Blue Plains Enhanced Nitrogen Removal Facilities Program, which provides for projects necessary to meet the stringent total nitrogen discharge limit in the NPDES permit, comprise a significant portion of the lifetime budget for the wastewater treatment service area. 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 all the 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 – \$831.8 million**

*(project pages III-8 to III-29)*

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 in construction include:

- *Dual Purpose Rehabilitation (Project BG) \$25.5 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 processes 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 (Project BR) \$52.2 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 75% complete. Also, included in this project is rehabilitation of the nitrification return sludge line, the first phase of which is 50% complete.
- *Filtration/Disinfection Facility Phase III (Project BT) \$19.9 million* – This project is an upgrade to major electrical equipment serving the Filtration/ Disinfection Facility. Construction began in FY 2011 and is expected to be complete by the end of fiscal year 2014.

Projects under this program in the planning and design phase include:

- *Headworks HVAC Rehabilitation (Project IX) \$15.7 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. Initial investigations were performed in FY2013 and recommendations for improvements are currently under review.

- *Raw Wastewater Pump Station 2 (Project BV) \$42.4 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. Site investigations and a concept design were performed in FY 2013 and additional design is expected in FY 2014.
- *Primary Treatment Facilities Phase II (Project BQ) \$14.6 million* – Design is scheduled to begin in FY 2015 for structural repairs to the primary sedimentation tanks.
- *Grit Chamber Facilities Phase II (Project BP) \$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.

New projects under this program :

- *Effluent Filter Upgrade (Project IY) \$107.7 million* – An upgrade to the Effluent Filters will be required by the year 2025 as that is the projected end of the facility’s useful life. The project is added to the program this year so that planning and design can begin in FY 2021.
- *Replace/Upgrade Influent Screens (Project IZ) \$40.4 million* – An upgrade or replacement of the influent screens will be required as the equipment is not projected to last more than 20 years. An investigation and concept design will be initiated by the year 2017 to more precisely define the existing condition of the facility and the upgrades necessary to extend its life.

**Plantwide Facilities Program – \$446.5 million**

*(project pages III-30 to III-60)*

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 and construction of the new Warehouse.

One major project under this program was completed in FY 2013:

- *Laboratory Rehabilitation (Project CV) \$7.8 million* –The laboratory on the Blue Plains site, which provides analyses for permit compliance, process optimization and long-range planning, has been rehabilitated and is in use.

Major projects under this program that are now underway include:

- *New Warehouse/Visitor Center/Security Facility (Project HC) \$18.4 million* – This project includes a new central warehouse facility at Blue Plains, based on industry ‘best practice’ designs and operations for similar utilities and plant operations. A visitor center and security facility will be 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.
- located in the new building, with the warehouse.
- *Instrumentation and Control Engineering Program Management (Project GP) \$10.9 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

Major new projects under this program:

- *Construction of Flood Seawall (Project JF) \$13.2 million* – A flood seawall will be constructed to prevent inundation of the Advanced Wastewater Treatment Plant at Blue Plains from the Potomac River during a flood event. The AWTP is a critical facility that must be in operation at full capacity or risk having a catastrophic impact on the environment.
- *Process Control System Upgrade (Project LX) \$4 million* - This project entails both a master planning study to define the next generation of the Process Control System (PCS) and necessary upgrades to the Blue Plains Process Control System to maintain functionality and maintainability for the next several years.
- *Control Systems Replacement (Project GW) \$37 million* - This project will implement the Process Control System (PCS) Master Plan and will include concept design, detailed design, and installation of a system or components of the Plant PCS as it reaches the end of its useful life. By 2023, the PCS will be approximately 23 years old and it is expected that the hardware will be obsolete, the vendor will no longer support the system and newer technologies will be available to replace the PCS.

### **Solids Processing Program – \$793.0 million**

*(project pages III-61 to III-73)*

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. 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 underway in this program include:

- *New Digestion Facilities (Project XA) \$524.8 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 100% complete, while the main process train project is 66% 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. The construction status of the combined heat and power facility is 50% complete while the final dewatering facilities first contract will be complete by December 2013 and the second contract is 47% complete.
- *Gravity Thickening Upgrade (Project BX) \$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. Detailed design is underway with an expected completion in FY 2014 and construction is expected to begin in FY 2015.

#### **Enhanced Nitrogen Removal Facilities – \$1,024.5 million**

*(project pages III-74 to III-83)*

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 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 (Project BI) \$72.0 million* (formerly named *Plantwide Fine Bubble Aeration System in the Plantwide Program Area*). This project involves replacing the existing coarse bubble diffusers in the secondary treatment

aeration system with a more efficient system. In addition to a more efficient process, this project will result in an overall savings in energy consumption. Construction began in FY 2013.

- *Enhanced Clarification Facilities - (Project E8) \$219.0 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 was issued in FY 2013 that includes the Tunnel Dewatering Pump Station (Project FR) and (Job CY18 – Division Y – Blue Plains Dewatering Pump Station) as well as the Enhanced Clarification Facility.
- *Enhanced Nitrogen Removal Facilities (Project E9) \$267.8 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 the first contract is 99% complete and the second contract is 70% complete. The project is on schedule to meet NPDES permit compliance dates.
- *Biosolids Filtrate Treatment Facilities – (Project EE) \$103.4 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 filtrate 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 most cost-effective and reliable method to provide separate treatment of the filtrate recycle stream. Construction is expected to begin in FY 2014.
- *Wet Weather Mitigation, Diversion at Bolling and Tunnel Dewatering Pump Station – (Projects EG, FR, H7 and FS) \$257.7 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. Construction of these projects is scheduled to be complete in FY 2018.
- *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 began in FY 2013 to define the most cost-effective and sustainable project to meet the project need.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	
Construction:	

<b>Project Completion:</b>	Sep 2023
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**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 - 41.39%  
 EPA/Fed - 0.00%  
 WSSC - 45.71%  
 Fairfax - 8.36%  
 Loudoun/PI - 4.55%



FY2014 Approved Life Budget	23,018,352
FY2014 Revised/FY2015 Proposed Life Budget	34,544,321
<b>Increase/(Decrease)</b>	<b>11,525,969</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	5,187	1,605	4,402	4,690	2,137	1,746	1,358	2,034	2,037	1,382	522	0
<b>Commitments Budget</b>	9,407	6,400	6,037	2,200	0	5,500	5,000	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jul 2011
Construction:	Feb 2012

<b>Project Completion:</b>	Sep 2018
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	24,473,629
FY2014 Revised/FY2015 Proposed Life Budget	25,520,221
<b>Increase/(Decrease)</b>	<b>1,046,592</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	5,892	3,942	5,680	2,885	47	26	0	0	0	0	0	0
<b>Commitments Budget</b>	23,972	1,537	12	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 2014 - 2023 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

Phase	Start Date
Design:	Jun 2015
Construction:	Mar 2017

<b>Project Completion:</b>	Oct 2019
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**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%



FY2014 Approved Life Budget	5,434,000
FY2014 Revised/FY2015 Proposed Life Budget	5,434,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	61	328	1,563	1,712	23	0	0	0	0	0
<b>Commitments Budget</b>	0	0	427	152	4,856	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Jun 2015
<b>Construction:</b>	Mar 2018

<b>Project Completion:</b>	Jan 2021
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**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%



FY2014 Approved Life Budget	14,625,000
FY2014 Revised/FY2015 Proposed Life Budget	14,625,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	80	513	599	1,803	6,848	953	3	0	0	0
<b>Commitments Budget</b>	0	0	1,320	0	360	12,945	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Aug 2007
Construction:	Mar 2009

Project Completion:	Feb 2019
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 40.66%  
 EPA/Fed - 0.56%  
 WSSC - 45.84%  
 Fairfax - 8.38%  
 Loudoun/PI - 4.56%



FY2014 Approved Life Budget	51,984,278
FY2014 Revised/FY2015 Proposed Life Budget	52,247,125
<b>Increase/(Decrease)</b>	<b>262,847</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	25,015	7,150	1,595	2,035	1,814	3,935	465	0	0	0	0	0
<b>Commitments Budget</b>	40,275	6,887	0	0	626	4,459	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Mar 2009
Construction:	Apr 2011

<b>Project Completion:</b>	Dec 2014
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**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 - 35.38%  
 EPA/Fed - 5.84%  
 WSSC - 45.84%  
 Fairfax - 8.38%  
 Loudoun/PI - 4.56%



FY2014 Approved Life Budget	18,978,176
FY2014 Revised/FY2015 Proposed Life Budget	19,915,522
<b>Increase/(Decrease)</b>	<b>937,346</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	13,817	1,507	10	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	19,916	0	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 2014 - 2023 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

Phase	Start Date
Design:	Nov 2012
Construction:	Mar 2016

Project Completion:	Apr 2020
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	27,522,000
FY2014 Revised/FY2015 Proposed Life Budget	42,392,209
<b>Increase/(Decrease)</b>	<b>14,870,209</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	572	840	1,535	2,625	14,310	9,887	1,104	14	0	0	0	0
<b>Commitments Budget</b>	644	3,566	100	38,082	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 2014 - 2023 Capital Improvement Program

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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	May 2016
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**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%



FY2014 Approved Life Budget	4,101,235
FY2014 Revised/FY2015 Proposed Life Budget	4,101,235
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	3,945	37	44	29	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,101	0	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 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	
Construction:	

Project Completion:	Nov 2019
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	366,000
FY2014 Revised/FY2015 Proposed Life Budget	15,740,350
<b>Increase/(Decrease)</b>	<b>15,374,350</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	28	201	258	926	5,709	3,912	173	11	0	0	0	0
<b>Commitments Budget</b>	366	0	1,195	549	13,630	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

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

Phase	Start Date
Design:	Feb 2022
Construction:	Jul 2024

<b>Project Completion:</b>	Mar 2028
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**Project Description:**

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

**Impact on Operations:**

There are no anticipated impacts on operations and maintenance costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	107,714,000
<b>Increase/(Decrease)</b>	<b>107,714,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	343	2,116	3,293	64,760
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	1,210	8,993	0	97,511

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Liquid Processing  
 Activity Group/Project Title: IZ - Replace/Upgrade Influent Screens  
 Managing Department: Engineering and Technical Services  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Nov 2018
Construction:	Jul 2021

Project Completion:	Oct 2025
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**Project Description:**

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

**Impact on Operations:**

There are no anticipated impacts on operations and maintenance costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	40,433,000
<b>Increase/(Decrease)</b>	<b>40,433,000</b>

**NEW**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	234	283	880	1,180	1,767	7,428	11,568	6,078
<b>Commitments Budget</b>	0	0	0	0	771	0	3,663	0	35,999	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	
Construction:	

Project Completion:	Oct 2019
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	1,483,000
FY2014 Revised/FY2015 Proposed Life Budget	1,483,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	59	74	191	274	268	201	44	0	0	0	0	0
<b>Commitments Budget</b>	220	0	1,263	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 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	
Construction:	

Project Completion:	Mar 2023
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**Project Description:**

This project involves construction of revised and improved disinfection process equipment based upon industry experience over the preceding 20 years.

**Impact on Operations:**

Without this upgrade in place by 2025, operations will have increasing difficulties in meeting regulatory requirements for disinfection.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	770,000
FY2014 Revised/FY2015 Proposed Life Budget	8,011,000
<b>Increase/(Decrease)</b>	<b>7,241,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	112	154	150	175	238	403	4,446	33	7	0
<b>Commitments Budget</b>	0	0	660	0	110	520	0	6,666	55	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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.

Phase	Start Date
Design:	Jul 1998
Construction:	Jan 2003

<b>Project Completion:</b>	Aug 2014
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	70,588,572
FY2014 Revised/FY2015 Proposed Life Budget	70,879,208
<b>Increase/(Decrease)</b>	<b>290,636</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	68,455	1,437	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	70,879	0	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 2014 - 2023 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

Phase	Start Date
Design:	Sep 1998
Construction:	Jun 1999

Project Completion:	Nov 2013
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**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. This will add significant 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. This is expected to result in an annual energy cost savings of about \$1 million.

Effective Funding by User (percent):

DC - 35.15%  
 EPA/Fed - 6.07%  
 WSSC - 45.84%  
 Fairfax - 8.38%  
 Loudoun/PI - 4.56%



FY2014 Approved Life Budget	95,590,339
FY2014 Revised/FY2015 Proposed Life Budget	95,049,887
<b>Increase/(Decrease)</b>	<b>-540,452</b>

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	94,710	134	0	0	0	0	0	0	0	0	0	0
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	95,050	0	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 2014 - 2023 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.

Phase	Start Date
Design:	Dec 1998
Construction:	Jan 2003

<b>Project Completion:</b>	Sep 2013
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 15.11%  
 EPA/Fed - 26.22%  
 WSSC - 45.84%  
 Fairfax - 8.38%  
 Loudoun/PI - 4.46%



FY2014 Approved Life Budget	39,123,170
FY2014 Revised/FY2015 Proposed Life Budget	39,067,454
<b>Increase/(Decrease)</b>	<b>-55,716</b>

**CLOSED**

Disbursements Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	39,067	0	0	0	0	0	0	0	0	0	0	0
Commitments Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	39,067	0	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 2014 - 2023 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

Phase	Start Date
Design:	Jul 1999
Construction:	Oct 2001

<b>Project Completion:</b>	Oct 2012
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**Project Description:**

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

**Impact on Operations:**

This project is projected to impact chemical, energy and contract costs in the operations budget.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	38,658,735
FY2014 Revised/FY2015 Proposed Life Budget	38,658,735
<b>Increase/(Decrease)</b>	<b>0</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	38,659	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	38,659	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Liquid Processing  
 Activity Group/Project Title: TO - 504H1 - Secondary Treatment Facility  
 Managing Department: Engineering and Technical Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Aug 1999
Construction:	Feb 2002

<b>Project Completion:</b>	Aug 2015
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**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%



FY2014 Approved Life Budget	70,593,858
FY2014 Revised/FY2015 Proposed Life Budget	70,603,223
<b>Increase/(Decrease)</b>	<b>9,365</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	70,502	5	74	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	70,502	101	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Liquid Processing  
 Activity Group/Project Title: TQ - 504H3 - Nitrification Facility  
 Managing Department: Engineering and Technical Services  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Apr 2003
Construction:	Jun 2005

Project Completion:	Feb 2014
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**Project Description:**

This project upgrades the 28 Nitrification sedimentation basins. The sludge and scum collection equipment and pumping systems in the sedimentation basins are replaced. This project upgrades process technology, improves treatment, reduces energy consumption, and increases 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 - 35.48%  
 EPA/Fed - 6.07%  
 WSSC - 45.58%  
 Fairfax - 8.33%  
 Loudoun/PI - 4.54%



FY2014 Approved Life Budget	47,417,263
FY2014 Revised/FY2015 Proposed Life Budget	47,067,765
<b>Increase/(Decrease)</b>	<b>-349,498</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	46,995	16	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	47,068	0	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 2014 - 2023 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

Phase	Start Date
Design:	
Construction:	Jan 1999

Project Completion:	Jul 2013
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**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%  
 Loudoun/PI - 4.46%



FY2014 Approved Life Budget	1,684,749
FY2014 Revised/FY2015 Proposed Life Budget	1,684,749
<b>Increase/(Decrease)</b>	<b>0</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	1,685	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,685	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Liquid Processing  
 Activity Group/Project Title: UC - 504J1 - Filtration/Disinfection Facility  
 Managing Department: Engineering and Technical Services  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Aug 2002
Construction:	Mar 2004

Project Completion:	Aug 2018
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**Project Description:**

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

**Impact on Operations:**

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%



FY2014 Approved Life Budget	80,841,242
FY2014 Revised/FY2015 Proposed Life Budget	80,841,242
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	62,577	895	4,225	5,048	2,595	62	0	0	0	0	0	0
<b>Commitments Budget</b>	62,700	1,878	16,006	258	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 2014 - 2023 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  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	May 2001
Construction:	Apr 2007

Project Completion:	Sep 2016
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**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. Increase in budget resulted primarily from the construction contract bid coming at an amount higher than the previously approved budget.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	15,694,415
FY2014 Revised/FY2015 Proposed Life Budget	15,747,220
<b>Increase/(Decrease)</b>	<b>52,805</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	14,916	229	177	169	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	15,305	443	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 2014 - 2023 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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Sep 2023
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 41.41%  
 EPA/Fed - 0.00%  
 WSSC - 45.69%  
 Fairfax - 8.35%  
 Loudoun/PI - 4.55%



FY2014 Approved Life Budget	18,397,051
FY2014 Revised/FY2015 Proposed Life Budget	38,285,798
<b>Increase/(Decrease)</b>	<b>19,888,747</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	6,812	1,232	658	2,389	2,460	467	4,201	3,678	3,893	2,020	626	0
<b>Commitments Budget</b>	10,306	0	4,400	3,900	0	6,100	4,300	9,280	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jan 2011
Construction:	Apr 2013

Project Completion:	Sep 2018
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**Project Description:**

This project provides for the renovation of the Central Operations Facility (COF) and will improve the functionality and appearance of the building. Project includes budget for renovation of office spaces used by the Authority's personnel, COF Windows replacement, HVAC upgrades and landscaping, among others. Office space renovations have been completed for the Department of Engineering and Technical Services (DETS) and the Boardroom, while those for other departments are in different stages of completion. The budget increase is mostly attributable to the reallocation Program Management costs.

**Impact on Operations:**

This project has no material impact on the operating budget.

Effective Funding by User (percent):

DC - 71.26%  
 EPA/Fed - 0.00%  
 WSSC - 22.47%  
 Fairfax - 4.11%  
 Loudoun/PI - 2.16%



FY2014 Approved Life Budget	17,212,240
FY2014 Revised/FY2015 Proposed Life Budget	17,517,097
<b>Increase/(Decrease)</b>	<b>304,857</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	12,981	1,423	649	320	34	13	0	0	0	0	0	0
<b>Commitments Budget</b>	16,624	893	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: BY - Additional Chemical Systems PH III  
 Managing Department: Engineering and Technical Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jun 2018
Construction:	Sep 2020

<b>Project Completion:</b>	Jun 2024
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**Project Description:**

This project is moving into the 10-year budget window through normal progression. This project will provide additional chemical feed lines and application points for process needs such as polymer distribution in the grit chambers, polymer for spent wash water treatment, chemicals for wet weather flow treatment, and chemicals for solids recycle side stream treatment, as appropriate for each project.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	3,821,638
FY2014 Revised/FY2015 Proposed Life Budget	3,821,638
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	21	142	49	711	1,299	458	18
<b>Commitments Budget</b>	0	0	0	0	0	315	0	3,507	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: CH - Misc Facility Projects  
 Managing Department: Facilities and Security  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Sep 2018
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**Project Description:**

This will rehabilitate 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, rehabilitate and upgrade of portions of the 2nd Floor of the Central Maintenance Facility (CMF) for relocated DETS and DMS staff and to meet current code requirements and other miscellaneous activities.

**Impact on Operations:**

This 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 - 62.35%  
 EPA/Fed - 0.00%  
 WSSC - 29.40%  
 Fairfax - 5.38%  
 Loudoun/PI - 2.87%



FY2014 Approved Life Budget	7,413,217
FY2014 Revised/FY2015 Proposed Life Budget	7,768,267
<b>Increase/(Decrease)</b>	<b>355,050</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	5,341	945	127	59	49	25	0	0	0	0	0	0
<b>Commitments Budget</b>	7,430	338	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 2014 - 2023 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

Phase	Start Date
Design:	
Construction:	Jun 2005

Project Completion:	Oct 2012
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**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:**

As samples are now collected by hand, the automated samplers could allow 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%



FY2014 Approved Life Budget	1,286,308
FY2014 Revised/FY2015 Proposed Life Budget	1,286,308
<b>Increase/(Decrease)</b>	<b>0</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	1,286	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,286	0	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 2014 - 2023 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

Phase	Start Date
Design:	Sep 2007
Construction:	Sep 2010

<b>Project Completion:</b>	Oct 2014
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	7,526,159
FY2014 Revised/FY2015 Proposed Life Budget	8,346,159
<b>Increase/(Decrease)</b>	<b>820,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	6,882	635	17	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	7,546	800	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 2014 - 2023 Capital Improvement Program

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

Phase	Start Date
Design:	
Construction:	Sep 2013

Project Completion:	Sep 2018
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	1,490,761
FY2014 Revised/FY2015 Proposed Life Budget	4,141,761
<b>Increase/(Decrease)</b>	<b>2,651,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	42	500	312	489	505	520	0	0	0	0	0	0
<b>Commitments Budget</b>	1,492	0	2,650	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 2014 - 2023 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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Aug 2008
<b>Construction:</b>	Sep 2011

<b>Project Completion:</b>	Sep 2016
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**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%



FY2014 Approved Life Budget	1,867,580
FY2014 Revised/FY2015 Proposed Life Budget	1,868,580
<b>Increase/(Decrease)</b>	<b>1,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,098	14	242	250	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,124	744	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 2014 - 2023 Capital Improvement Program

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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Jun 2016
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**Project Description:**

This project is to interface the non-Original Equipment Manufacturer (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 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%



FY2014 Approved Life Budget	2,107,090
FY2014 Revised/FY2015 Proposed Life Budget	2,107,090
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,130	209	273	116	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	2,107	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title:   
 Managing Department: Engineering and Technical Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Health Safety

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Sep 2015

<b>Project Completion:</b>	Sep 2018
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**Project Description:**

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

**Impact on Operations:**

This project will prevent unforeseen repair / replacement costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	<input type="text" value="4,960,000"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="4,960,000"/>
<b>Increase/(Decrease)</b>	<input type="text" value="0"/>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	60	0	46	1,095	1,131	1,127	0	0	0	0	0	0
<b>Commitments Budget</b>	80	0	4,880	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: EN - WWTP - Central Fire Alarm System  
 Managing Department: Engineering and Technical Services  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Health Safety

Phase	Start Date
Design:	
Construction:	Aug 2010

Project Completion:	Sep 2018
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**Project Description:**

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

**Impact on Operations:**

This project will have no impact on the operating budget.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	3,014,330
FY2014 Revised/FY2015 Proposed Life Budget	3,027,578
<b>Increase/(Decrease)</b>	<b>13,248</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	2,512	118	85	35	33	34	0	0	0	0	0	0
<b>Commitments Budget</b>	2,836	192	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: FF - WWTP Flood Protection  
 Managing Department: Engineering and Technical Services  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Health Safety

Phase	Start Date
Design:	
Construction:	

Project Completion:	Oct 2012
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**Project Description:**

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

**Impact on Operations:**

This project will have an impact on insurance premiums. In the case of a flood, this project will save operations and maintenance costs that would otherwise be spent on sandbagging and repair of damaged equipment. Impacts on Operations and Maintenance: The Flood Mapping will have no impact on operations and maintenance costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	607,513
FY2014 Revised/FY2015 Proposed Life Budget	607,513
<b>Increase/(Decrease)</b>	<b>0</b>

**CLOSED**

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	608	0	0	0	0	0	0	0	0	0	0	0
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	608	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: GP - I & C & Elec - EPMC  
 Managing Department: Engineering and Technical Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Apr 2015
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**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%



FY2014 Approved Life Budget	13,591,494
FY2014 Revised/FY2015 Proposed Life Budget	10,928,126
<b>Increase/(Decrease)</b>	<b>-2,663,368</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,882	1,819	3,178	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	6,220	4,708	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: GW - Control Systems Replacement  
 Managing Department: Engineering and Technical Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Health Safety

Phase	Start Date
Design:	Mar 2020
Construction:	Sep 2021

<b>Project Completion:</b>	May 2024
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**Project Description:**

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

**Impact on Operations:**

There will be significant impact on operating and maintenance budgets

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	37,000,000
<b>Increase/(Decrease)</b>	<b>37,000,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	678	566	746	12,114	12,218	296
<b>Commitments Budget</b>	0	0	0	0	0	0	1,000	1,700	34,300	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title:   
 Managing Department: Maintenance Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	

<b>Project Completion:</b>	Nov 2013
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**Project Description:**

This project is the annual program for the repair and replacement of Major Pumps, Large Motors, and Centrifuges at Blue Plains

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	<input type="text" value="2,442,000"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="2,239,898"/>
<b>Increase/(Decrease)</b>	<input type="text" value="-202,102"/>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	2,240	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	2,240	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: HC - New Warehouse/Visitor Center/Security Facility  
 Managing Department: Engineering and Technical Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Aug 2011
Construction:	Oct 2012

<b>Project Completion:</b>	Jan 2016
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**Project Description:**

This project is for the construction a new central warehouse at the Blue Plains Treatment Facility. Currently material is stored in several different areas: 2nd Floor of CMF building; Supply Building No. 1; and by Maintenance Service in its various maintenance shops located on the ground level of CMF. By consolidating all material required and classifying same as inventory and storing in one central location, it will free up much needed land area at Blue Plains for planned plant projects; eliminate duplicate inventories and obsolete materials now being stored; provide the ability to tract 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 operational savings through re-structured functions and greater equipment availability.

Effective Funding by User (percent):

DC - 41.83%  
 EPA/Fed - 0.00%  
 WSSC - 45.36%  
 Fairfax - 8.29%  
 Loudoun/PI - 4.51%



FY2014 Approved Life Budget	18,128,600
FY2014 Revised/FY2015 Proposed Life Budget	18,373,600
<b>Increase/(Decrease)</b>	<b>245,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	10,628	3,217	59	16	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	18,374	0	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 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	Sep 2016
Construction:	Sep 2017

Project Completion:	Sep 2020
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**Project Description:**

This project will provide for much-needed additional office space throughout the Central Operations 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 on 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%



FY2014 Approved Life Budget	8,872,000
FY2014 Revised/FY2015 Proposed Life Budget	8,872,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	38	791	3,465	1,094	498	0	0	0	0
<b>Commitments Budget</b>	0	0	0	1,470	6,485	0	917	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 pay back, Mission / Function over long term

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Mar 2016
<b>Construction:</b>	Feb 2017

<b>Project Completion:</b>	Sep 2018
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**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 as 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 functions (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 on 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%



FY2014 Approved Life Budget	4,032,000
FY2014 Revised/FY2015 Proposed Life Budget	4,032,000
<b>Increase/(Decrease)</b>	<b>0</b>

<b>Disbursements Budget</b>	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	0	0	193	875	1,426	0	0	0	0	0	0
<b>Commitments Budget</b>	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	0	0	498	3,334	200	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	
Construction:	

<b>Project Completion:</b>	Sep 2018
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	3,020,000
FY2014 Revised/FY2015 Proposed Life Budget	3,396,000
<b>Increase/(Decrease)</b>	<b>376,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,005	619	381	329	72	42	0	0	0	0	0	0
<b>Commitments Budget</b>	2,721	675	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title:   
 Managing Department: Engineering and Technical Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Sep 2012

<b>Project Completion:</b>	Oct 2017
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**Project Description:**

This project is comprised of activities designed to facilitate the movement of resources into, through, and out of Blue Plains, which is a particular challenge during the years 2012-2016 due to several simultaneous construction projects, i.e. Enhanced Nitrogen Removal Facilities (ENRF), New Digestion Facilities and the Blue Plains Tunnel.

**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%



FY2014 Approved Life Budget	<input type="text" value="6,196,283"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="6,243,287"/>
<b>Increase/(Decrease)</b>	<input type="text" value="47,004"/>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	954	1,299	886	532	89	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,238	1,005	1,000	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title:   
 Managing Department: Engineering and Technical Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Sep 2017
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**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%



FY2014 Approved Life Budget	<input type="text" value="1,650,000"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="4,000,000"/>
<b>Increase/(Decrease)</b>	<input type="text" value="2,350,000"/>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	220	879	978	459	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	2,350	1,650	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 2014 - 2023 Capital Improvement Program

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

Phase	Start Date
Design:	Jun 2015
Construction:	Jan 2017

Project Completion:	Jul 2019
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	2,775,000
<b>Increase/(Decrease)</b>	<b>2,775,000</b>

**NEW**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	64	271	1,039	369	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	575	0	2,200	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

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

Phase	Start Date
Design:	Jan 2016
Construction:	Jun 2017

Project Completion:	Jul 2021
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	13,234,000
<b>Increase/(Decrease)</b>	<b>13,234,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	62	564	712	4,920	2,478	215	4	0	0	0
<b>Commitments Budget</b>	0	0	110	1,213	10,683	1,228	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	May 2011
Construction:	Apr 2013

Project Completion:	Sep 2016
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	3,335,175
FY2014 Revised/FY2015 Proposed Life Budget	3,335,175
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	965	736	359	206	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	2,658	677	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 2014 - 2023 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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Sep 2018
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	10,000,000
FY2014 Revised/FY2015 Proposed Life Budget	10,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	133	778	1,407	1,460	1,342	1,550	0	0	0	0	0	0
<b>Commitments Budget</b>	10,000	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: LS - Misc. Facilities Projects FY 2013  
 Managing Department: Facilities and Security  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Dec 2015
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**Project Description:**

This project provides for the FY 2013 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.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	1,350,000
FY2014 Revised/FY2015 Proposed Life Budget	2,239,950
<b>Increase/(Decrease)</b>	<b>889,950</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	715	523	50	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,350	890	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: LX - Process Control System Upgrade  
 Managing Department: Engineering and Technical Services  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Oct 2015
Construction:	

Project Completion:	Sep 2018
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	4,000,000
<b>Increase/(Decrease)</b>	<b>4,000,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	1,248	1,239	270	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	3,625	0	375	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: TA - Process Computer Control System  
 Managing Department: Engineering and Technical Services  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Sep 1998
Construction:	Aug 2002

Project Completion:	Aug 2014
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**Project Description:**

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



FY2014 Approved Life Budget	64,852,128
FY2014 Revised/FY2015 Proposed Life Budget	65,018,191
<b>Increase/(Decrease)</b>	<b>166,063</b>

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	61,484	1,373	0	0	0	0	0	0	0	0	0	0
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	64,975	43	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 2014 - 2023 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

Phase	Start Date
Design:	Dec 1998
Construction:	Apr 2001

<b>Project Completion:</b>	Sep 2013
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	74,080,993
FY2014 Revised/FY2015 Proposed Life Budget	74,056,192
<b>Increase/(Decrease)</b>	<b>-24,801</b>

**CLOSED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	74,056	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	74,056	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Plantwide  
 Activity Group/Project Title: TZ - 50416 - Elec. Power Sys. - Switch Gear  
 Managing Department: Engineering and Technical Services  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	Mar 2003

Project Completion:	Mar 2020
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**Project Description:**

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

**Impact on Operations:**

Project has no material impact on operations costs

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	31,223,875
FY2014 Revised/FY2015 Proposed Life Budget	31,260,744
<b>Increase/(Decrease)</b>	<b>36,869</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	4,114	1,204	2,495	881	349	5,393	4,962	891	0	0	0	0
<b>Commitments Budget</b>	10,843	2,912	0	70	1,011	16,425	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	May 2011
Construction:	Jul 2011

Project Completion:	Dec 2020
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**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 - 38.29%  
 EPA/Fed - 3.47%  
 WSSC - 45.42%  
 Fairfax - 8.30%  
 Loudoun/PI - 4.50%



FY2014 Approved Life Budget	48,515,790
FY2014 Revised/FY2015 Proposed Life Budget	51,765,790
<b>Increase/(Decrease)</b>	<b>3,250,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	33,884	1,725	4,608	2,308	1,340	697	456	320	7	0	0	0
<b>Commitments Budget</b>	39,444	8,218	853	3,250	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 2014 - 2023 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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Sep 2022
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 41.50%  
 EPA/Fed - 0.00%  
 WSSC - 45.62%  
 Fairfax - 8.34%  
 Loudoun/PI - 4.54%



FY2014 Approved Life Budget	25,476,469
FY2014 Revised/FY2015 Proposed Life Budget	23,700,674
<b>Increase/(Decrease)</b>	<b>-1,775,795</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	7,476	3,331	1,029	1,401	1,931	1,125	0	971	1,486	972	0	0
<b>Commitments Budget</b>	11,010	2,041	6,300	0	0	0	0	4,350	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Feb 2011
Construction:	Nov 2014

<b>Project Completion:</b>	Nov 2018
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**Project Description:**

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

**Impact on Operations:**

This project will add facilities requiring operations and maintenance.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	31,167,092
FY2014 Revised/FY2015 Proposed Life Budget	31,202,485
<b>Increase/(Decrease)</b>	<b>35,393</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,383	2,242	4,163	9,491	5,393	560	20	0	0	0	0	0
<b>Commitments Budget</b>	3,068	4,572	23,562	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 2014 - 2023 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

Phase	Start Date
Design:	
Construction:	Apr 2010

Project Completion:	Sep 2018
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**Project Description:**

This project replaces the 5 KV switchgear, Area Substation No. 4, at the south end of the Blue Plains AWTP, which services the Filtration & Disinfection Facility and Dual Purpose Sedimentation Basins with the proposed new Area Substation No. 6. This project is needed to replace obsolete electrical equipment and ensure reliability of these critical plant processes. Funding for this new project was transferred from Project XA. Construction of the new substation, which was designed as part of the Egg Digestion Facility project, should start as soon as possible and not be deferred until FY 2010.

**Impact on Operations:**

This project will eliminate repeated shut-downs, resulting in savings in operating costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	23,032,040
FY2014 Revised/FY2015 Proposed Life Budget	21,778,040
<b>Increase/(Decrease)</b>	<b>-1,254,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	19,397	350	130	212	212	120	0	0	0	0	0	0
<b>Commitments Budget</b>	20,910	868	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Solids Processing  
 Activity Group/Project Title: I2 - Biosolids Loadout Crane Rehabilitation  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC4 - Biosolids Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Mar 2014

Project Completion:	Sep 2014
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**Project Description:**

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

**Impact on Operations:**

This project will have no material impact 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%



FY2014 Approved Life Budget	2,350,000
FY2014 Revised/FY2015 Proposed Life Budget	4,050,000
<b>Increase/(Decrease)</b>	<b>1,700,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	28	2,576	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	28	4,022	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Solids Processing  
 Activity Group/Project Title: I3 - Biosolids Blending Development Center  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC4 - Biosolids Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Oct 2014
Construction:	Mar 2015

Project Completion:	Jun 2015
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**Project Description:**

This project will provide a facility to demonstrate how to blend Class A biosolids with other products such as sawdust to make a commercial soil amendment product. A soil mixer, a covered work area, and a greenhouse are among the items required for this project. The space vacated by the biosolids program Main Process Train and Combined Heat and Power contractors would be ideal for this enterprise. The facility is intended to determine the ideal blend as a soil amendment. Staff will determine the economics of different product production, so that larger commercial-scale operations can be developed off-site. The greenhouse, ideally heated by the Combined Heat and Power excess steam pipe, would provide a showcase for produce grown from the blended biosolids.

**Impact on Operations:**

There would be no impact on Plant operations from implementing this project. However, there could be a beneficial impact on Plant operating costs through reduction in long-distance hauling of biosolids.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	700,000
<b>Increase/(Decrease)</b>	<b>700,000</b>

**NEW**

Disbursements Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	0	611	0	0	0	0	0	0	0	0	0
Commitments Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	0	700	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Solids Processing  
 Activity Group/Project Title: I6 - Combined Heat & Power as Backup Power  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC4 - Biosolids Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Oct 2015
Construction:	Jan 2017

Project Completion:	Sep 2019
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**Project Description:**

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

**Impact on Operations:**

The project will result in no increase to operations costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	1,500,000
<b>Increase/(Decrease)</b>	<b>1,500,000</b>

**NEW**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	115	190	583	270	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	150	1,350	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Solids Processing  
 Activity Group/Project Title: LD - Pre-Dewatering Additional Centrifuges  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC4 - Biosolids Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	May 2018
Construction:	Apr 2019

Project Completion:	Dec 2020
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**Project Description:**

This project will provide two additional centrifuges and associated feed pumps, polymer pumps, solids chutes and odor control connections at the Main Process Train (MPT) pre-dewatering building. Space for the two additional centrifuges is available in the pre-dewatering building, which will have 10 centrifuges installed under the ongoing Main Process Train project that is due for completion in early 2015.

**Impact on Operations:**

The additional equipment would require additional maintenance but no new operators.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	9,170,000
<b>Increase/(Decrease)</b>	<b>9,170,000</b>

**NEW**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	122	1,215	5,199	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	200	8,970	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Oct 1999
Construction:	Dec 2002

Project Completion:	Oct 2012
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**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%



FY2014 Approved Life Budget	19,958,237
FY2014 Revised/FY2015 Proposed Life Budget	19,958,237
<b>Increase/(Decrease)</b>	<b>0</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	19,958	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	19,958	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Solids Processing  
 Activity Group/Project Title: XA - New Digestion Facilities  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC4 - Biosolids Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Aug 2002
Construction:	Dec 2010

Project Completion:	Nov 2018
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**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 options being considered utilize digestion and can produce a Class A biosolids product. DC Water proposes to utilize the Cambi Thermal Hydrolysis digestion process, which has resulted in most of the budget increase.

**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 include 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%



FY2014 Approved Life Budget	514,793,141
FY2014 Revised/FY2015 Proposed Life Budget	524,841,559
<b>Increase/(Decrease)</b>	<b>10,048,418</b>

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	290,973	127,840	35,978	37	37	37	6	0	0	0	0	0
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	515,970	7,371	1,500	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Solids Processing  
 Activity Group/Project Title: XB - Centrifuge Thickener Facility  
 Managing Department: Engineering and Technical Services  
**EPMC:** NRPM - Nitrogen Removal Program Manager  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jun 2005
Construction:	Mar 2009

<b>Project Completion:</b>	Sep 2016
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**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%



FY2014 Approved Life Budget	48,431,042
FY2014 Revised/FY2015 Proposed Life Budget	48,529,602
<b>Increase/(Decrease)</b>	<b>98,560</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	47,288	65	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	48,505	25	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 2014 - 2023 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

Phase	Start Date
Design:	Dec 1998
Construction:	Dec 2001

<b>Project Completion:</b>	Oct 2012
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**Project Description:**

Project provided 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.

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 15.52%  
 EPA/Fed - 25.80%  
 WSSC - 45.84%  
 Fairfax - 8.38%  
 Loudoun/PI - 4.46%



FY2014 Approved Life Budget	81,725,849
FY2014 Revised/FY2015 Proposed Life Budget	81,635,535
<b>Increase/(Decrease)</b>	<b>-90,314</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	81,636	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	81,636	0	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 2014 - 2023 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

Phase	Start Date
Design:	
Construction:	Sep 2005

Project Completion:	Oct 2017
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**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/PI - 4.55%



FY2014 Approved Life Budget	23,743,798
FY2014 Revised/FY2015 Proposed Life Budget	23,743,798
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	9,202	1,580	4,328	3,411	2,261	9	0	0	0	0	0	0
<b>Commitments Budget</b>	14,747	8,997	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 2014 - 2023 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

Phase	Start Date
Design:	May 2000
Construction:	Nov 2001

<b>Project Completion:</b>	Jun 2014
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**Project Description:**

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

**Impact on Operations:**

No significant operating cost impact.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	2,234,454
FY2014 Revised/FY2015 Proposed Life Budget	2,234,454
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	1,894	238	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	2,234	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Enhanced Nitrogen Removal Facilities Project  
 Activity Group/Project Title: BI - Enhanced Nitrogen Removal (ENR) North  
 Managing Department: Engineering and Technical Services  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Health Safety

Phase	Start Date
Design:	Aug 2009
Construction:	Mar 2013

Project Completion:	Sep 2016
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**Project Description:**

This project was formally Project BI00 - Plantwide Fine Bubble in the Plantwide Program. The project replaces the diffusers in the Secondary Treatment process with a more efficient aeration system and rehabilitates equipment to improve reliability of the secondary treatment system to optimize the enhanced nitrogen removal process.

**Impact on Operations:**

This project will add facilities requiring operations and maintenance.

Effective Funding by User (percent):

DC - 29.97%  
 EPA/Fed - 11.25%  
 WSSC - 45.84%  
 Fairfax - 8.38%  
 Loudoun/PI - 4.56%



FY2014 Approved Life Budget	71,861,603
FY2014 Revised/FY2015 Proposed Life Budget	72,009,155
<b>Increase/(Decrease)</b>	<b>147,552</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	10,819	15,700	19,375	7,946	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	70,497	1,512	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 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Enhanced Nitrogen Removal Facilities Project  
 Activity Group/Project Title: E8 - Enhanced Clarification Facilities  
 Managing Department: Engineering and Technical Services  
 EPMC: NRPM - Nitrogen Removal Program Manager  
 Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	Oct 2012
Construction:	

Project Completion:	Nov 2018
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**Project Description:**

The Enhanced Clarification Facility (ECF) is part of DC Water's proposed Total Nitrogen - Wet Weather (TN/WW) Plan, which addresses the requirements of the Long Term Control Plan as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The principal components of this project are grit removal and screening for influent wastewater followed by an enhanced clarification facility. The new facilities will treat excess flow during wet weather events.

**Impact on Operations:**

Operation of the ECF will increase operating and maintenance costs, and specifically power and chemical costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	224,140,500
FY2014 Revised/FY2015 Proposed Life Budget	219,040,500
<b>Increase/(Decrease)</b>	<b>-5,100,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	7,134	1,943	6,575	33,295	36,815	28,334	260	0	0	0	0	0
<b>Commitments Budget</b>	195,216	500	20,550	0	2,775	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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.

Phase	Start Date
Design:	Mar 2009
Construction:	Jan 2011

Project Completion:	Sep 2018
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**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 - 35.61%  
 EPA/Fed - 5.61%  
 WSSC - 45.84%  
 Fairfax - 8.38%  
 Loudoun/PI - 4.56%



FY2014 Approved Life Budget	267,370,531
FY2014 Revised/FY2015 Proposed Life Budget	267,797,417
<b>Increase/(Decrease)</b>	<b>426,886</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	199,729	29,225	10,866	1,874	5	2	0	0	0	0	0	0
<b>Commitments Budget</b>	262,319	1,994	3,484	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 2014 - 2023 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	Start Date
Design:	Aug 2009
Construction:	Mar 2014

Project Completion:	Apr 2019
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**Project Description:**

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

**Impact on Operations:**

Operation of the new system will significantly increase operating and maintenance costs beginning in FY 2015. Increased chemical addition and power consumption comprise most of the cost increase.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	89,125,000
FY2014 Revised/FY2015 Proposed Life Budget	103,386,994
<b>Increase/(Decrease)</b>	<b>14,261,994</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	8,489	8,613	20,068	24,541	13,638	4,532	1,136	0	0	0	0	0
<b>Commitments Budget</b>	11,660	86,120	570	838	0	4,199	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area  
 Program Title: Enhanced Nitrogen Removal Facilities Project  
 Activity Group/Project Title: EG - Blue Plains Tunnel  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC5 - LTCP Program Manager  
 Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	May 2011
Construction:	May 2011

Project Completion:	Jun 2022
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**Project Description:**

The Blue Plains Tunnel is part of DC Water's proposed Total Nitrogen - Wet Weather (TN/WW) Plan, which addresses the requirements of the Long Term Control Plan as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The principal components of this project are a 23 foot diameter tunnel from Main and O Streets to Blue Plains. The Blue Plains Tunnel has been included in the draft TN/Wet Weather Plan that DC Water submitted to the USEPA. The recommended alternative in the plan removes additional nitrogen from the wastewater prior to discharge and improves the quality of discharge to the Potomac and Anacostia Rivers during wet weather events.

**Impact on Operations:**

Dewatering pump station costs will increase operating and maintenance costs beginning in FY 2016.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	177,380,058
FY2014 Revised/FY2015 Proposed Life Budget	177,380,058
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	92,543	26,276	16,758	10,326	8	8	8	8	8	5	0	0
<b>Commitments Budget</b>	176,115	1,265	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 2014 - 2023 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.

Phase	Start Date
Design:	Feb 2022
Construction:	Feb 2024

<b>Project Completion:</b>	Jul 2028
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**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 Metropolitan Washington Council of Governments flow projections, updated in 2002, now indicate that the 370 MGD design conditions will not be seen until 2025. Studies and research will begin in fiscal year 2013 and continue for a few years to more accurately define the required size and configuration of the expansion and the timing of the need for the expansion.

**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%



FY2014 Approved Life Budget	56,925,000
FY2014 Revised/FY2015 Proposed Life Budget	56,925,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	96	508	1,030	0	0	163	129	0	0	533	1,097	37,155
<b>Commitments Budget</b>	440	1,100	440	0	0	435	0	0	0	2,835	66	51,610

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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.

Phase	Start Date
Design:	Aug 2013
Construction:	Aug 2013

Project Completion:	Jun 2018
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**Project Description:**

This pump station located at Blue Plains at the terminus and lowest point of the tunnel system is designed to dewater the entire contents of the tunnel system and pump it to treatment at Blue Plains treatment plant during and after a rain event.

**Impact on Operations:**

The dewatering pump station is an integral part of the underground storage solution to CSO control. Without a dewatering pump station a deep underground storage tunnel solution cannot be employed. Operations and maintenance costs will increase.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	27,194,802
FY2014 Revised/FY2015 Proposed Life Budget	32,314,878
<b>Increase/(Decrease)</b>	<b>5,120,076</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	2,390	2,867	6,675	4,869	3,695	2,918	0	0	0	0	0	0
<b>Commitments Budget</b>	30,653	300	500	0	862	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 & Diversion  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC5 - LTCP Program Manager  
 Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	Sep 2013
Construction:	Oct 2014

<b>Project Completion:</b>	Jan 2018
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**Project Description:**

This project will include a diversion chamber to capture overflows from the Potomac outfall sewers and direct them into the Anacostia CSO tunnel during a rain event and an overflow structure for the Anacostia CSO tunnel when it reaches it's full capacity. It also includes the internals of the tunnel drop shaft which is constructed a part of Blue Plains tunnel project. This is one of the two overflows for the Anacostia CSO tunnel system.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	26,375,532
FY2014 Revised/FY2015 Proposed Life Budget	41,685,660
<b>Increase/(Decrease)</b>	<b>15,310,128</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,802	2,486	5,355	12,434	7,343	2,527	0	0	0	0	0	0
<b>Commitments Budget</b>	5,617	3,686	32,383	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 2014 - 2023 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.

Phase	Start Date
Design:	Apr 2009
Construction:	Feb 2010

Project Completion:	Aug 2013
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**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/PI - 4.56%



FY2014 Approved Life Budget	6,360,303
FY2014 Revised/FY2015 Proposed Life Budget	6,360,303
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	5,647	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	6,360	0	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 2014 - 2023 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.

Phase	Start Date
Design:	
Construction:	

Project Completion:	Sep 2021
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 41.82%  
 EPA/Fed - 0.00%  
 WSSC - 45.37%  
 Fairfax - 8.29%  
 Loudoun/PI - 4.51%



FY2014 Approved Life Budget	20,154,478
FY2014 Revised/FY2015 Proposed Life Budget	47,581,235
<b>Increase/(Decrease)</b>	<b>27,426,757</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	4,644	5,499	5,667	2,659	4,914	6,569	3,366	2,572	870	0	0	0
<b>Commitments Budget</b>	17,791	1,832	9,066	0	8,800	10,092	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

**WASTEWATER TREATMENT SERVICE AREA  
PROJECT NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
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AL	Plantwide Project Program Management	III-30
AM	Solids Processing Program Management	III-61
AZ	COF Renovations	III-31
BG	Dual Purpose Rehabilitation	III-9
BI	Enhanced Nitrogen Removal (ENR)	III-74
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BX	Gravity Thickener Upgrades Ph II	III-62
BY	Additional Chemical Systems PH III	II-32
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CW	Perimeter Security at Blue Plains	III-36
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**WASTEWATER TREATMENT SERVICE AREA  
PROJECT NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
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EN	WWTP - Central Fire Alarm System	III-40
EV	Area Substation No. 6	III-63
FF	WWTP Flood Protection	III-41
FG	Secondary Treatment Upgrades for TN	III-79
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FS	Div D - Bolling Overflow & Diversion	III-81
GP	I & C & Elec - EPMC	III-42
GW	Control Systems Replacement	III-43
H7	Blue Plains Tunnel Site Preparation	III-82
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HC	New Warehouse Facility at Blue Plains	III-45
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I2	Biosolids Loadout Crane Rehabilitation	III-64
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I6	Combined Heat and Power as Back-up Power	III-66
IC	Electrical Monitoring Systems	III-50
IV	Blue Plains IT Backbone FOC Tubes	III-51
IX	Headworks HVAC Rehab	III-16
IY	Effluent Filter Upgrade	III-17
IZ	Replace / Upgrade Influent Screens	III-18

**WASTEWATER TREATMENT SERVICE AREA  
PROJECT NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
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JF	Construction of Flood Seawall	III-52
JY	I.T.- Data Center	III-53
LC	Effluent Disinfection Upgrades	III-20
LD	Pre Dewatering additional Centrifuges	III-67
LM	ENR Program Management	III-83
LP	Wastewater Asset Management Tech Support	III-54
LS	Misc. Facilities Projects FY2013	III-55
LX	Process Control System Upgrade	III-56
TA	Process Computer Control System	III-57
TC	504B6 - Additional Chemical Systems	III-58
TF	504C5 - GRIT CHAMBER BLDG 1&2	III-21
TK	504G3 - BIOLOGICAL NUTRIENT REMOVAL	III-22
TM	504G6 - INFLUENT SCREEN FACILITY	III-23
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TP	504H2 - GRAVITY THICKENERS	III-68
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**WASTEWATER TREATMENT SERVICE AREA  
PROJECT NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
XC	Additional Dewatering Facilities	III-71
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YD	700D5 - MISCELLANEOUS PROJECTS	III-60
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**CAPITAL  
IMPROVEMENT  
PROGRAM**

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

**SECTION IV  
SANITARY SEWER  
SERVICE AREA**



## **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. The 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 the 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:

- Major sewer pipe infrastructure can generally 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, approximately 17,000 linear feet of sewers were 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 sewer 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 (FY 2008 dollars) in capital funding to address currently

identified projects (\$536 million) and a sewer pipe renewal program (\$664 million). Of the \$536 million in identified projects, 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 other funding needs within the CIP.

Some of the jobs that are planned for design or construction in FY 2014 include:

- EJ01- Potomac Pump Station Phase III Rehab
- G401 – Upper Potomac Interceptor Sewer Rehab
- G504 – Creekbed Sewer Rehab Klingle Valley
- G601 – Sanitary SUB Rehab and Repair Phase 2
- G603 – Sanitary Sewer Rehab and Repair Phase 4
- G703 - Combined Sewers Rehab and Repair Phase 4
- G800 – Small Local Sewer Rehab 2
- G900- Small Local Sewer Rehab 3
- GA01 - Small Local Sewer Rehab 4
- GH01 - Large Sewer Rehab 3
- GG00 - Large Sewer Rehab 2
- IF01 - Sanitary Sewer Rehabilitation 2
- IL01 - Creekbed Sewer Rehab Pinehurst Branch
- IN01 - Upper East Side Trunk Sewer Rehabilitation
- J306 - National Arboretum Sewer Rehab
- N708 - Potomac Interceptor Repairs at Waxpool Road, Loudoun County, Virginia

The current CIP includes the following programs:

**Sanitary Collection Sewers – \$212.9 million**

*(project pages IV-7 to IV-25)*

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.

### **Sanitary On-Going Projects – \$200.7 million**

*(project pages IV-26 to IV-44)*

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. Construction began in late FY2013.

### **Sanitary Pumping Facilities – \$44.2 million**

*(project pages IV-45 to IV-51)*

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 – \$111.2 million**

*(project pages IV-52 to IV-54)*

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 FY2009, 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 – \$585.5 million

(project pages IV-55 to IV-91)

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 the District of Columbia and continuing to the Main Pumping Station. Design is presently underway.
- *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 FY 2011 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 (Project 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 (Project 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 NZ)* - 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 (\$66.7 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 using slip lining to reconstruct the 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. Both Virginia sites are under construction and the completion is anticipated in FY 2014.
- *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 (NPS). The design was completed in FY 2009, but recent cleaning and inspection shows other repairs are necessary that will delay construction start until mid FY 2014 due to further negotiation with NPS.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Jul 2011
Construction:	Jul 2014

<b>Project Completion:</b>	Sep 2017
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**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%



FY2014 Approved Life Budget	28,000,000
FY2014 Revised/FY2015 Proposed Life Budget	28,099,411
<b>Increase/(Decrease)</b>	<b>99,411</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,308	502	4,478	5,055	1,263	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,963	15,249	10,887	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: G8 - Small Local Sewer Rehab 2  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Jun 2013
<b>Construction:</b>	Aug 2014

<b>Project Completion:</b>	Oct 2015
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**Project Description:**

This project is for the rehabilitate and repair of 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 linear 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%



FY2014 Approved Life Budget	2,750,000
FY2014 Revised/FY2015 Proposed Life Budget	2,750,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	123	976	39	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	176	2,574	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: G9 - Small Local Sewer Rehab 3  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Jan 2014
<b>Construction:</b>	Jul 2015

<b>Project Completion:</b>	Sep 2016
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**Project Description:**

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 20,000 linear 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%



FY2014 Approved Life Budget	5,650,000
FY2014 Revised/FY2015 Proposed Life Budget	5,650,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	302	238	1,902	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	1,012	4,638	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: GA - Small Local Sewer Rehab 4  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2014
Construction:	Nov 2015

Project Completion:	Dec 2016
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**Project Description:**

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 30,000 linear 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%



FY2014 Approved Life Budget	8,700,000
FY2014 Revised/FY2015 Proposed Life Budget	8,700,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	105	80	284	3,047	337	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	665	930	7,105	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 2014 - 2023 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

Phase	Start Date
Design:	Nov 2015
Construction:	Apr 2017

<b>Project Completion:</b>	Jun 2018
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**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 linear 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%



FY2014 Approved Life Budget	12,000,000
FY2014 Revised/FY2015 Proposed Life Budget	12,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	366	2,404	2,760	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	2,000	10,000	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Jul 2016
Construction:	Jan 2018

Project Completion:	Mar 2019
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**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 linear 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%



FY2014 Approved Life Budget	12,400,000
FY2014 Revised/FY2015 Proposed Life Budget	12,400,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	66	468	4,198	1,146	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	827	1,240	10,333	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Jul 2017
Construction:	Jan 2019

<b>Project Completion:</b>	Mar 2020
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**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 linear 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%



FY2014 Approved Life Budget	12,700,000
FY2014 Revised/FY2015 Proposed Life Budget	12,700,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	71	499	4,498	1,233	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	847	1,270	10,583	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Jul 2018
Construction:	Jan 2020

<b>Project Completion:</b>	Mar 2021
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**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 linear 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%



FY2014 Approved Life Budget	13,100,000
FY2014 Revised/FY2015 Proposed Life Budget	13,100,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	76	539	4,878	1,319	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	874	1,310	10,916	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Jul 2019
<b>Construction:</b>	Jan 2021

<b>Project Completion:</b>	Mar 2022
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**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:**

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%



FY2014 Approved Life Budget	13,495,000
FY2014 Revised/FY2015 Proposed Life Budget	13,495,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	77	551	5,473	1,474	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	900	1,350	11,245	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: I1 - 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

Phase	Start Date
Design:	
Construction:	Feb 2004

Project Completion:	Sep 2013
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**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%



FY2014 Approved Life Budget	6,682,537
FY2014 Revised/FY2015 Proposed Life Budget	4,291,947
<b>Increase/(Decrease)</b>	<b>-2,390,590</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	4,292	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,292	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: I9 - Sewer Rehab.10th-12th St, Bet. Penn  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Oct 2007
Construction:	Oct 2009

<b>Project Completion:</b>	Dec 2013
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**Project Description:**

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

**Impact on Operations:**

This project will have no material impact 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%



FY2014 Approved Life Budget	1,150,000
FY2014 Revised/FY2015 Proposed Life Budget	1,150,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	565	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,150	0	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 2014 - 2023 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

Phase	Start Date
Design:	
Construction:	Nov 2002

Project Completion:	Mar 2016
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**Project Description:**

This project is for the assessment, design and construction of sanitary sewer interceptors, trunk sewers and force mains that require upgrade. Sewers rehabilitated by this project are defined by the major planning and condition assessment program underway for the sanitary sewer system. This project consists of four jobs to address sewer upgrade needs. It increases the reliability, restores the integrity, and maintains the capacity of DC Water's sanitary sewer system.

**Impact on Operations:**

This project will maintain the operational integrity of the sewer and have no 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%



FY2014 Approved Life Budget	16,063,000
FY2014 Revised/FY2015 Proposed Life Budget	16,188,926
<b>Increase/(Decrease)</b>	<b>125,926</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	3,868	472	3,587	948	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,532	8,739	2,918	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 2014 - 2023 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

Phase	Start Date
Design:	Jul 2020
Construction:	Jan 2022

Project Completion:	Mar 2023
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**Project Description:**

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:**

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%



FY2014 Approved Life Budget	13,910,000
FY2014 Revised/FY2015 Proposed Life Budget	13,910,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	98	696	6,200	1,659	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	927	1,400	11,583	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: LL - Small Local Sewer Rehabilitation 11  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Jul 2021
<b>Construction:</b>	Jan 2023

<b>Project Completion:</b>	Mar 2024
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**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:**

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%



FY2014 Approved Life Budget	16,055,000
FY2014 Revised/FY2015 Proposed Life Budget	16,055,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	97	670	6,976	1,759
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	1,040	1,820	13,195	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: LY - Sewer Facilities Security Upgrades  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Oct 2016

Project Completion:	Sep 2018
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**Project Description:**

This project will provide an upgrade to the Sewage Service Facilities & CSOs requiring immediate security attention to implement exterior and interior security elements (CCTV cameras, access card readers, sensors, etc), other control surveillance devices and systems to protect the existing infrastructure and critical assets against vandalism, criminal activity, and possible future terrorism; as well as to protect DC Water personnel

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	2,000,000
<b>Increase/(Decrease)</b>	<b>2,000,000</b>

**NEW**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	369	455	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	2,000	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: MC - Additional Sewer SCADA System Sites  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jul 2015
Construction:	Jun 2018

Project Completion:	Aug 2019
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**Project Description:**

This project implements recommendations of the 2013 SCADA Master Plan. It is to add additional sites and also optimize the existing Sewer SCADA System. The initial focus will be to develop standards, implement changes needed for existing SCADA sites to conform to the standards, and perform system-wide testing to promote reliable monitoring and control of Sewer System SCADA sites. In the future, a fully optimized SCADA will move water operations from an operator-based automation system to a centralized computer decision system that forecasts demand and continuously calculates optimal system settings within established operating constraints. This is the direction envisioned in the SCADA Master Plan.

**Impact on Operations:**

The primary purpose of the SCADA System is to monitor the health of the distribution system and control water system equipment in order to meet water quality requirements and customer needs. Water and sewer operators need to understand alarms and see discrepancies between known field conditions and SCADA System displays. This affects operations ability to make effective operating decisions and respond appropriately to unexpected changes in system operation.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	8,000,000
<b>Increase/(Decrease)</b>	<b>8,000,000</b>

**NEW**

Disbursements Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	114	36	199	0	750	2,324	0	0	0	0	0
Commitments Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	400	600	0	0	7,000	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: MO - Small Local Sewer Rehabilitation 12  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jul 2022
Construction:	Jan 2024

Project Completion:	Mar 2025
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**Project Description:**

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 Program 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:**

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%



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	15,000,000
<b>Increase/(Decrease)</b>	<b>15,000,000</b>

**NEW**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	137	889	8,164
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	1,200	1,800	12,000

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: MP - Small Local Sewer Rehabilitation 13  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jul 2023
Construction:	Jan 2025

<b>Project Completion:</b>	Mar 2026
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**Project Description:**

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

**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%



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	18,475,000
<b>Increase/(Decrease)</b>	<b>18,475,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	856	1,194	9,286
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	3,025	1,236	14,214

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Collection Sewers  
 Activity Group/Project Title: MZ - Small Local Sewer Rehabilitation 14  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jul 2024
Construction:	Jan 2026

<b>Project Completion:</b>	Mar 2027
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**Project Description:**

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

**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%



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	19,029,250
<b>Increase/(Decrease)</b>	<b>19,029,250</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	901	10,745
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	0	3,116	15,914

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: Q3 - FY 2003 - DSS Sanitary Sewer Project  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Apr 2003

Project Completion:	Sep 2016
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2003 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 - 86.50%  
 EPA/Fed - 13.50%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	13,753,485
FY2014 Revised/FY2015 Proposed Life Budget	13,844,539
<b>Increase/(Decrease)</b>	<b>91,054</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	4,609	1,173	3,055	1,431	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,971	8,874	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: Q7 - FY 2007 - DSS Sanitary Sewer Project  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Mar 2007

Project Completion:	Aug 2014
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2007 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%



FY2014 Approved Life Budget	5,670,000
FY2014 Revised/FY2015 Proposed Life Budget	5,602,789
<b>Increase/(Decrease)</b>	<b>-67,211</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	5,603	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	5,603	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: Q8 - FY 2008 - DSS Sanitary Sewer Project  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	Jun 2008

Project Completion:	Jun 2014
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2008 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%



FY2014 Approved Life Budget	4,640,000
FY2014 Revised/FY2015 Proposed Life Budget	4,640,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	4,241	174	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,640	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: AP - FY 2009 - DSS Sanitary Sewer Projects  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	May 2009

Project Completion:	Sep 2013
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**Project Description:**

This project is for the FY 2009 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%



FY2014 Approved Life Budget	5,720,000
FY2014 Revised/FY2015 Proposed Life Budget	5,609,337
<b>Increase/(Decrease)</b>	<b>-110,663</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	5,609	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	5,609	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: A9 - FY 2010 - DSS Sanitary Sewer Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Jun 2010

<b>Project Completion:</b>	Sep 2013
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**Project Description:**

This project provides for the FY 2010 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%



FY2014 Approved Life Budget	7,924,251
FY2014 Revised/FY2015 Proposed Life Budget	7,924,251
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	6,466	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	7,924	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: BF - FY 2011 - DSS Sanitary Sewer Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Sep 2012

<b>Project Completion:</b>	Dec 2015
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**Project Description:**

This project provides for the FY 2011 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%



FY2014 Approved Life Budget	8,165,000
FY2014 Revised/FY2015 Proposed Life Budget	8,165,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	4,241	1,178	17	5	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,785	3,380	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: CE - FY 2012 - DSS Sanitary Sewer Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Dec 2011

<b>Project Completion:</b>	Jul 2014
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**Project Description:**

This project provides for the FY 2012 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%



FY2014 Approved Life Budget	9,385,000
FY2014 Revised/FY2015 Proposed Life Budget	9,385,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	5,197	2,642	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	9,286	99	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title:   
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Mar 2013

Project Completion:	Oct 2014
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**Project Description:**

This project provides for the FY 2013 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%



FY2014 Approved Life Budget	<input type="text" value="10,205,000"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="10,205,000"/>
<b>Increase/(Decrease)</b>	<input type="text" value="0"/>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	4,026	3,560	2	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,337	5,868	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: D6 - FY 2014 - DSS Sanitary Sewer Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Jun 2014

<b>Project Completion:</b>	Sep 2015
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**Project Description:**

This project provides for the FY 2014 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%



FY2014 Approved Life Budget	10,575,000
FY2014 Revised/FY2015 Proposed Life Budget	10,575,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	925	4,967	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	10,575	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: DI - FY 2015 - DSS Sanitary Sewer Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Mar 2015

<b>Project Completion:</b>	May 2016
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**Project Description:**

This project provides for the FY 2015 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%



FY2014 Approved Life Budget	10,846,000
FY2014 Revised/FY2015 Proposed Life Budget	10,846,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	3,232	2,656	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	10,846	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: DW - FY 2016 - DSS Sanitary Projects  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Apr 2016

Project Completion:	Jun 2017
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**Project Description:**

This project is for the FY 2016 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%



FY2014 Approved Life Budget	11,215,000
FY2014 Revised/FY2015 Proposed Life Budget	11,215,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	3,146	4,282	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	11,215	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: FP - FY 2017 - DSS Sanitary Sewer Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Feb 2017

<b>Project Completion:</b>	Jun 2018
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**Project Description:**

This project is for the FY 2017 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%



FY2014 Approved Life Budget	11,500,000
FY2014 Revised/FY2015 Proposed Life Budget	11,500,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	4,769	2,998	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	11,500	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: H6 - FY 2018 - DSS Sanitary Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	
<b>Construction:</b>	Feb 2018

<b>Project Completion:</b>	May 2019
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2018 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%



FY2014 Approved Life Budget	11,845,000
FY2014 Revised/FY2015 Proposed Life Budget	11,845,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	4,905	3,063	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	11,845	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: HN - FY 2019 - DSS Sanitary Sewer Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Feb 2019

<b>Project Completion:</b>	Apr 2020
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**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%  
 EPA/Fed - 0.00%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	12,200,000
FY2014 Revised/FY2015 Proposed Life Budget	12,200,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	5,769	2,770	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	12,200	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: JI - FY 2020 - DSS Sanitary Sewer Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Apr 2020

<b>Project Completion:</b>	Apr 2021
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**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%



FY2014 Approved Life Budget	12,568,000
FY2014 Revised/FY2015 Proposed Life Budget	12,568,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	4,168	4,783	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	12,568	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: LN - FY 2021 - DSS Sanitary Sewer Projects  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Apr 2021

Project Completion:	Apr 2022
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**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.

**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%



FY2014 Approved Life Budget	12,945,000
FY2014 Revised/FY2015 Proposed Life Budget	12,945,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	4,268	4,974	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	12,945	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: M9 - FY 2022 - DSS Sanitary Projects  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	May 2022

Project Completion:	May 2023
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2022 for sanitary sewer 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%



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	13,335,350
<b>Increase/(Decrease)</b>	<b>13,335,350</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	3,301	7,172	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	13,335	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary On-Going  
 Activity Group/Project Title: MF - FY 2023 - DSS Sanitary Projects  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Jan 2023

Project Completion:	Jan 2024
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2023 for sanitary sewer 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%



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	13,735,411
<b>Increase/(Decrease)</b>	<b>13,735,411</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	7,696	2,931
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	0	13,735	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	
Construction:	Dec 2008

Project Completion:	Sep 2015
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**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/PI - 0.00%



FY2014 Approved Life Budget	14,600,000
FY2014 Revised/FY2015 Proposed Life Budget	14,600,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	11,207	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	14,100	500	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Pumping Facilities  
 Activity Group/Project Title:   
 Managing Department: Facilities and Security  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Jan 2016
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**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%



FY2014 Approved Life Budget	<input type="text" value="1,135,000"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="1,135,000"/>
<b>Increase/(Decrease)</b>	<input type="text" value="0"/>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	165	57	183	49	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	225	910	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Pumping Facilities  
 Activity Group/Project Title: GZ - Sewer Instrumentation & Control  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Apr 2015
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**Project Description:**

This project will provide instrumentation and control enhancements at sewer pump stations and other sewer facilities located outside of Blue Plains throughout the District. The proposed controls would maximize flows to Blue Plains in wet weather, automate data capture for more efficient responses and optimize energy use at the sewer facilities. Project includes installation of flow meters, rain gauges, and SCADA equipment and controls. This project is a suggested project in the 2009 Sewer System Facilities Plan.

**Impact on Operations:**

Project would reduce wet weather CSO flow during high intensity, short duration events, reduce energy costs and would increase the useful life of DC Water facilities.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	2,400,000
FY2014 Revised/FY2015 Proposed Life Budget	2,400,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	231	50	34	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	500	1,900	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 2014 - 2023 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

Phase	Start Date
Design:	
Construction:	Oct 2010

Project Completion:	Sep 2015
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**Project Description:**

This project will support the Department of Sewer Services Pumping Department maintenance program. Large, expensive, and long lived equipment needs to be periodically replaced due to wear or premature failure. Major pumps, motors, valves, screens and related equipment will be replaced or rebuilt in each of the department's more than twenty pump stations as needed.

**Impact on Operations:**

Failure to proceed with this project will increase overtime parts and labor costs in the operating budget.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	4,560,000
FY2014 Revised/FY2015 Proposed Life Budget	4,560,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	1,133	570	271	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	2,890	910	760	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Pumping Facilities  
 Activity Group/Project Title: L3 - Rock Creek Sewage Pumping Station<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Nov 2003
Construction:	Apr 2007

<b>Project Completion:</b>	Dec 2014
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**Project Description:**

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

**Impact on Operations:**

There will be no material impact on operating costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	11,131,290
FY2014 Revised/FY2015 Proposed Life Budget	11,131,290
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	7,873	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	11,131	0	0	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Pumping Facilities  
 Activity Group/Project Title: L4 - Upper Anacostia Sew. Pump. Station  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Nov 2003
Construction:	May 2008

<b>Project Completion:</b>	Apr 2014
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**Project Description:**

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

**Impact on Operations:**

There will be no material impact on operating costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	9,134,559
FY2014 Revised/FY2015 Proposed Life Budget	9,134,559
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	7,056	23	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	9,060	75	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 2014 - 2023 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

Phase	Start Date
Design:	Feb 2002
Construction:	Aug 2005

<b>Project Completion:</b>	Nov 2014
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**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:**

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%



FY2014 Approved Life Budget	2,097,568
FY2014 Revised/FY2015 Proposed Life Budget	2,097,568
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,752	9	5	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	2,048	50	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Pumping Facilities  
 Activity Group/Project Title: MB - 3rd Street & Constitution Ave NW - Pumping Station  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Feb 2014
Construction:	Feb 2014

Project Completion:	Feb 2017
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**Project Description:**

This project provides for the rehabilitation of the 3rd Street and Constitution Avenue NW Pumping Station. Proposed Job MB01 (3rd Street and Constitution Avenue NW Pumping Station Interim Rehabilitation) provides for the rehabilitation or replacement of most electrical and mechanical equipment and instrumentation in the station and the installation of an odor control system. Proposed Job MB02 (3rd Street and Constitution Avenue NW Pumping Station Long-Term Rehabilitation) provides for the installation or replacement of several major items in the station including a new entrance to the wet well, replacement of the switchgear and feeders, and rehabilitation of the force main.

**Impact on Operations:**

This project will have no material impact on operating budgets.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	3,735,000
<b>Increase/(Decrease)</b>	<b>3,735,000</b>

**NEW**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	135	106	782	180	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	600	2,985	150	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 2014 - 2023 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<sup>1</sup>  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Nov 2026
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**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:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	61,079,994
FY2014 Revised/FY2015 Proposed Life Budget	77,799,783
<b>Increase/(Decrease)</b>	<b>16,719,789</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	27,436	1,953	1,866	1,357	2,551	3,068	3,987	3,401	2,493	2,460	3,027	10,327
<b>Commitments Budget</b>	36,200	0	0	0	20,800	0	0	0	0	20,800	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>1</sup> 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.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Mar 2010
Construction:	May 2011

<b>Project Completion:</b>	Sep 2021
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**Project Description:**  
 The program will provide an ongoing effort to further inspect the Authority's existing sewer system

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	25,006,445
FY2014 Revised/FY2015 Proposed Life Budget	28,414,194
<b>Increase/(Decrease)</b>	<b>3,407,749</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	4,089	2,307	2,413	2,767	1,880	1,666	1,677	1,572	1,578	0	0	0
<b>Commitments Budget</b>	7,175	2,990	4,649	2,400	2,400	2,400	2,400	2,000	2,000	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Jan 2019
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	5,000,000
FY2014 Revised/FY2015 Proposed Life Budget	5,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	479	714	742	762	764	199	0	0	0	0	0
<b>Commitments Budget</b>	400	4,600	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 2014 - 2023 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<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Oct 2003

<b>Project Completion:</b>	Sep 2021
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**Project Description:**

This project is to design and construct sanitary sewer interceptors, trunk sewers and force mains identified as requiring upgrade by the major planning and condition assessment program underway for the sanitary sewer system. This project is needed to construct new and rehabilitate or replace aged infrastructure to restore integrity and reliability of DC Water's sanitary sewer system.

**Impact on Operations:**

This project includes activities that will enhance system reliability and reduce emergency maintenance or repairs. Therefore, the project provides cost avoidance to future operating budgets.

Effective Funding by User (percent):

DC - 90.72%  
 EPA/Fed - 2.87%  
 WSSC - 5.93%  
 Fairfax - 0.37%  
 Loudoun/PI - 0.12%



FY2014 Approved Life Budget	43,815,515
FY2014 Revised/FY2015 Proposed Life Budget	45,087,524
<b>Increase/(Decrease)</b>	1,272,009

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	16,812	2,255	3,056	5,012	1,375	579	0	0	0	0	0	0
<b>Commitments Budget</b>	22,763	5,684	10,379	4,261	2,000	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Interceptor/Trunk/Force Sewers  
 Activity Group/Project Title: DM - UAMI Relief Sewer  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Sep 2010
<b>Construction:</b>	Nov 2015

<b>Project Completion:</b>	May 2018
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**Project Description:**

The existing Upper Anacostia Main Interceptor (UAMI) conveys sewage from the Eastland Gardens and Kenilworth neighborhoods to the Upper Anacostia Pumping Station on Anacostia Avenue, NE. The UAMI was constructed in the early 1930's and ranges in size from 18-inches to 24-inches in diameter. Due to population growth and pipe deterioration, the UAMI trunk and collection sewers were assessed for rehabilitation and capacity needs. This project includes the construction of a new 30-inch relief sanitary sewer and several repairs to the collection sewers tributary to the UAMI.

**Impact on Operations:**

Operation and maintenance resources that have been routinely utilized for maintenance on the existing UAMI could be reallocated to other needs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	12,350,000
FY2014 Revised/FY2015 Proposed Life Budget	14,367,674
<b>Increase/(Decrease)</b>	<b>2,017,674</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	340	7	163	2,850	4,266	451	0	0	0	0	0	0
<b>Commitments Budget</b>	768	0	1,200	12,400	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 2014 - 2023 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

Phase	Start Date
Design:	Sep 2007
Construction:	Jun 2009

Project Completion:	Sep 2016
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**Project Description:**

This project provides for the cleaning, assessing, design and rehabilitation of the 11,700 foot long Low Area Trunk Sewer after a collapse of a section of the sewer near the US Capitol Building. The line extends from 13th Street NW to the Main Pumping Station. The majority of it will be Cured In-Phase Pipe (CIPP) lined and the manholes rehabilitated.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	10,616,570
FY2014 Revised/FY2015 Proposed Life Budget	11,934,316
<b>Increase/(Decrease)</b>	<b>1,317,746</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	1,437	417	1,802	3,179	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,762	650	9,522	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 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Interceptor/Trunk/Force Sewers  
 Activity Group/Project Title: FV - Rehabilitation of East Side Interceptor  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Aug 2011
<b>Construction:</b>	Mar 2012

<b>Project Completion:</b>	Feb 2014
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	14,800,500
FY2014 Revised/FY2015 Proposed Life Budget	15,138,872
<b>Increase/(Decrease)</b>	<b>338,372</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	2,640	811	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	15,139	0	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 2014 - 2023 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

Phase	Start Date
Design:	Jan 2014
Construction:	May 2015

<b>Project Completion:</b>	Nov 2017
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**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%



FY2014 Approved Life Budget	25,000,000
FY2014 Revised/FY2015 Proposed Life Budget	25,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	258	566	1,146	7,915	3,537	64	0	0	0	0	0	0
<b>Commitments Budget</b>	283	3,885	20,833	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 2014 - 2023 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<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Apr 2017
Construction:	Nov 2018

<b>Project Completion:</b>	Jan 2020
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**Project Description:**

This project will rehabilitate approximately 13,800 feet of the upper part of the Rock Creek Main Interceptor (RCMI). The project will repair all known defects of the RCMI including broken pipes, holes, missing mortar, and visibly exposed aggregate and structural reinforcement. The project proposes rehabilitation by lining methods of the Rock Creek Main Interceptor between the intersection of Joyce Road & Ross Drive, NW and Beach Drive, NW close to the intersection of Oregon Avenue, NW and Western Avenue.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	16,000,000
FY2014 Revised/FY2015 Proposed Life Budget	16,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	21	365	8,128	998	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	790	1,820	13,390	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Interceptor/Trunk/Force Sewers  
 Activity Group/Project Title: G2 - Sewer Structure Rehabilitation (1)<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Nov 2013
Construction:	Apr 2015

<b>Project Completion:</b>	Jun 2017
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**Project Description:**

This multi-phase / multi-job project was developed from the suggested project list included in the 2009 Sewer System Facilities Plan. Each job within the project proposes improvements to various sewer structures throughout the District. Project includes job G201, Rehabilitation of Structure 35B, to abandon the existing sewer structure inside the Kennedy Center and reinstate the structure at the intersection of 27th & G Street., NW. Project includes job G202, Sewer Structure 24 and 34 Improvements, to install access to the inflatable dams and rehabilitate Structures 24 and 34. Project includes job G203, Access Improvements to CSO 061, to provide maintenance accessibility to NPDES Outfall 061. Project includes job G204, Rehabilitation of Gates at Structures 5A, 5B and 5C, to replace the sluice gates for the sewer structures located outside of the Poplar Point Pumping Station.

**Impact on Operations:**

Not implementing this project may result in the possible failure or inability to access this infrastructure in an emergency in the future, resulting in undesirable environmental and social consequences.

Effective Funding by User (percent):

DC - 90.20%  
 EPA/Fed - 0.00%  
 WSSC - 9.80%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	9,000,000
FY2014 Revised/FY2015 Proposed Life Budget	9,082,430
<b>Increase/(Decrease)</b>	<b>82,430</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	82	61	430	505	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,082	333	2,167	2,500	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Interceptor/Trunk/Force Sewers  
 Activity Group/Project Title: G4 - Upper Potomac Intercept Sewer Rehab.<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Oct 2009
Construction:	Jul 2014

<b>Project Completion:</b>	Nov 2015
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**Project Description:**

Repair and return to service approximately 2,000 feet of the 48-inch diameter Upper Potomac Interceptor Sewer, which has been out of service since a failure occurred during Hurricane Agnes in June 1972. This project will divert future flow from the Upper Potomac Interceptor Relief Sewer, which will be at capacity in future years.

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 53.46%  
 EPA/Fed - 0.00%  
 WSSC - 46.54%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	3,927,906
FY2014 Revised/FY2015 Proposed Life Budget	3,992,384
<b>Increase/(Decrease)</b>	<b>64,478</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	439	179	1,313	1	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	577	3,415	0	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Jun 2011
Construction:	Jan 2016

<b>Project Completion:</b>	Apr 2020
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**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:**

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%



FY2014 Approved Life Budget	32,000,000
FY2014 Revised/FY2015 Proposed Life Budget	37,782,080
<b>Increase/(Decrease)</b>	<b>5,782,080</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	551	175	435	2,736	6,146	1,657	7,559	2,105	0	0	0	0
<b>Commitments Budget</b>	1,292	2,100	1,900	15,830	0	1,420	15,240	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Mar 2009
Construction:	Jan 2010

<b>Project Completion:</b>	Mar 2018
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**Project Description:**

This project rehabilitates sanitary sewers located under buildings Citywide. Other activities included in this project are cleaning, pre and post CCTV, sealing joints and repair of offset pipe.

**Impact on Operations:**

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%



FY2014 Approved Life Budget	8,468,000
FY2014 Revised/FY2015 Proposed Life Budget	8,473,525
<b>Increase/(Decrease)</b>	<b>5,525</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	993	236	464	1,242	1,022	199	0	0	0	0	0	0
<b>Commitments Budget</b>	3,062	284	1,119	2,519	1,490	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Jan 2014
<b>Construction:</b>	Jul 2015

<b>Project Completion:</b>	Sep 2016
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**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%



FY2014 Approved Life Budget	3,000,000
FY2014 Revised/FY2015 Proposed Life Budget	3,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	71	234	1,298	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	528	2,472	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 2014 - 2023 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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Jan 2014
<b>Construction:</b>	Jul 2015

<b>Project Completion:</b>	Sep 2016
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**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%



FY2014 Approved Life Budget	6,150,000
FY2014 Revised/FY2015 Proposed Life Budget	6,150,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	137	476	2,662	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	1,000	5,150	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 2014 - 2023 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

Phase	Start Date
Design:	Apr 2015
Construction:	Nov 2016

<b>Project Completion:</b>	Dec 2017
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**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%



FY2014 Approved Life Budget	9,530,000
FY2014 Revised/FY2015 Proposed Life Budget	9,530,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	147	379	4,336	465	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	616	983	7,931	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Jan 2016
Construction:	Jul 2017

<b>Project Completion:</b>	Sep 2018
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**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%



FY2014 Approved Life Budget	13,100,000
FY2014 Revised/FY2015 Proposed Life Budget	13,100,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	357	1,170	5,800	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	2,184	10,916	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Apr 2016
<b>Construction:</b>	Nov 2017

<b>Project Completion:</b>	Jan 2019
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**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%



FY2014 Approved Life Budget	13,500,000
FY2014 Revised/FY2015 Proposed Life Budget	13,500,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	216	557	6,159	679	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	900	1,350	11,250	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Interceptor/Trunk/Force Sewers  
 Activity Group/Project Title: GL - Large Sewer Rehab 7  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2017
Construction:	Nov 2018

<b>Project Completion:</b>	Jan 2020
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**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%



FY2014 Approved Life Budget	13,900,000
FY2014 Revised/FY2015 Proposed Life Budget	13,900,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	232	594	6,593	730	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	927	1,390	11,583	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Apr 2018
Construction:	Nov 2019

Project Completion:	Jan 2021
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**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%



FY2014 Approved Life Budget	14,300,000
FY2014 Revised/FY2015 Proposed Life Budget	14,300,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	247	635	7,086	774	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	954	1,430	11,916	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Apr 2019
Construction:	Nov 2020

Project Completion:	Jan 2022
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**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%



FY2014 Approved Life Budget	15,705,000
FY2014 Revised/FY2015 Proposed Life Budget	15,705,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	248	646	8,450	916	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	980	1,475	13,250	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jul 2014
Construction:	

<b>Project Completion:</b>	Oct 2015
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**Project Description:**

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 cleaning, and inspection as necessary of 32,000 linear feet to fully ascertain the pipe condition, prior to future (as yet unfunded) rehabilitation.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences. Due to the size of the sewer and volume of flow, the negative effects on public health and safety in the event of a collapse would be substantial.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	3,000,000
FY2014 Revised/FY2015 Proposed Life Budget	3,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	89	1,416	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	3,000	0	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Sep 2011
Construction:	Nov 2015

<b>Project Completion:</b>	Feb 2019
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**Project Description:**

This project was developed to evaluate, rehabilitate and protect the Anacostia Force Main (AFM). The 108-inch diameter AFM extends 32,700 linear feet (LF) from the Maryland / District border to its terminus near South Capital Street and Firth Sterling Ave, SE. The AFM carries approximately 244 MGD (1/3 of WSSC's wastewater flow) to Blue Plains. This critical sewer consists largely of pre-stressed concrete cylinder pipe (PCCP) which has a history of failures throughout the industry. Job HT01 is to repair the force main's cathodic protection system due to its critical nature in protecting PCCP. Job HT02 is to repair known damaged pipe in 8 locations. Job HT05 plans for the future analysis and condition assessment of the AFM and Job HT06 is for a feasibility study to determine if the original force main can be put back into service.

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 20.66%  
 EPA/Fed - 0.00%  
 WSSC - 79.34%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	6,150,000
FY2014 Revised/FY2015 Proposed Life Budget	10,557,406
<b>Increase/(Decrease)</b>	<b>4,407,406</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	487	437	200	1,347	2,376	802	14	0	0	0	0	0
<b>Commitments Budget</b>	407	1,300	450	7,500	150	750	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Interceptor/Trunk/Force Sewers  
 Activity Group/Project Title: IF - Sanitary Sewer Rehabilitation 2  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2014
Construction:	Nov 2015

Project Completion:	Mar 2018
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**Project Description:**

This multi-job project to rehabilitate sanitary sewers in various locations throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer infrastructure to be rehabilitated is prioritized based on the criticality given to sewer segments. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as any necessary replacement of offset pipes. Multiple jobs provide the annualized program to rehabilitate the large sewer inventory which exhibits deteriorated conditions.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	12,000,000
FY2014 Revised/FY2015 Proposed Life Budget	16,000,000
<b>Increase/(Decrease)</b>	<b>4,000,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	46	758	3,554	3,736	433	0	0	0	0	0	0
<b>Commitments Budget</b>	0	260	2,330	9,993	3,417	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Jan 2017
Construction:	Jul 2018

<b>Project Completion:</b>	Jun 2021
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**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:**

Not implementing this project could result in a failure of the infrastructure under buildings, resulting in significant repair cost and liability exposure.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	20,995,000
FY2014 Revised/FY2015 Proposed Life Budget	20,995,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	121	516	2,517	5,371	3,955	0	0	0
<b>Commitments Budget</b>	0	0	0	0	717	4,233	4,290	11,755	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Oct 2011
Construction:	

<b>Project Completion:</b>	Feb 2015
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**Project Description:**

The project will provide for the rehabilitation of the Potomac Force Main. This is necessary in order to continue to gather information for the prioritization of rehabilitation projects established for both mainline sewers and sewer lateral repair work.

**Impact on Operations:**

This project will provide information regarding the status and condition of the sewer system and improve planning for the sewer system rehabilitation needs. This allows for the evaluation and prioritization of work for the large sewer rehabilitation program and local sewer rehabilitation program, as well as other aspects of the Service Life Improvement Plan.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	1,500,000
FY2014 Revised/FY2015 Proposed Life Budget	1,527,724
<b>Increase/(Decrease)</b>	<b>27,724</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	28	445	305	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	28	1,500	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 2014 - 2023 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<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Health Safety

Phase	Start Date
Design:	Sep 2013
Construction:	Apr 2018

<b>Project Completion:</b>	Sep 2020
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**Project Description:**

This project consists of multiple jobs to protect infrastructure in the vicinity of streams and creeks located throughout the District. The project intends to relocate and rehabilitate manholes and sewer pipes vulnerable to flooding or erosion and infrastructure exposed to or adjacent to surface waters. The project also includes the rehabilitation of outfalls and other tasks required to protect exposed sewers due to stream bank erosion.

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 85.76%  
 EPA/Fed - 0.00%  
 WSSC - 14.24%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	20,010,000
FY2014 Revised/FY2015 Proposed Life Budget	29,010,000
<b>Increase/(Decrease)</b>	<b>9,000,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	40	392	657	697	1,023	6,459	8,208	0	0	0	0
<b>Commitments Budget</b>	304	1,209	3,040	0	460	5,352	18,645	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Health Safety

Phase	Start Date
Design:	Apr 2016
Construction:	Nov 2020

<b>Project Completion:</b>	Jan 2022
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**Project Description:**

This project consists of multiple jobs to protect infrastructure in the vicinity of streams and creeks located throughout the District. The project intends to relocate and rehabilitate manholes and sewer pipes vulnerable to flooding or erosion and infrastructure exposed to or adjacent to surface waters. The project also includes the rehabilitation of outfalls and other tasks required to protect exposed sewers due to stream bank erosion.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	16,107,000
FY2014 Revised/FY2015 Proposed Life Budget	16,107,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	32	150	165	147	503	8,666	980	0	0
<b>Commitments Budget</b>	0	0	0	1,081	0	0	0	1,624	13,402	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2012
Construction:	Jun 2012

<b>Project Completion:</b>	Jun 2019
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**Project Description:**

This project will be a multi job project for the rehabilitation of the Upper East Side Trunk Sewer. Job IN01 is associated with the cleaning and pre- and post CCTV inspection of part of the Upper East Side Interceptor located between the Arboretum and the intersection of this interceptor with the Northeast Boundary Trunk Sewer (NEBT). The section has a total length of approximately 6,370 LF. Job IN02 will rehabilitate the ESI by relining the pipe utilizing the appropriate methodology and reinstating service connections.

**Impact on Operations:**

This project will maintain the operational integrity of the sewer and have no 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%



FY2014 Approved Life Budget	14,250,000
FY2014 Revised/FY2015 Proposed Life Budget	18,250,000
<b>Increase/(Decrease)</b>	<b>4,000,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	1,477	1,913	0	423	2,913	3,442	0	0	0	0	0
<b>Commitments Budget</b>	90	6,255	0	0	1,520	10,385	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 Reha<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Mar 2009
Construction:	May 2017

<b>Project Completion:</b>	Sep 2019
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**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 maintain the operational integrity of the sewer and have no impact on the operating budget.

Effective Funding by User (percent):

DC - 90.06%  
 EPA/Fed - 0.00%  
 WSSC - 9.94%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	5,620,000
FY2014 Revised/FY2015 Proposed Life Budget	5,937,930
<b>Increase/(Decrease)</b>	<b>317,930</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	423	645	122	103	243	1,536	606	0	0	0	0	0
<b>Commitments Budget</b>	423	1,515	245	407	3,348	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 Rehabilitation<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jun 2013
Construction:	Apr 2018

Project Completion:	May 2020
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**Project Description:**

This project assesses the condition and develops needed repairs for a segment of sewer that crosses Oxon Run. This project will increase the reliability, restore the integrity, stop leakage from the pipe, and maintain the capacity of the sewer.

**Impact on Operations:**

This project will maintain the operational integrity of the sewer and have no impact on the operating budget.

Effective Funding by User (percent):

DC - 15.85%  
 EPA/Fed - 0.00%  
 WSSC - 84.15%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	7,945,000
FY2014 Revised/FY2015 Proposed Life Budget	14,189,011
<b>Increase/(Decrease)</b>	<b>6,244,011</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	377	98	151	151	222	1,048	5,212	1,632	0	0	0	0
<b>Commitments Budget</b>	1,361	0	0	0	950	11,878	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 <sup>2</sup>  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2014
Construction:	Jul 2015

Project Completion:	Sep 2016
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**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%  
 EPA/Fed - 0.00%  
 WSSC - 40.70%  
 Fairfax - 6.90%  
 Loudoun/PI - 3.80%



FY2014 Approved Life Budget	1,723,000
FY2014 Revised/FY2015 Proposed Life Budget	1,723,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	31	105	859	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	117	1,606	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Jan 2023
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**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.

**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%



FY2014 Approved Life Budget	16,175,500
FY2014 Revised/FY2015 Proposed Life Budget	16,175,500
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	309	768	8,432	916	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	1,010	1,519	13,647	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Jan 2020
Construction:	Jul 2021

<b>Project Completion:</b>	Sep 2022
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**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.

**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%



FY2014 Approved Life Budget	4,565,000
FY2014 Revised/FY2015 Proposed Life Budget	4,565,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	161	309	1,894	952	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	765	3,800	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2021
Construction:	Nov 2022

Project Completion:	Jan 2024
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**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.

**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%



FY2014 Approved Life Budget	16,055,000
FY2014 Revised/FY2015 Proposed Life Budget	16,055,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	286	808	9,032	922
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	1,040	1,820	13,195	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Interceptor/Trunk/Force Sewers  
 Activity Group/Project Title: LZ - Potomac Interceptor Projects - Rehab Phase 2<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jan 2016
Construction:	Jul 2017

Project Completion:	Jun 2019
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**Project Description:**

This project will provide funding to rehabilitate segments of the Potomac Interceptor (PI) Sewer after the inspection, evaluation, and prioritization is determined by the Potomac Interceptor Sewer Inspection Program. Sewer segments would be rehabilitated using appropriate rehabilitation technology and include any necessary cleaning and point repairs. The project will include engineering services for the design, permitting, bid, and construction phases and funding for capital construction, construction management, and site access planning. The funding will also install flow meters and rain gauge systems to monitor real-time flow and rainfall rates to facilitate rehabilitation along the PI. Funding will also be used to develop a program that will monitor the hydrogen sulfide levels in the Potomac Interceptor (PI) Sewer for a period of 5 years. The program will evaluate the effectiveness of the Potomac Interceptor Long Term Odor Control projects. This will include the establishment of permanent monitoring stations as well as recommendations on how to further reduce hydrogen sulfide and related corrosion and odor.

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 0.00%  
 EPA/Fed - 0.00%  
 WSSC - 35.94%  
 Fairfax - 35.94%  
 Loudoun/PI - 28.12%



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	9,800,000
<b>Increase/(Decrease)</b>	<b>9,800,000</b>

**NEW**

Disbursements Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	29	648	379	544	3,017	1,455	0	0	0	0	0
Commitments Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	60	1,500	723	3,667	3,850	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Interceptor/Trunk/Force Sewers  
 Activity Group/Project Title: N1 - Large Sewer Rehabilitation 13  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2023
Construction:	Nov 2024

<b>Project Completion:</b>	Jan 2026
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**Project Description:**

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

**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%



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	20,100,000
<b>Increase/(Decrease)</b>	<b>20,100,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	845	797	12,682
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	1,560	1,483	17,057

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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.<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: High Profile, Good Neighbor Policy

Phase	Start Date
Design:	Mar 2003
Construction:	Dec 2001

Project Completion:	Jul 2017
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**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:**

These projects will incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs

Effective Funding by User (percent):

DC - 8.60%  
 EPA/Fed - 0.00%  
 WSSC - 32.85%  
 Fairfax - 32.85%  
 Loudoun/PI - 25.70%



FY2014 Approved Life Budget	55,281,935
FY2014 Revised/FY2015 Proposed Life Budget	66,655,479
<b>Increase/(Decrease)</b>	<b>11,373,544</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	26,723	4,648	6,949	7,894	259	0	0	0	0	0	0	0
<b>Commitments Budget</b>	37,015	7,469	21,897	275	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Interceptor/Trunk/Force Sewers  
 Activity Group/Project Title: NC - Large Sewer Rehabilitation 14  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2024
Construction:	Nov 2025

<b>Project Completion:</b>	Jan 2027
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**Project Description:**

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

**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%



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	20,703,000
<b>Increase/(Decrease)</b>	<b>20,703,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	884	13,852
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	0	1,607	19,096

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area  
 Program Title: Sanitary Interceptor/Trunk/Force Sewers  
 Activity Group/Project Title: NF - Large Sewer Rehabilitation 12  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2022
Construction:	Nov 2023

<b>Project Completion:</b>	Jan 2025
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**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 Program 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:**

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%



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	18,000,000
<b>Increase/(Decrease)</b>	<b>18,000,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	480	674	11,666
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	1,440	2,160	14,400

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

**SANITARY SEWER SERVICE AREA  
PROJECT ID NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
A4	Sanitary Interceptor/Trunk/Force Sewers	IV-55
A9	FY2010 - DSS Sanitary Sewer Projects	IV-30
AP	FY2009 - DSS Sanitary Sewer Projects	IV-29
AU	Sanitary Sewer Program Management	IV-52
BF	FY2011 - DSS Sanitary Sewer Projects	IV-31
CE	FY2012 - DSS Sanitary Sewer Projects	IV-32
CQ	FY2013 - DSS Sanitary Projects	IV-33
CX	Sewer Facilities Security Upgrades	IV-45
D6	FY2014 - DSS Sanitary Sewer Projects	IV-34
DI	FY2015 - DSS Sanitary Sewer Projects	IV-35
DM	UAMI Relief Sewer	IV-56
DN	Sewer Inspection Program	IV-53
DR	Low Area Trunk Sewer Rehabilitation	IV-57
DW	FY2016 - DSS Sanitary Projects	IV-36
EU	Sewer Lateral Rehab and Main Lining	IV-44
FP	FY2017 - DSS Sanitary Sewer Projects	IV-37
FV	Rehabilitation of East Side Interceptor	IV-58
FW	Rehab Piney Branch Trunk Sewer	IV-59
FY	Rehab Upper Rock Creek Interceptor	IV-60
G1	Small Local Sewer Rehab 1	IV-7
G2	Sewer Structure Rehabilitation (1)	IV-61
G4	Upper Potomac Intercept Sewer Rehab.	IV-62

**SANITARY SEWER SERVICE AREA  
PROJECT ID NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
G5	Sewer Rehab Near Creek Beds	IV-63
G6	Sanitary Sewers Under Buildings 1	IV-64
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
GE	Small Local Sewer Rehab 8	IV-14
GF	Small Local Sewer Rehab 9	IV-15
GG	Large Sewer Rehab 2	IV-65
GH	Large Sewer Rehab 3	IV-66
GI	Large Sewer Rehab 4	IV-67
GJ	Large Sewer Rehab 5	IV-68
GK	Large Sewer Rehab 6	IV-69
GL	Large Sewer Rehab 7	IV-70
GM	Large Sewer Rehab 8	IV-71
GN	Large Sewer Rehab 9	IV-72
GZ	Sewer Instrumentation & Control	IV-46
H6	FY2018 - DSS Sanitary Projects	IV-38
HB	FY 2011 DSS Sewer Pumping	IV-47
HN	FY2019 - DSS Sanitary Sewer Projects	IV-39

**SANITARY SEWER SERVICE AREA  
PROJECT ID NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
HS	Rehabilitation of Influent Sewers	IV-73
HT	Rehabilitation of Anacostia Force Main	IV-74
I1	Selective Sewer Separation & I/I Sewer Rehab.	IV-16
I9	Sewer Rehab.10th-12th St, Bet. Penn	IV-17
IF	Sanitary Sewer Rehabilitation 2	IV-75
IG	Sanitary Sewer Rehabilitation 3	IV-76
IK	Potomac Force Main Rehabilitation	IV-77
IL	Creekbed Sewer Rehabilitation 2	IV-78
IM	Creekbed Sewer Rehabilitation 3	IV-79
IN	Upper East Side Trunk Sewer Rehabilitation	IV-80
J0	B St/New Jersey Ave Trunk Sewer Reha	IV-81
J1	Oxon Run Sewer Rehabilitation	IV-82
J3	Sewer Upgrade - City Wide	IV-18
JQ	Hydraulic Protection Project	IV-83
JR	Large Sewer Rehabilitation 10	IV-84
JS	Small Local Sewer Rehabilitation 10	IV-19
JU	Sanitary Sewer Rehabilitation 4	IV-85
L3	Rock Creek Sewage Pumping Station	IV-48
L4	Upper Anacostia Sew. Pump. Station	IV-49
L5	Earl Place Sewage Pumping Station	IV-50
LK	Large Sewer Rehabilitation 11	IV-86
LL	Small Local Sewer Rehabilitation 11	IV-20

**SANITARY SEWER SERVICE AREA  
PROJECT ID NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
LN	FY2021 - DSS Sanitary Sewer Projects	IV-41
LR	Sanitary Sewer Asset Management	IV-54
LY	Sewer Facilities Security Upgrades	IV-21
LZ	Potomac Interceptor Projects - Rehab Phase 2	IV-87
M9	FY 2022 - DSS Sanitary Projects	IV-42
MB	3rd St and Constitution Ave. NW - Pumping Sta.	IV-51
MC	Additional Sewer SCADA Systems Sites	IV-22
MF	FY 2023 - DSS Sanitary Projects	IV-43
MO	Small Local Sewer Rehabilitation 12	IV-23
MP	Small Local Sewer Rehabilitation 13	IV-24
MZ	Small Local Sewer Rehabilitation 14	IV-25
N1	Large Sewer Rehabilitation 13	IV-88
N7	Potomac Sewer System Rehab.	IV-89
NC	Large Sewer Rehabilitation 14	IV-90
NF	Large Sewer Rehabilitation 12	IV-91
Q3	FY2003 - DSS Sanitary Sewer Project	IV-26
Q7	FY2007 - DSS Sanitary Sewer Project	IV-27
Q8	FY2008 - DSS Sanitary Sewer Project	IV-28



**CAPITAL  
IMPROVEMENT  
PROGRAM**

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

**SECTION V  
COMBINED SEWER  
OVERFLOW SERVICE  
AREA**



## COMBINED SEWER AREA

*(project pages V-5 to V-35)*

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 soccer stadium, 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.
- \$1.80 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 as well as structural repairs. The design phase of the project is nearing completion with construction proceeding with selected rehabilitation items such as the roof rehabilitation.
- 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 began in FY 2013, and is expected to be completed in FY 2014 by the consent decree date.
- 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 was substantially completed in 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' Street Pump Station Intermediate Upgrade (Project FQ), with a lifetime budget of \$17.4 million, reflects work originally anticipated to be completed later in the long term upgrade plan for these pumping stations. However, a 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 necessary replacement of storm water pumps and various sluice gates and gate valves at the Main and O Street Pumping Station is incorporated in this project. Construction is expected to start in FY 2015.

- Combined Sewers under Buildings (Project G7), with a lifetime budget of \$25.1 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 \$8.2 million is to rehabilitate the Tiber Creek combined sewers. This project is a result of the recommendations from the Sewer System Facilities Plan. Design is expected to start in FY 2016.
- 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. The emergency work to help alleviate flooding in the Bloomingdale neighborhood utilizing existing storage space in the McMillan sand filters is also funded from this project and is currently under construction.
- New Headquarters Building (Project DS), with a lifetime budget of \$63 million, is to provide a 135,000 sqft. Administrative building to provide sufficient space for current and future administrative needs. A new administrative headquarters off-site from Blue Plains would address the overcrowded existing administrative building and assist in alleviating the increased traffic and parking problems now occurring due to additional staffing, visitors and construction projects. In addition, placing the building off-site would free space for plant operations. The design build portion of this project is expected to start in FY 2014.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: CSO Program Management  
 Activity Group/Project Title: AV - CSO Program Management <sup>1</sup>  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Sep 2026
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**Project Description:**

Project AV provides engineering project management services for planning, design and rehabilitation projects for DC Water’s combined sewer system for the purpose of reducing adverse impact of combined sewer overflow to the receiving waters. Examples of the projects to be managed are: CSO Long Term Control Plan Development Project, CSO Nine Minimum Control Projects, Fabri-Dam Rehabilitation Project, Pump Stations Rehabilitation and the CSO control projects recommended under the CSO LTCP Development Project and approved by the regulatory agencies.

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 98.74%  
 EPA/Fed - 1.26%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	40,720,146
FY2014 Revised/FY2015 Proposed Life Budget	53,945,378
<b>Increase/(Decrease)</b>	<b>13,225,232</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	8,375	2,203	2,017	1,472	1,887	2,035	2,612	2,203	1,727	1,845	2,399	9,238
<b>Commitments Budget</b>	24,745	0	0	0	14,600	0	0	0	0	14,600	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>1</sup> 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.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

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.

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	May 2014
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**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 related 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 -	0.63%
Loudoun/PI -	0.36%



FY2014 Approved Life Budget	14,518,848
FY2014 Revised/FY2015 Proposed Life Budget	14,518,848
<b>Increase/(Decrease)</b>	<b>0</b>

<b>Disbursements Budget</b>	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	14,290	77	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	14,519	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

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

Managing Department: Engineering and Technical Services

**EPMC:** DETS - Engineering & Tech Services

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

Phase	Start Date
Design:	May 2005
Construction:	Feb 2007

<b>Project Completion:</b>	Jun 2014
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**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 budget.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	1,900,000
FY2014 Revised/FY2015 Proposed Life Budget	1,900,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,638	18	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,672	228	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 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Activity Group/Project Title: BA - DC Water Low Impact Development Projects

Managing Department: Engineering and Technical Services

**EPMC:** EPMC5 - LTCP Program Manager

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

Phase	Start Date
Design:	Feb 2002
Construction:	Jun 2004

<b>Project Completion:</b>	Dec 2015
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**Project Description:**

This project was developed in accordance with DC Water's commitment to promote Low Impact Development (LID) to control wet weather related pollution, DC Water has or will under take projects to implement LID technology at its own facilities, when and where possible. In addition to reduce stormwater runoff and thereby contribute to the water quality of the receiving waters, this also provides DC Water the opportunity to examine effectiveness of various LID techniques.

**Impact on Operations:**

There will be some increase in O&M activities when these projects are implemented.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	3,000,000
FY2014 Revised/FY2015 Proposed Life Budget	3,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	947	945	58	14	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	3,000	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Activity Group/Project Title

Managing Department: Engineering and Technical Services

**EPMC:** EPMC3C - Sewer Program Manager

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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Jul 2002
<b>Construction:</b>	Apr 2005

<b>Project Completion:</b>	Oct 2013
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**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 -	24.87%
EPA/Fed -	24.84%
WSSC -	25.79%
Fairfax -	16.00%
Loudoun/PI -	8.50%



FY2014 Approved Life Budget	<input type="text" value="20,052,932"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="20,058,099"/>
<b>Increase/(Decrease)</b>	<input type="text" value="5,167"/>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	19,821	1	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	20,058	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Activity Group/Project Title: BH - Rock Creek CSO Projects

Managing Department: Engineering and Technical Services

**EPMC:** EPMC3C - Sewer Program Manager

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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Mar 2007
<b>Construction:</b>	Mar 2009

<b>Project Completion:</b>	Sep 2014
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**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 - 52.24%  
 EPA/Fed - 47.76%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	16,570,900
FY2014 Revised/FY2015 Proposed Life Budget	16,647,220
<b>Increase/(Decrease)</b>	<b>76,320</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	14,269	823	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	16,647	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title: BK - CSO Nine Minimum Control Projects  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	
Construction:	Feb 2008

Project Completion:	Apr 2014
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**Project Description:**

This project has been added to make financial provisions to comply with requirements in the 3-party consent decree. These funds will provide for: CSO Event Indicator Lights: The lights are triggered by CSO events, and will be placed at two CSO locations to alert potential users of the river of an active CSO. This will be an automatic system including an overflow detector, an automatic electronic communication system and a pole fitted with a light that will be visible to the users of the river. Additional CSO Signs: At a select number of locations, at or near CSO outfall structures, special signs will be installed (pending National Park Service's approval) to alert potential users of CSO impacted rivers about the location of the outfall.

**Impact on Operations:**

Addition of the lights and signs will result in increased operating costs to provide for inspection and maintenance activities.

Effective Funding by User (percent):

DC - 58.29%  
 EPA/Fed - 34.61%  
 WSSC - 5.54%  
 Fairfax - 1.01%  
 Loudoun/PI - 0.55%



FY2014 Approved Life Budget	1,391,000
FY2014 Revised/FY2015 Proposed Life Budget	1,354,048
<b>Increase/(Decrease)</b>	<b>-36,952</b>

**CLOSED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,354	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,354	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title:  <sup>2</sup>  
 Managing Department: Facilities and Security  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	
Construction:	Jul 2008

<b>Project Completion:</b>
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**Project Description:**

This project will rehabilitate 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 the Department of Maintenance Services (DMS).

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Activity Group/Project Title: D2 - Outfall Sewer Rehabilitation

Managing Department: Engineering and Technical Services

**EPMC:** EPMC3C - Sewer Program Manager

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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Nov 2007
<b>Construction:</b>	Apr 2009

<b>Project Completion:</b>	Dec 2013
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**Project Description:**

This project will rehabilitate the existing Outfall Sewer System tributary to the headworks of the Blue Plains WWTP. Four 10-foot diameter sewers were inspected in 2005 and it was concluded that the pipelines will need to be rehabilitated in order to provide reliable service. As the design has progressed to the concept finalization phase, the latest estimates require an additional budget of \$26 million, primarily for construction costs. The additional budget is also required for design work to separate the project into multiple contracts in order to meet LTCP deadlines. 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 -	41.81%
EPA/Fed -	41.62%
WSSC -	15.07%
Fairfax -	0.94%
Loudoun/PI -	0.56%



FY2014 Approved Life Budget	55,500,000
FY2014 Revised/FY2015 Proposed Life Budget	51,035,833
<b>Increase/(Decrease)</b>	<b>-4,464,167</b>

**CLOSED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	51,036	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	51,036	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title:  <sup>2</sup>  
 Managing Department: Chief Financial Officer  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Apr 2006
Construction:	

<b>Project Completion:</b>	Mar 2015
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**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:**

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%



FY2014 Approved Life Budget	<input type="text" value="790,570"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="790,570"/>
<b>Increase/(Decrease)</b>	<input type="text" value="0"/>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	758	11	5	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	759	32	0	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title: DS - New Headquarters Building<sup>2</sup>  
 Managing Department: Chief Financial Officer  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Apr 2014
Construction:	Aug 2015

<b>Project Completion:</b>	Nov 2017
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**Project Description:**

This project is for the construction of the new DC Water Headquarters building. However, at this time we have budgeted for only \$2 million for the immediate costs of planning and preliminary design; additional budget will be added resulting from the outcome of the planning and preliminary design.

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 73.51%  
 EPA/Fed - 0.00%  
 WSSC - 20.66%  
 Fairfax - 3.77%  
 Loudoun/PI - 2.06%



FY2014 Approved Life Budget	63,000,000
FY2014 Revised/FY2015 Proposed Life Budget	63,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	559	1,257	2,345	22,727	15,294	152	0	0	0	0	0	0
<b>Commitments Budget</b>	960	5,680	56,360	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title: EJ - Potomac Pumping Station-Ph III Rehab  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Oct 2009
Construction:	Feb 2012

Project Completion:	May 2017
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**Project Description:**

This project will provide a general upgrade to this station that was placed in service in 1963. It will provide for the replacement of the four existing screens, replacement of gate valve actuators, additional sluice gates between the pumps and the wet well, and a replacement lighting system. It will also provide a new fire alarm and suppression system.

**Impact on Operations:**

While there is no financial impact on operations, this project will increase the efficiency and decrease the maintenance costs associated with the Potomac Pumping Station, as well as provide the flexibility to reroute influent from any wet well to another pump, easing the ability to do maintenance while still processing the maximum amount of flows for the station.

Effective Funding by User (percent):

DC - 46.77%  
 EPA/Fed - 2.02%  
 WSSC - 28.16%  
 Fairfax - 17.06%  
 Loudoun/PI - 5.98%



FY2014 Approved Life Budget	20,552,605
FY2014 Revised/FY2015 Proposed Life Budget	21,446,028
<b>Increase/(Decrease)</b>	<b>893,423</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	2,435	1,444	3,593	5,056	1,973	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,781	16,335	0	0	330	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title: EK - Long Term Rehab-Main & O Pump Sta<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Jun 2017
Construction:	Aug 2020

Project Completion:	Jan 2024
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**Project Description:**

This project will provide for a 30 year upgrade to the Main Pumping Station and the O Street Pumping Station. This project will replace the Main Pumping Station's sanitary pumps, motors and controls, all six storm pumps, rebuild or replace various large gates in the channels, provide a new roof, 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) and the budget appropriately reflects the cost of transferred work to 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%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	72,444,000
FY2014 Revised/FY2015 Proposed Life Budget	72,444,000
<b>Increase/(Decrease)</b>	<b>0</b>

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	0	0	0	0	580	2,748	2,736	2,889	17,405	21,426	5,579	49
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	0	0	0	0	11,533	0	0	60,391	0	520	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title: EL - Swirl Facility Rehabilitation  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Nov 2008
<b>Construction:</b>	Aug 2014

<b>Project Completion:</b>	Nov 2016
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**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 - 97.04%  
 EPA/Fed - 2.96%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	4,495,000
FY2014 Revised/FY2015 Proposed Life Budget	4,515,770
<b>Increase/(Decrease)</b>	<b>20,770</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	1,063	674	998	376	4	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,374	3,056	0	85	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 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title: EQ - Potomac Pumping Station-PH IV Rehab  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Jun 2018
Construction:	Nov 2019

<b>Project Completion:</b>	May 2021
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**Project Description:**

This project will provide a general upgrade to this station that was placed in service in 1963. It will provide for architectural improvements, painting throughout the station, new men's and women's ADA compliant restrooms, an odor control system, and VFD's for the two large pumps.

**Impact on Operations:**

This project will have no material impact on the operating budget, but will provide protection for the large pumps by installing variable frequency drives to more efficiently handle start ups.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	7,515,000
FY2014 Revised/FY2015 Proposed Life Budget	7,515,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	86	380	3,573	793	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	1,085	650	5,550	230	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title: FQ - Main & O St. PS Intermediate Upgrade<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Sep 2011
Construction:	Dec 2013

<b>Project Completion:</b>	Nov 2017
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**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. A major part of this project's budget was funded by transferring the rehabilitation tasks ( and associated budgets) from Project EK.

**Impact on Operations:**

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

DC - 91.06%  
 EPA/Fed - 0.00%  
 WSSC - 8.94%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	17,345,000
FY2014 Revised/FY2015 Proposed Life Budget	17,375,242
<b>Increase/(Decrease)</b>	<b>30,242</b>

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	553	272	927	6,255	2,510	65	0	0	0	0	0	0
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	2,518	0	14,557	300	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 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

Phase	Start Date
Design:	May 2016
Construction:	May 2018

<b>Project Completion:</b>	Oct 2020
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**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%



FY2014 Approved Life Budget	18,500,000
FY2014 Revised/FY2015 Proposed Life Budget	18,500,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	268	127	580	1,192	7,834	2,937	1	0	0	0
<b>Commitments Budget</b>	0	0	482	1,232	924	15,862	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 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

Phase	Start Date
Design:	Nov 2015
Construction:	Apr 2017

<b>Project Completion:</b>	Jun 2019
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**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%



FY2014 Approved Life Budget	16,500,000
FY2014 Revised/FY2015 Proposed Life Budget	16,500,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	268	770	1,593	7,100	2,211	0	0	0	0	0
<b>Commitments Budget</b>	0	0	387	2,620	13,493	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title: G7 - Combined Sewers Under Buildings<sup>1</sup>  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Mar 2009
Construction:	Jan 2010

<b>Project Completion:</b>	Mar 2018
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**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%



FY2014 Approved Life Budget	24,720,000
FY2014 Revised/FY2015 Proposed Life Budget	25,119,857
<b>Increase/(Decrease)</b>	<b>399,857</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	5,894	164	1,497	3,820	6,205	378	0	0	0	0	0	0
<b>Commitments Budget</b>	7,487	1,273	2,367	6,472	7,521	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>1</sup> 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.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 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: High Profile, Good Neighbor Policy

Phase	Start Date
Design:	Dec 2012
Construction:	Dec 2012

<b>Project Completion:</b>	Mar 2018
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**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 would incrementally reduce operating costs by eliminating emergency repair costs of the rehabilitated infrastructure, as planned sewer replacement or repair costs are typically lower than emergency repair costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	27,600,000
FY2014 Revised/FY2015 Proposed Life Budget	27,600,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	2,193	5,951	253	876	5,898	1,586	0	0	0	0	0	0
<b>Commitments Budget</b>	15,000	0	1,254	3,430	7,916	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 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

Phase	Start Date
Design:	Jan 2017
Construction:	Jul 2018

Project Completion:	Sep 2021
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**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:**

Not implementing this project could result in a failure of the infrastructure under buildings, resulting in significant repair cost and liability exposure.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	30,000,000
FY2014 Revised/FY2015 Proposed Life Budget	30,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	334	1,444	6,808	6,717	5,718	0	0	0
<b>Commitments Budget</b>	0	0	0	0	1,617	9,750	10,048	8,585	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 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:** Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Nov 2015
Construction:	Apr 2017

<b>Project Completion:</b>	Aug 2019
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**Project Description:**

This project involves the rehabilitation of severely deteriorated sections found at various locations on three (3) segments of the Tiber Creek Combined Trunk Sewer between Massachusetts Avenue NW to the north and N Street SE to the south (approximately 65 locations total) using appropriate rehabilitation techniques. The size of the trunk sewer ranges from 14'-0" by 14'-3" to 10'-5" by 24'-0". Project also includes the cleaning of the entire 6,400 LF combined sewer main, pre- and post CCTV inspections, reinstating service connections and other related activities.

**Impact on Operations:**

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences. Due to the size of the sewer and volume of flow, the negative effects on public health and safety in the event of a collapse would be substantial.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	8,250,000
FY2014 Revised/FY2015 Proposed Life Budget	8,250,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	443	855	3,737	1,214	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	1,452	6,798	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 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

Phase	Start Date
Design:	Jan 2020
Construction:	Jul 2021

<b>Project Completion:</b>	Sep 2023
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**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:**

Not implementing this project could result in a failure of the infrastructure under buildings, resulting in significant repair cost and liability exposure.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	27,602,000
FY2014 Revised/FY2015 Proposed Life Budget	27,602,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	431	1,804	8,551	10,920	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	1,767	10,610	15,225	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Activity Group/Project Title: K1 - Main & O St. Pump Stations<sup>2</sup>

Managing Department: Engineering and Technical Services

**EPMC:** EPMC3C - Sewer Program Manager

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

Phase	Start Date
Design:	Dec 2004
Construction:	Apr 2005

<b>Project Completion:</b>	Aug 2014
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**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.

**Impact on Operations:**

Rehabilitation of these stations will increase the amount of flow that can be pumped to Blue Plains thus reducing the quantity of overflows. The project make the facilities safer for personnel by improving the ventilation, providing odor control, installing new lighting, replacing handrails and other safety features, repairing various structural defects in the two structures and eliminating the need to handle screenings by hand.

Effective Funding by User (percent):

DC -	54.75%
EPA/Fed -	45.25%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%



FY2014 Approved Life Budget	79,900,723
FY2014 Revised/FY2015 Proposed Life Budget	79,900,723
<b>Increase/(Decrease)</b>	0

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	77,064	21	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	79,901	0	0	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Activity Group/Project Title K3 - East Side Pumping Station

Managing Department: Engineering and Technical Services

**EPMC:** EPMC3C - Sewer Program Manager

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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Mar 2003
<b>Construction:</b>	Aug 2004

<b>Project Completion:</b>	Apr 2014
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**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:**

There will be no material impact on operating costs.

Effective Funding by User (percent):

DC -	55.82%
EPA/Fed -	44.18%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%



FY2014 Approved Life Budget	17,193,005
FY2014 Revised/FY2015 Proposed Life Budget	17,193,005
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	16,406	159	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	17,193	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: Combined Sewer Projects  
 Activity Group/Project Title: K4 - Poplar Point Pumping Station<sup>2</sup>  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Apr 2005
Construction:	Jan 2010

<b>Project Completion:</b>	Aug 2015
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**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:**

There will be no material impact on operating costs.

Effective Funding by User (percent):

DC - 88.97%  
 EPA/Fed - 6.87%  
 WSSC - 4.15%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	5,751,001
FY2014 Revised/FY2015 Proposed Life Budget	5,751,001
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	4,842	129	87	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	5,561	190	0	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Activity Group/Project Title K5 - Dry-Weather Overflow Elimination<sup>2</sup>

Managing Department: Engineering and Technical Services

**EPMC:** EPMC3C - Sewer Program Manager

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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Dec 2000
<b>Construction:</b>	Mar 2000

<b>Project Completion:</b>	Jul 2014
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**Project Description:**

Under this project, engineering and design for the rehabilitation of the CSO overflow structures to eliminate dry weather overflow has been completed. Construction has been initiated at these locations. As a separate activity, the combined sewer system area served by outfall 006 will be separated into two separate systems for the collection of sanitary and storm sewage flow separately. This will result in the elimination of the outfall and resultant CSOs. In addition, this project includes the inspection of the Anacostia River siphons in Year 2010. The siphons are scheduled for inspection every 10 years to ensure their reliability and to evaluate their condition.

**Impact on Operations:**

When the CSO structures are rehabilitated, there will be an increase in the efficiency of operation and maintenance tasks related to these structures that will result in a cost reduction. However, some additional workload will be required to operate and maintain the trash collection facilities at the separated stormwater outfalls resulting in no net reduction to operational costs.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	12,128,271
FY2014 Revised/FY2015 Proposed Life Budget	12,128,271
<b>Increase/(Decrease)</b>	<b>0</b>

<b>Disbursements Budget</b>	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	10,114	34	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	12,128	0	0	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: DC Clean Rivers Project

Activity Group/Project Title: CY - Anacostia LTCP Projects

Managing Department: Engineering and Technical Services

EPMC: EPMC5 - LTCP Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	Apr 2009
Construction:	Feb 2010

Project Completion:	Dec 2025
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**Project Description:**

A tunnel will be constructed in 3 segments; the first extends from the Blue Plains Treatment Plant north following the route of the Potomac crosses underneath the Anacostia River north of Poplar Point and terminates at Main and O Pump Station. The second segment commences at Poplar Point crosses the Anacostia runs along the Navy Yard and terminates just south of RFK stadium. The third segment runs from the stadium north east past the national arboretum to the Rhode Island Avenue metro station and will then follow a southwest alignment along Rhode Island Avenue. Construction also includes smaller diameter pipelines or tunnels to intercept flooding in the northeast boundary area and redirect it to the tunnel. In addition, the project includes the construction of numerous surface structures such as diversion chambers to convey flow to the tunnels and overflow structures to relieve the system if overwhelmed. When completed, this project along with other CSO 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 -	91.34%
EPA/Fed -	3.95%
WSSC -	3.73%
Fairfax -	0.63%
Loudoun/PI -	0.34%



FY2014 Approved Life Budget	1,714,719,926
FY2014 Revised/FY2015 Proposed Life Budget	1,806,541,177
<b>Increase/(Decrease)</b>	<b>91,821,251</b>

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	325,101	149,607	259,403	144,560	101,299	121,447	105,458	70,875	45,586	2,806	2,120	22,608
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	866,820	365,569	28,451	511,884	332	5,168	19,839	0	0	0	0	8,478

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: DC Clean Rivers Project

Activity Group/Project Title: CZ - Potomac LTCP Projects

Managing Department: Engineering and Technical Services

**EPMC:** EPMC5 - LTCP Program Manager

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

Phase	Start Date
Design:	Mar 2018
Construction:	Mar 2021

<b>Project Completion:</b>	Dec 2025
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**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 tunnels, pumping station, intercepting sewer and various diversion structures. Additional operations and maintenance costs will also be incurred for monitoring the completed facilities to assess performance of the CSO controls against predictions established as part of LTCP development.

Effective Funding by User (percent):

DC -	92.64%
EPA/Fed -	0.28%
WSSC -	5.53%
Fairfax -	1.01%
Loudoun/PI -	0.55%



FY2014 Approved Life Budget	383,700,000
FY2014 Revised/FY2015 Proposed Life Budget	383,700,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	2,281	1,116	3,399	3,087	2,877	5,544	9,503	9,969	23,578	49,445	80,140	79,435
<b>Commitments Budget</b>	4,866	20,935	0	0	0	54,232	0	2,864	284,573	0	16,229	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area

Program Title: DC Clean Rivers Project

Activity Group/Project Title DZ - Rock Creek CSS LTCP Project

Managing Department: Engineering and Technical Services

**EPMC:** EPMC5 - LTCP Program Manager

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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Mar 2019
<b>Construction:</b>	Mar 2022

<b>Project Completion:</b>	Dec 2025
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**Project Description:**

The purpose of this project is to capture and provide storage for combined sewer overflows (CSOs) being discharged to Piney Branch, a tributary to Rock Creek. The project comprises construction of a tunnel approximately 1 mile long, with a volume of about 9.5 million gallons, above the banks of Rock Creek. Construction also includes a pipeline and control structure to convey stored CSO to the existing collection system for treatment at Blue Plains and diversion structures to convey CSO to the tunnel. When completed, this project, together with CSO control projects already completed, or underway, are expected to reduce CSOs to Rock Creek by about 90 percent.

**Impact on Operations:**

The project will result in increased operations and maintenance costs related to the tunnel, pipeline and structures. Additional operations and maintenance costs will also be incurred for monitoring the completed facilities to assess performance of the CSO controls against predictions established as part of LTCP development.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	65,341,600
FY2014 Revised/FY2015 Proposed Life Budget	65,341,600
<b>Increase/(Decrease)</b>	<b>0</b>

<b>Disbursements Budget</b>	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	1,020	0	0	212	710	761	942	1,467	1,501	4,835	14,485	18,516
<b>Commitments Budget</b>	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	1,399	0	0	3,086	0	3,517	7,034	0	0	50,306	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Combined Sewer Overflow Service Area  
 Program Title: DC Clean Rivers Project  
 Activity Group/Project Title: LJ - DC Clean Rivers Green Infrastructures  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC5 - LTCP Program Manager  
 Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	Jun 2014
Construction:	

Project Completion:	Dec 2017
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**Project Description:**

This project proposes to construct large scale public and private space green infrastructure demonstration projects in the watersheds of the Potomac and Rock Creek to test its effectiveness in controlling CSOs. This project involves working with the neighborhoods and the District to install and test GI and to monitor its effectiveness for two years after construction. Based on the results of the demonstration project, DC Water will conduct an open, public process to determine whether to change the CSO controls required for the Potomac River and Rock Creek. 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. If, on the other hand, EPA determines none of the alternatives will provide superior improvements or achieve water quality standards, DC Water will be required to design and construct the tunnel and related facilities in the current consent decree.

**Impact on Operations:**

This project will have no material impact on 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%



FY2014 Approved Life Budget	40,000,000
FY2014 Revised/FY2015 Proposed Life Budget	40,000,000
Increase/(Decrease)	0

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	589	1,602	8,792	12,740	7,076	689	0	0	0	0	0	0
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	8,786	31,214	0	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

**COMBINED SEWER OVERFLOW SERVICE AREA  
PROJECT NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
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
BH	Rock Creek CSO Projects	V-10
BK	CSO Nine Minimum Control Projects	V-11
CI	O Street - Facility Projects	V-12
CY	Anacostia LTCP Projects	V-32
CZ	Potomac LTCP Projects	V-33
D2	Outfall Sewer Rehabilitation	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
IH	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

**COMBINED SEWER OVERFLOW SERVICE AREA  
PROJECT NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
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
LJ	DC Clean Rivers Green Infrastructures	V-35



**CAPITAL  
IMPROVEMENT  
PROGRAM**

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

**SECTION VI  
STORMWATER  
SERVICE AREA**



## **STORMWATER**

The District's Municipal separate storm sewer system (MS4), not including the combined sewers system (CSO), 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 the publicly owned collection & conveyance facilities that transport stormwater runoff to the Anacostia and Potomac Rivers, Rock Creek, and other receiving streams within the District of Columbia.

The District is required to meet certain regulatory requirements in managing its separate stormwater system under the District's MS4 permit issued by the US Environmental Protection Agency (EPA) to reduce/eliminate water quality impact in the receiving waters due to pollutants delivered by the storm water. Since 2007, DDOE, as the MS4 administrator, has been responsible for managing the MS4 Permit compliance activities required under the federal Clean Water Act. Among other things, DDOE coordinates the inter-agency 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 MS4 NPDES 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-permittee, 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. These issues have been addressed.

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. DC Water General Manager is a member of the DC Storm Water Advisory Council, consisting of heads of agencies that have some responsibility for reducing the impact of storm water pollution. The Council meets quarterly to review status of permit compliance and to set policies for MS4 compliance in the District. Since 2001, DC Water collected the MS4 stormwater fees on behalf of the District and acted as storm water 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. These funds, established by the City Council are used exclusively for compliance of the MS4 NPDES permit requirements.

Member agencies enter into an MOU each year to establish agency responsibilities vis-s-vis the MS4 NPDES Permit. 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. DC Water's primary responsibility is to ensure integrity of the storm sewer collection & conveyance infrastructure. However, at the request of the MS4

Administration, DC Water does undertake special engineering studies, design and construction of projects funded by the MS4 Administration.

DC Water's lifetime budget for the Stormwater Service Area is \$91.4 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 – \$13.0 million**

*(project pages VI-9 to VI-28)*

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 - \$25.0 million**

*(project page VI-29)*

Funding for a stormwater pumping rehabilitation project is included in this year's budget. This project will provide reliability and improve the hydraulic capacity, upgrade the stations components to current standards and codes, provide emergency power, and prevent flooding of the adjacent streets to aid in public safety during severe rain events. There are 16 stormwater pumping stations that serve critical areas of the District and are integral to the road network to maintain safe passage of vehicles through areas that do not drain without the assistance of mechanical means. Three of the 16 pumping stations were rehabilitated/ upgraded during DDOT projects that improved adjacent public streets and therefore the remaining 13 will be rehabilitated under this DC Water project.

**DDOT Stormwater Projects – \$3.2 million**

*(project pages VI-30 to VI-43)*

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 - \$12.0 million**

*(project page VI-44)*

This area provides for necessary technical assessments and hydraulic studies required to assess problems in the storm water system. For example, an assessment and analysis of the Bloomingdale neighborhood flooding problems was completed in FY 2013. 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 – \$15.3 million**

*(project page VI-45)*

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.

Other storm sewer projects (or jobs within a project) that are already underway or are planned for design and construction in FY 2014 and FY 20154 include:

- GY01 – Sewers under Buildings
- GY02 – Abandoned Sewers under Buildings
- GY03 – Storm Sewer Rehab 13
- GY04 – Storm Sewer Rehab 14

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater Local Drainage  
 Activity Group/Project Title: A6 - Lining, 22nd & Psts., NW/NWBSO Repair  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Oct 2004
Construction:	Nov 2013

Project Completion:	Nov 2014
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**Project Description:**

This project is for the investigation, design and repair of the existing 8'-3" diameter Northwest Boundary Interceptor Sewer which has shown signs of structural defects during prior inspections. The project will decrease further deterioration of the asset.

**Impact on Operations:**

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%



FY2014 Approved Life Budget	3,019,246
FY2014 Revised/FY2015 Proposed Life Budget	3,032,178
<b>Increase/(Decrease)</b>	<b>12,932</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	270	120	1	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	271	2,761	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater Local Drainage  
 Activity Group/Project Title: GY - Storm Sewer Rehab @ Various Location  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Jul 2013
Construction:	Jan 2015

<b>Project Completion:</b>	Jun 2018
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**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%



FY2014 Approved Life Budget	6,580,000
FY2014 Revised/FY2015 Proposed Life Budget	6,580,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	2	56	786	1,025	427	0	0	0	0	0	0
<b>Commitments Budget</b>	28	164	918	3,081	2,390	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	Jul 2016
Construction:	Jan 2018

Project Completion:	Sep 2021
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**Project Description:**

This multi-job project rehabilitates storm sewers located throughout the District. Storm sewer infrastructure to be rehabilitated is prioritized based on the criticality given to inspected sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as the repair of any offset pipe. Multiple jobs provide the annualized program to rehabilitate the storm sewer inventory which exhibits deteriorated conditions and is located under buildings.

**Impact on Operations:**

Not implementing this project could result in a failure of the infrastructure under buildings, resulting in significant repair cost and liability exposure.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	6,200,000
FY2014 Revised/FY2015 Proposed Life Budget	6,200,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	9	72	609	760	285	621	0	0	0
<b>Commitments Budget</b>	0	0	0	128	352	1,922	1,996	1,803	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater Local Drainage  
 Activity Group/Project Title: IE - Storm Sewer Rehabilitation 3  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Jul 2020
Construction:	Jan 2022

Project Completion:	Mar 2026
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**Project Description:**

This project rehabilitates storm sewers located throughout the District. Storm sewer infrastructure to be rehabilitated is prioritized based on the criticality given to inspected sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as the repair of any offset pipe. Multiple jobs provide the annualized program to rehabilitate the storm sewer inventory which exhibits deteriorated conditions and is located under buildings.

**Impact on Operations:**

Not implementing this project could result in a failure of the infrastructure under buildings, resulting in significant repair cost and liability exposure.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	7,016,500
FY2014 Revised/FY2015 Proposed Life Budget	7,016,500
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	11	72	628	249	1,725
<b>Commitments Budget</b>	0	0	0	0	0	0	0	144	202	2,013	413	4,244

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: C1 - FY 2001 - DSS Storm Sewer Project  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Sep 2002

Project Completion:	Aug 2012
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2001 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%



FY2014 Approved Life Budget	247,000
FY2014 Revised/FY2015 Proposed Life Budget	247,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	169	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	247	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: C4 - FY 2004 - DSS Storm Sewer Project  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Jun 2004

Project Completion:	Jul 2012
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2004 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%



FY2014 Approved Life Budget	497,000
FY2014 Revised/FY2015 Proposed Life Budget	497,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	416	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	497	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: C6 - FY 2006 - DSS Storm Sewer Project  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Jul 2005

Project Completion:	Jan 2014
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2006 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%



FY2014 Approved Life Budget	497,000
FY2014 Revised/FY2015 Proposed Life Budget	497,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	371	39	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	416	81	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: C7 - FY 2007 - DSS Storm Sewer Project<sup>2</sup>  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Sep 2012

Project Completion:	Jun 2013
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2007 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%



FY2014 Approved Life Budget	497,000
FY2014 Revised/FY2015 Proposed Life Budget	497,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	76	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	497	0	0	0	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

<sup>2</sup> Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted in this book is based on the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: C8 - FY 2008 - DSS Storm Sewer Project  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Jun 2008

Project Completion:	Nov 2012
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2008 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%



FY2014 Approved Life Budget	497,000
FY2014 Revised/FY2015 Proposed Life Budget	497,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	486	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	497	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: AO - FY 2009 - DSS Storm Sewer Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Sep 2009

<b>Project Completion:</b>	Sep 2014
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**Project Description:**

This project is for the FY 2009 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%



FY2014 Approved Life Budget	497,000
FY2014 Revised/FY2015 Proposed Life Budget	497,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	421	39	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	421	76	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: AN - FY 2010 - DSS Storm Sewer Projects  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Feb 2010

Project Completion:	Apr 2014
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**Project Description:**

This project is for the FY 2010 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%



FY2014 Approved Life Budget	600,000
FY2014 Revised/FY2015 Proposed Life Budget	600,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	600	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	600	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: BD - FY 2011 - DSS Storm Sewer Projects  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jul 2011
Construction:	

Project Completion:	Dec 2015
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**Project Description:**

This project is for the FY 2011 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%



FY2014 Approved Life Budget	618,000
FY2014 Revised/FY2015 Proposed Life Budget	618,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	538	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	618	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: CD - FY 2012 - DSS Storm Water Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Oct 2011

<b>Project Completion:</b>	Dec 2015
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**Project Description:**

This project is for the FY 2011 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%



FY2014 Approved Life Budget	637,000
FY2014 Revised/FY2015 Proposed Life Budget	637,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	253	164	24	5	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	630	7	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: CN - FY 2013 - DSS Stormwater Projects  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Feb 2013

Project Completion:	Feb 2015
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**Project Description:**

This project is for the FY 2013 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%



FY2014 Approved Life Budget	660,000
FY2014 Revised/FY2015 Proposed Life Budget	660,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	301	164	21	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	558	102	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: D7 - FY 2014 - DSS Stormwater Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Jun 2014

<b>Project Completion:</b>	Sep 2015
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**Project Description:**

This project is for the FY 2014 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%



FY2014 Approved Life Budget	680,000
FY2014 Revised/FY2015 Proposed Life Budget	680,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	38	373	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	680	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: DJ - FY 2015 - DSS Stormwater Projects  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Mar 2015

Project Completion:	Jun 2016
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**Project Description:**

This project is for the FY 2015 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%



FY2014 Approved Life Budget	701,000
FY2014 Revised/FY2015 Proposed Life Budget	701,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	162	217	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	701	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: DX - FY 2016 - DSS Stormwater Projects  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Feb 2016

Project Completion:	May 2017
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**Project Description:**

This project is for the FY 2016 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%



FY2014 Approved Life Budget	720,000
FY2014 Revised/FY2015 Proposed Life Budget	720,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	228	178	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	720	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: FN - FY 2017 - DSS Stormwater Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Feb 2017

<b>Project Completion:</b>	May 2018
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**Project Description:**

This project is for the FY 2017 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%



FY2014 Approved Life Budget	745,000
FY2014 Revised/FY2015 Proposed Life Budget	745,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	241	189	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	745	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: H5 - FY 2018 - DSS Stormwater Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Mar 2018

<b>Project Completion:</b>	May 2019
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**Project Description:**

This project is for the FY 2018 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:**

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%



FY2014 Approved Life Budget	770,000
FY2014 Revised/FY2015 Proposed Life Budget	770,000
<b>Increase/(Decrease)</b>	0

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	253	206	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	770	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: HM - FY 2019 - DSS Stormwater Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Mar 2019

<b>Project Completion:</b>	Feb 2020
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	795,000
FY2014 Revised/FY2015 Proposed Life Budget	795,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	287	197	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	795	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: JH - FY 2020 - DSS Storm Sewer Projects  
 Managing Department: Sewer Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Feb 2020

<b>Project Completion:</b>	Feb 2021
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**Project Description:**  
 This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2020 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%



FY2014 Approved Life Budget	820,000
FY2014 Revised/FY2015 Proposed Life Budget	820,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	319	209	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	820	0	0	0	0

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

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: LO - FY 2021 - DSS Storm Sewer Projects  
 Managing Department: Sewer Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Feb 2021

Project Completion:	Feb 2022
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2021 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%



FY2014 Approved Life Budget	845,000
FY2014 Revised/FY2015 Proposed Life Budget	845,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	336	224	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	845	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: M8 - FY 2022 - DSS Stormwater Projects  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	
<b>Construction:</b>	Jan 2022

<b>Project Completion:</b>	Jan 2023
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2022 for stormwater infrastructure rehabilitation of the existing stormwater system. Job numbers will be issued to identify different jobs within the project.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	820,000
<b>Increase/(Decrease)</b>	<b>820,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	457	183	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	820	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater On-Going  
 Activity Group/Project Title: MG - FY 2023 - DSS Stormwater Projects  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Oct 2022

<b>Project Completion:</b>	Jan 2024
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2023 for stormwater infrastructure rehabilitation of the existing stormwater system. Job numbers will be issued to identify different jobs within the project.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	844,600
<b>Increase/(Decrease)</b>	<b>844,600</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	473	180
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	0	845	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater Pumping Facilities  
 Activity Group/Project Title: NG - Stormwater Pump Stations Rehabilitation  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Nov 2015
Construction:	Apr 2017

<b>Project Completion:</b>	Jun 2018
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**Project Description:**

This project provides for the rehabilitation of 12 of the 16 stormwater pumping stations that were not upgraded in the last 5 years. These stations are aging and require new mechanical and electrical equipment to maintain operations.

**Impact on Operations:**

This project has no material impacts on the operating budget.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	25,000,000
<b>Increase/(Decrease)</b>	<b>25,000,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	1,222	7,827	8,888	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	4,508	20,492	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: P5 - FY 2004 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
 EPMC: DETS - Engineering & Tech Services  
 Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Aug 2004
Construction:	

Project Completion:	Oct 2014
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Public Works in FY 2004 for stormwater infrastructure improvements. Job numbers will be issued to identify location of projects.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	20,000
FY2014 Revised/FY2015 Proposed Life Budget	20,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	1	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	20	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: P8 - FY 2007 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
 EPMC: DETS - Engineering & Tech Services  
 Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Nov 2013
Construction:	

Project Completion:	Oct 2014
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Public Works in FY 2007 for stormwater infrastructure improvements. Job numbers will be issued to identify location of projects.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	155,000
FY2014 Revised/FY2015 Proposed Life Budget	155,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	155	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: P9 - FY 2008 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
 EPMC: DETS - Engineering & Tech Services  
 Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Nov 2013
Construction:	

Project Completion:	Oct 2014
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**Project Description:**

This project was created as an annual program for planned projects by the Department of Public Works in FY 2008 for stormwater infrastructure improvements. Job numbers will be issued to identify location of projects.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	1,000,000
FY2014 Revised/FY2015 Proposed Life Budget	1,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	1,000	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: AR - FY 2009 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Nov 2013
Construction:	

<b>Project Completion:</b>	Oct 2014
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**Project Description:**

This project is for the FY 2009 annual program of stormwater infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District of Columbia Department of Public Works. This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost. Job numbers will be issued to identify the location of projects.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	160,000
FY2014 Revised/FY2015 Proposed Life Budget	160,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	160	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: B3 - FY 2010 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Nov 2014
Construction:	

<b>Project Completion:</b>	Oct 2015
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**Project Description:**

This project is for the FY 2010 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Public Works. This coordination minimize 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%



FY2014 Approved Life Budget	165,000
FY2014 Revised/FY2015 Proposed Life Budget	165,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	15	1	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	165	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: BM - FY 2011 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Nov 2015
Construction:	

<b>Project Completion:</b>	Oct 2016
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**Project Description:**

This project is for the FY 2011 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Public Works. This coordination minimize 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%



FY2014 Approved Life Budget	170,000
FY2014 Revised/FY2015 Proposed Life Budget	170,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	8	1	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	170	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title:   
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Oct 2016
Construction:	

<b>Project Completion:</b>	Oct 2017
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**Project Description:**

This project is for the FY 2012 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Public Works. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	<input type="text" value="175,000"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="175,000"/>
<b>Increase/(Decrease)</b>	<input type="text" value="0"/>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	8	1	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	175	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title:   
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Oct 2017
Construction:	

<b>Project Completion:</b>	Oct 2018
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**Project Description:**

This project is for the FY 2013 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%



FY2014 Approved Life Budget	<input type="text" value="180,000"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="180,000"/>
<b>Increase/(Decrease)</b>	<input type="text" value="0"/>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	8	1	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	180	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: D8 - FY 2014 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Oct 2018
<b>Construction:</b>	

<b>Project Completion:</b>	Oct 2019
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**Project Description:**

This project is for the FY 2014 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%



FY2014 Approved Life Budget	185,000
FY2014 Revised/FY2015 Proposed Life Budget	185,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	9	1	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	185	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: DK - FY 2015 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Oct 2014
Construction:	

<b>Project Completion:</b>	Sep 2015
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**Project Description:**

This project is for the FY 2015 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%



FY2014 Approved Life Budget	191,000
FY2014 Revised/FY2015 Proposed Life Budget	191,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	19	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	191	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: DT - FY 2016 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Oct 2015
<b>Construction:</b>	

<b>Project Completion:</b>	Sep 2016
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**Project Description:**

This project is for the FY 2016 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Public Works. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	196,000
FY2014 Revised/FY2015 Proposed Life Budget	196,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	9	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	196	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 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: FM - FY 2017 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** EPMC3C - Sewer Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Oct 2016
Construction:	

<b>Project Completion:</b>	Sep 2017
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**Project Description:**

This project is for the FY 2017 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the storm water 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%



FY2014 Approved Life Budget	205,000
FY2014 Revised/FY2015 Proposed Life Budget	205,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	9	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	205	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: H4 - FY 2018 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Oct 2017
Construction:	

<b>Project Completion:</b>	Sep 2018
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**Project Description:**

This project is for the FY 2018 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%



FY2014 Approved Life Budget	215,000
FY2014 Revised/FY2015 Proposed Life Budget	215,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	10	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	215	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: DDOT Stormwater  
 Activity Group/Project Title: HP - FY 2019 - DDOT Stormwater Projects  
 Managing Department: DC Dept. of Transportation  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Oct 2018
Construction:	

Project Completion:	Oct 2019
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**Project Description:**

This project was created as an annual program for planned projects by the District of Columbia Department of Transportation in FY 2019 for stormwater infrastructure improvements where stormwater systems will need to be modified. Job numbers will be issued to identify different jobs within the project.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	220,000
FY2014 Revised/FY2015 Proposed Life Budget	220,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	9	1	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	220	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Stormwater Service Area  
 Program Title: Stormwater Research & Program Mgmt  
 Activity Group/Project Title: AT - Stormwater Program Management  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC3C - Sewer Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Oct 2026
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**Project Description:**

This project provides engineering program management services for the stormwater service area capital projects and design management services for the rehabilitation or replacement of 15 stormwater pumping stations. It also provides engineering services for condition assessment of the storm sewer system and development of conceptual design for the storm sewer system capital projects.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	10,630,190
FY2014 Revised/FY2015 Proposed Life Budget	12,051,406
<b>Increase/(Decrease)</b>	<b>1,421,216</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	7,312	436	190	138	171	192	258	227	171	177	227	726
<b>Commitments Budget</b>	8,359	493	0	0	1,600	0	0	0	0	1,600	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 pay back, Mission / Function over long term

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Jan 2006
<b>Construction:</b>	Oct 2009

<b>Project Completion:</b>	Sep 2016
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**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 - 96.43%  
 EPA/Fed - 3.57%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	15,162,370
FY2014 Revised/FY2015 Proposed Life Budget	15,341,154
<b>Increase/(Decrease)</b>	<b>178,784</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	5,690	1,839	1,173	1,190	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	9,084	2,629	1,658	1,970	0	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

**STORMWATER SERVICE AREA  
PROJECT ID NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
A6	Lining , 22nd and P Street, NW/NWBSO Repair	VI-5
AN	FY2010 - DSS Storm Sewer Projects	VI-15
AO	FY2009 - DSS Storm Sewer Projects	VI-14
AR	FY2009 - DDOT STORMWATER PROJECTS	VI-33
AT	Stormwater Program Management	VI-44
B3	B3 FY2010 - DDOT Stormwater Projects	VI-34
BD	FY2011 - DSS Storm Sewer Projects	VI-16
BM	FY2011 - DDOT Stormwater Projects	VI-35
BO	Future Stormwater Projects	VI-45
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
CB	FY2012 - DDOT Stormwater Projects	VI-36
CD	FY2012 - DSS Storm Water Projects	VI-17
CL	FY2013 - DDOT Stormwater Projects	VI-37
CN	FY2013 - DSS Stormwater Projects	VI-18
D7	FY2014 - DSS Stormwater Projects	VI-19
D8	FY2014 - DDOT Stormwater Projects	VI-38
DJ	FY2015 - DSS Stormwater Projects	VI-20
DK	FY2015 - DDOT Stormwater Projects	VI-39
DT	FY2016 - DDOT Stormwater Projects	VI-40
DX	FY2016 - DSS Stormwater Projects	VI-21

**STORMWATER SERVICE AREA  
PROJECT ID NAME AND PAGE NUMBERS**

FM	FY2017 - DDOT Stormwater Projects	VI-41
FN	FY2017 - DSS Stormwater Projects	VI-22
GY	Storm Sewer Rehab @ Various Location	VI-6
H4	FY2018 - DDOT Stormwater Projects	VI-42
H5	FY2018 - DSS Stormwater Projects	VI-23
HM	FY2019 - DSS Stormwater Projects	VI-24
HP	FY2019 - DDOT Stormwater Projects	VI-43
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
M8	FY2022 - DSS Storm Sewer Projects	VI-27
MG	FY2023 - DSS Storm Sewer Projects	VI-28
NG	Stormwater Pump Stations Rehabilitation	VI-29
P5	FY2004 - DDOT STORMWATER PROJECTS	VI-30
P8	FY2007 - DDOT STORMWATER PROJECTS	VI-31
P9	FY2008 - DDOT STORMWATER PROJECTS	VI-32



**CAPITAL  
IMPROVEMENT  
PROGRAM**

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

**SECTION VII  
WATER SYSTEM  
SERVICE AREA**

## **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, meter replacements and the Customer Information System (CIS).

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 \$1.7 billion, an increase of \$62.1 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 System 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.

The Water Program is currently developing an update to the 2009 Water System Facilities Plan and a draft updated plan will be submitted in FY 2014. The updated Water System Facilities Plan will outline recommendations for the water service infrastructure renewal needs through FY 2035 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;
- Pipeline rehabilitation and replacement strategies for assets renewal; and
- Present a prioritized Capital Improvement Program (CIP).

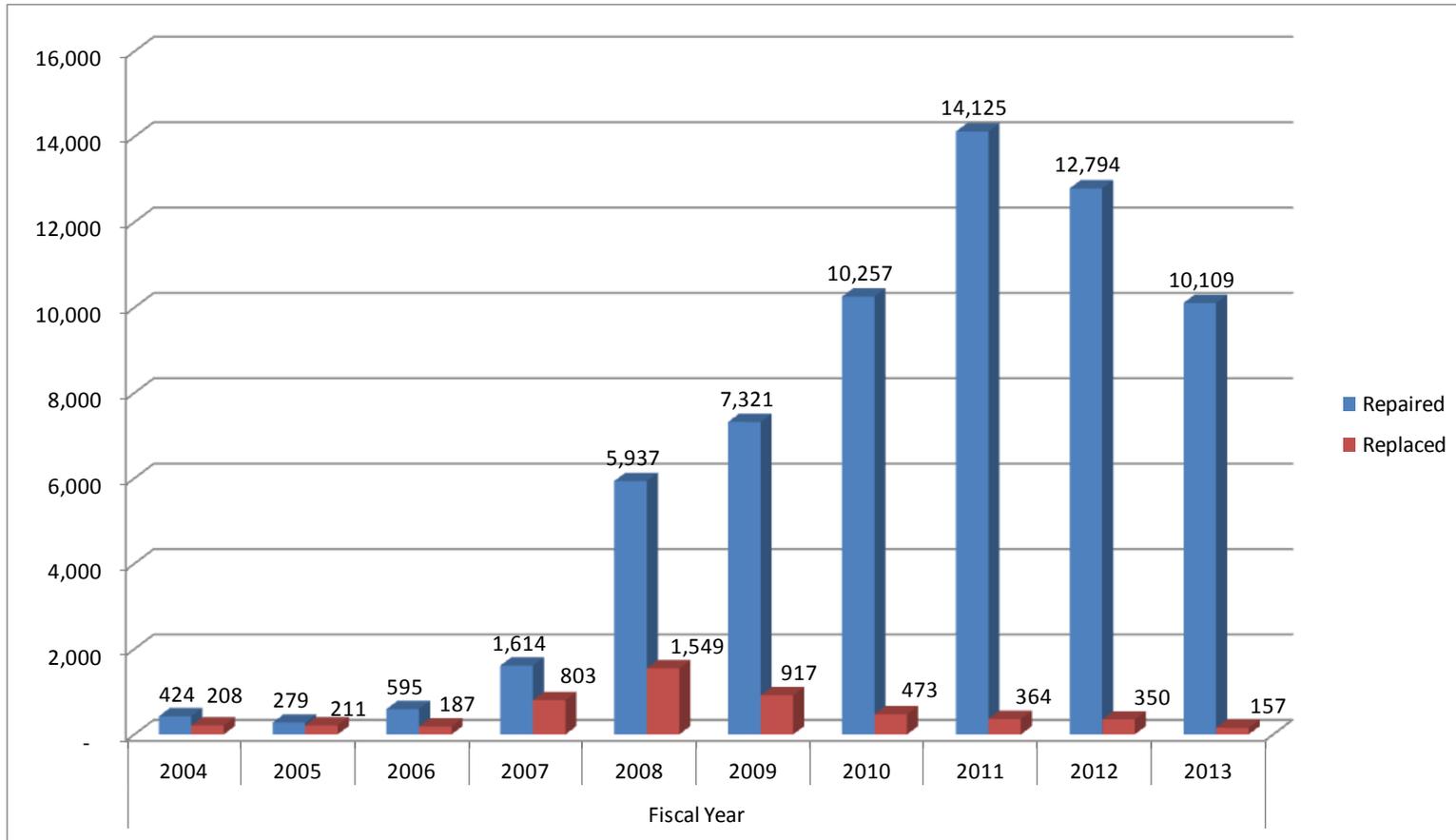
## **Water Distribution System – \$940.9 million**

*(project pages VII-8 to VII-50)*

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:

- *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 as required, will be accomplished at the same time the small diameter water main is replaced. The concept is to complete all needed improvements to a block at one time to minimize disruption and costs. In FY 2013, DC Water prioritized and selected over 10 miles of small mains for replacement and continued the transition of completing designs with in-house staff. Currently, DC Water is on schedule to meet goal of 1% renewal (11 miles) starting construction in FY 2015.
- *Large Diameter Water Main Replacement* – DC Water is 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 specific large diameter pipe rehabilitation or replacement needs in order to assign capital funds where the need is most critical. The plan for FY 2014 - FY 2016 includes limited capital funds to rehabilitate large diameter mains found to be in a critical deteriorated condition. Beginning in FY 2017 there will be more capital funds available for an annual large diameter rehabilitation/replacement program.
- *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 FY 2013, 233 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.

## Department of Water Services Fire Hydrant Repair and Replacement Report



\* 2004 to date Fire hydrants repaired = 63,455

\* 2004 to date Fire Hydrants Replaced = 5,219

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.

**Water On-Going Projects – \$140.9 million**

*(project pages VII-51 to VII-66)*

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 repaving 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 – \$167.2 million**

*(project pages VII-67 to VII-81)*

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 is on-going at a total project budget of \$11.5 million and is expected to be completed in FY 2015.
- A project to upgrade the 16<sup>th</sup> 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 \$4.7 million. Construction is scheduled to commence in FY 2014.

**DDOT Water Program – \$38.7 million**

*(project pages VII-82 to VII-92)*

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 – \$76.4 million**

*(project pages VII-93 to VII-97)*

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. This project is under design and construction is scheduled to start in FY 2014. In addition, planning is on-going for the following two new storage facilities: a storage reservoir in the 2<sup>nd</sup> high service area east of Rock Creek (Project MR) and a two million gallon elevated storage tank in the 4<sup>th</sup> high service area, (Project MQ).

In coordination with the triennial cleaning & disinfection schedule, detailed inspection of the 8 storage facilities was completed and design has started to implement the recommended rehabilitations for each facility. In addition, 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 (Project FA). This work will be constructed in coordination with the triennial cleaning & disinfection schedule of each facility beginning in 2014 and continuing through 2019, as approved by EPA.

Also, included in the CIP is a project to rehabilitate the coating systems for: Anacostia Tank No. 1 (Boulevard Tank), Anacostia Tank No. 2 (Good Hope Tank), and Fort Reno Tank 2 (Project HW).

**Water Projects Program- Management – \$74.8 million**

*(project pages VII-98 to VII-100)*

This program provides engineering program management services for the water system capital improvements program, including assessing system needs, developing facilities plans, conceptual designs, design scopes of work, cost estimates, task orders or agreements, and design document review. In FY 2013, the Water Program developed a water system facilities plan update and will submit a draft of the plan in FY 2014. The updated Water System Facilities Plan will outline recommendations for the water service infrastructure renewal needs through FY 2035

**Meter Replacements / AMR – \$50.1 million**

*(project pages VII-101 to VII-103)*

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 FY 2022 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. The AMR replacements are on an accelerated schedule.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title:   
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Dec 2008
Construction:	Jan 2014

<b>Project Completion:</b>	Jun 2015
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Project Description:  
 This project entails the upgrade of 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%



FY2014 Approved Life Budget	<input type="text" value="2,726,030"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="2,765,777"/>
<b>Increase/(Decrease)</b>	<input type="text" value="39,747"/>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	973	425	681	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,083	1,683	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: BZ - Large Valve Repl. (Contracts 8, 9 & 10)  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Mar 2009
Construction:	Feb 2010

Project Completion:	Sep 2015
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Project Description:  
 Replacement of approximately 60 broken large diameter valves under separate contracts throughout the water distribution system. Replacement of inoperable valves will improve the reliability of the system by reducing the number of valves that would need to be closed under emergency conditions. Increasing the number of operable valves in the system will also reduce the number of customers that may be impacted during emergency conditions.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

Effective Funding by User (percent):

DC - 54.82%  
 EPA/Fed - 45.18%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	12,293,597
FY2014 Revised/FY2015 Proposed Life Budget	12,432,713
<b>Increase/(Decrease)</b>	<b>139,116</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	4,956	2,101	475	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	12,098	335	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 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	Nov 2016
Construction:	Mar 2018

<b>Project Completion:</b>	Aug 2020
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**Project Description:**

Replacement of 12,000 linear feet of 30-inch cast iron water main with a ductile iron 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 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%



FY2014 Approved Life Budget	18,400,000
FY2014 Revised/FY2015 Proposed Life Budget	18,400,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	8	145	449	539	1,524	6,551	3,754	0	0	0	0
<b>Commitments Budget</b>	0	300	0	600	1,370	16,130	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title:   
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Mar 2007
Construction:	Nov 2009

<b>Project Completion:</b>
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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.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of small diameter water mains.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	Apr 2015
Construction:	Sep 2016

Project Completion:	Feb 2019
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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:

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	38,405,000
FY2014 Revised/FY2015 Proposed Life Budget	38,405,000
<b>Increase/(Decrease)</b>	<b>0</b>

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	0	0	5,281	1,498	7,086	10,417	2,787	0	0	0	0	0
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	0	0	9,210	29,195	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 2014 - 2023 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  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Jun 2011
Construction:	Jan 2014

Project Completion:	Jul 2016
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Project Description:  
 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 some impact on the operating budget to maintain the cathodic protection system.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	645,818
FY2014 Revised/FY2015 Proposed Life Budget	665,692
<b>Increase/(Decrease)</b>	<b>19,874</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	296	76	150	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	320	346	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: DL - Citywide Fire Hydrant Program  
 Managing Department: Water Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	Jul 2007

Project Completion:	Nov 2015
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Project Description:

This project provides funding for the replacement and upgrade of approximately 9,000 fire hydrants on behalf of the District government. It is expected that approximately 3,000 broken and older model type fire hydrants will be replaced or rehabilitated under this project.

Impact on Operations:

This project will have no material impact on the DC Water operating budget, because the maintenance cost of fire hydrants is reimbursed by the DC Government.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	25,539,718
FY2014 Revised/FY2015 Proposed Life Budget	23,964,267
<b>Increase/(Decrease)</b>	<b>-1,575,451</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	23,964	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	23,964	0	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 2014 - 2023 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

Phase	Start Date
Design:	Apr 2016
Construction:	Sep 2017

<b>Project Completion:</b>	Feb 2020
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**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:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	39,560,000
FY2014 Revised/FY2015 Proposed Life Budget	39,560,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	5,335	1,540	7,265	10,739	2,889	0	0	0	0
<b>Commitments Budget</b>	0	0	0	9,670	29,890	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: F2 - Small Diameter Water Main Rehab 14  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2017
Construction:	Sep 2018

<b>Project Completion:</b>	Feb 2021
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**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:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	40,470,000
FY2014 Revised/FY2015 Proposed Life Budget	40,470,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	5,578	1,565	7,418	11,113	2,955	0	0	0
<b>Commitments Budget</b>	0	0	0	0	10,020	30,450	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: F6 - Steel Water Main Rehab - Phase I  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Sep 2010
Construction:	Aug 2012

Project Completion:	Apr 2018
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Project Description:  
 This project is to rehabilitate, replace and/or install cathodic protection systems on high priority large diameter steel water mains, where there is a near-term need to mitigate the effects corrosion degradation of these critical pipelines based upon recent evaluations.

**Impact on Operations:**  
 This project will have some impact on the operating budget to maintain installed cathodic protection systems.

Effective Funding by User (percent):

DC - 76.11%  
 EPA/Fed - 23.89%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	9,253,206
FY2014 Revised/FY2015 Proposed Life Budget	11,592,322
<b>Increase/(Decrease)</b>	<b>2,339,116</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	2,099	1,402	350	2,050	1,587	265	0	0	0	0	0	0
<b>Commitments Budget</b>	5,582	0	150	4,510	1,350	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Jun 2012
Construction:	Oct 2013

<b>Project Completion:</b>	Jul 2015
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**Project Description:**

This project includes the installation of approximately 4,700 linear feet of 20-inch water main in the Low Service Area and a pressure reducing valve (PRV) between the 1st High and the Low Service Areas. The existing Low Service 20-inch main will be extended from the intersection of 17th and C Streets, NE to the intersection of Potomac Avenue, G Street and Kentucky Avenue, SE where it will connect to the existing Low Service 30-inch water main.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	4,910,000
FY2014 Revised/FY2015 Proposed Life Budget	6,009,369
<b>Increase/(Decrease)</b>	<b>1,099,369</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	233	1,557	2,320	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	499	5,510	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: FT - Water Mains Rehab Phase II  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2015
Construction:	Aug 2016

<b>Project Completion:</b>	Feb 2020
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**Project Description:**

This project is to install cathodic protection (CP) systems, rehabilitate, or replace large diameter mains. There is a need of CP systems, particularly for large diameter steel mains in order to mitigate the effects corrosion degradation of these pipelines. Also, there is a need to rehabilitate or replace large diameter pipelines of different material. This project includes pipe condition assessments (PCA) of these mains to determine the best option for rehabilitation or replacement if necessary. PCA results are also used to prioritize the specifically identified design and construction work.

**Impact on Operations:**

Regular inspections and testing of CP systems would be required in the future, which would impact the operating budget. Temporary outages of large diameter pipelines due to assessment and/or construction activities will require coordination and adjustments to operations.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	38,500,000
FY2014 Revised/FY2015 Proposed Life Budget	41,500,000
<b>Increase/(Decrease)</b>	<b>3,000,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	813	2,242	4,921	11,212	7,068	2,847	0	0	0	0
<b>Commitments Budget</b>	0	0	6,200	35,300	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 2014 - 2023 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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Apr 2011
<b>Construction:</b>	Nov 2010

<b>Project Completion:</b>	Mar 2020
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**Project Description:**  
 This project provides funding for the replacement and upgrade of fire hydrants in the District. It is expected that approximately 2,700 broken and older model type fire hydrants will be replaced and 2,700 will be upgraded under this project if accepted by the District of Columbia under the October 2007 Memorandum of Understanding. This program is expected to be totally reimbursed by the District Government and will not impact retail rate payers.

**Impact on Operations:**  
 This project will have no material impact on the DC Water operating budget, because the maintenance cost of fire hydrants is reimbursed by the DC government.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	28,244,481
FY2014 Revised/FY2015 Proposed Life Budget	28,244,481
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	4,883	2,621	2,541	2,479	2,365	2,274	2,316	1,101	0	0	0	0
<b>Commitments Budget</b>	10,584	2,697	2,777	2,861	2,948	3,035	3,125	217	0	0	0	0

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

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Apr 2018
Construction:	Sep 2019

Project Completion:	Feb 2022
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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:

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	39,750,000
FY2014 Revised/FY2015 Proposed Life Budget	39,750,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	6,076	1,524	7,280	10,724	2,855	0	0
<b>Commitments Budget</b>	0	0	0	0	0	10,380	29,370	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Dec 2009
Construction:	Aug 2011

<b>Project Completion:</b>	Apr 2015
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**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:**

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

Effective Funding by User (percent):

DC - 69.71%  
 EPA/Fed - 30.29%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	12,746,265
FY2014 Revised/FY2015 Proposed Life Budget	12,865,508
<b>Increase/(Decrease)</b>	<b>119,243</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	7,126	805	16	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	12,866	0	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 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	Apr 2018
Construction:	Sep 2019

Project Completion:	Feb 2022
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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%



FY2014 Approved Life Budget	20,000,000
FY2014 Revised/FY2015 Proposed Life Budget	20,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	297	897	4,469	6,593	1,752	0	0
<b>Commitments Budget</b>	0	0	0	0	0	1,600	18,400	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Apr 2019
<b>Construction:</b>	Sep 2020

<b>Project Completion:</b>	Feb 2023
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**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:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	41,500,000
FY2014 Revised/FY2015 Proposed Life Budget	41,500,000
<b>Increase/(Decrease)</b>	<b>0</b>

<b>Disbursements Budget</b>	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	0	0	0	0	0	6,172	1,585	7,532	11,136	2,944	0
<b>Commitments Budget</b>	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	0	0	0	0	0	10,820	30,680	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: l8 - 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

Phase	Start Date
Design:	Jun 2012
Construction:	Jul 2014

<b>Project Completion:</b>	Sep 2017
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**Project Description:**

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	17,700,000
FY2014 Revised/FY2015 Proposed Life Budget	17,938,486
<b>Increase/(Decrease)</b>	<b>238,486</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	482	382	4,075	4,544	1,464	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,298	6,340	10,300	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 2014 - 2023 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

Phase	Start Date
Design:	May 2015
Construction:	Oct 2016

<b>Project Completion:</b>	Oct 2020
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**Project Description:**

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	18,390,000
FY2014 Revised/FY2015 Proposed Life Budget	18,390,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	44	227	1,464	3,104	3,104	1,884	101	0	0	0
<b>Commitments Budget</b>	0	0	500	510	5,990	5,610	5,780	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	May 2018
<b>Construction:</b>	Oct 2019

<b>Project Completion:</b>	Oct 2023
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**Project Description:**

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

**Impact on Operations:**

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	20,130,000
FY2014 Revised/FY2015 Proposed Life Budget	20,130,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	47	254	1,635	3,481	3,460	2,049	109
<b>Commitments Budget</b>	0	0	0	0	0	550	560	6,550	6,140	6,330	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2020
Construction:	Sep 2021

Project Completion:	Feb 2024
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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:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	46,650,000
FY2014 Revised/FY2015 Proposed Life Budget	46,650,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	8,344	1,687	8,245	12,018	3,054
<b>Commitments Budget</b>	0	0	0	0	0	0	0	13,380	33,270	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Apr 2021
Construction:	Aug 2022

Project Completion:	Feb 2027
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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.

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%



FY2014 Approved Life Budget	63,710,000
FY2014 Revised/FY2015 Proposed Life Budget	63,710,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	328	1,321	5,868	34,372
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	1,720	20,760	21,350	19,880

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	May 2021
Construction:	Oct 2022

Project Completion:	Oct 2026
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Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	17,610,000
FY2014 Revised/FY2015 Proposed Life Budget	17,610,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	52	282	1,784	9,457
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	480	490	5,720	10,920

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Apr 2021
Construction:	Sep 2022

<b>Project Completion:</b>	Feb 2025
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**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%  
 EPA/Fed - 0.00%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	46,340,000
FY2014 Revised/FY2015 Proposed Life Budget	46,340,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	5,723	3,059	8,422	15,008
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	12,070	34,270	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: KF - Small Diameter Water Main Rehabilitation 19  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2022
Construction:	Sep 2023

<b>Project Completion:</b>	Feb 2026
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**Project Description:**  
 This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. Work includes the elimination of dead end pipelines in the system, reconfiguration of inefficient alignments, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other similar work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**  
 This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	47,730,000
<b>Increase/(Decrease)</b>	<b>47,730,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	5,913	3,125	23,758
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	12,440	35,290	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: KG - Small Diameter Water Main Rehabilitation 20  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2023
Construction:	Aug 2024

<b>Project Completion:</b>	Feb 2027
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**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. Work includes the elimination of dead end pipelines in the system, reconfiguration of inefficient alignments, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. To minimize public inconvenience caused by construction work and to save DC Water the paving cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other similar work performed by the District Department of Transportation (DDOT). The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	49,160,000
<b>Increase/(Decrease)</b>	<b>49,160,000</b>

**NEW**

Disbursements Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	0	0	0	0	0	0	0	0	0	6,076	27,511
Commitments Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	0	0	0	0	0	0	0	0	0	12,810	36,350

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: LT - Water System SCADA  
 Managing Department: Water Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jan 2015
Construction:	Jun 2016

<b>Project Completion:</b>	Apr 2019
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**Project Description:**  
 This project implements recommendations of the 2013 SCADA Master Plan. It is to add additional sites and also optimize the existing Water SCADA System. The initial focus will be to develop standards, implement changes needed for existing SCADA sites to conform to the standards, and perform system-wide testing to promote reliable monitoring and control of water system SCADA sites. New sites will be added such as: tanks, reservoirs, zone pressure monitoring, distribution valve monitoring, and water quality monitoring. In the future a fully optimized SCADA will move water operations from an operator-based automation system to a centralized computer decision system that forecasts demand and continuously calculates optimal system settings within established operating constraints. This is the direction envisioned in the SCADA Master Plan.

**Impact on Operations:**

The primary purpose of the SCADA System is to monitor the health of the distribution system and control water system equipment in order to meet water quality requirements and customer needs. Water and sewer operators need to understand alarms and see discrepancies between known field conditions and SCADA System displays. This affects operations ability to make effective operating decisions and respond appropriately to unexpected changes in system operation.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	8,000,000
<b>Increase/(Decrease)</b>	<b>8,000,000</b>

**NEW**

Disbursements Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	146	114	222	1,123	1,562	547	0	0	0	0	0
Commitments Budget	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
	0	400	600	7,000	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: LU - Water Facilities Security System Upgrades 2  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Feb 2017

<b>Project Completion:</b>	Feb 2022
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**Project Description:**

This project is to upgrade security systems at water pumping stations, water storage reservoirs and elevated tanks, and other water distribution system structures and sites. Work consists of installing CCTV cameras, access card readers, intrusion sensors, fencing, network and communications, and other control surveillance devices and systems to protect the water facilities and infrastructure against vandalism, criminal activity, and possible future terrorism; as well as to protect DC Water personnel in accordance with the recommendations of the Vulnerability Assessment (VA) Study

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	2,000,000
<b>Increase/(Decrease)</b>	<b>2,000,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	30	151	304	286	152	80	0	0
<b>Commitments Budget</b>	0	0	0	0	2,000	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Aug 2002
Construction:	Sep 2007

<b>Project Completion:</b>
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**Project Description:**  
 This project includes the installation of approximately 5,300 linear feet of 24-inch diameter water main connecting the 20-inch diameter main along MLK Jr. Avenue to the Fort Stanton reservoirs. This project will provide an alternate feed to the Fort Stanton Reservoirs and proposed First High South Low Lift Pumping Station, improving the overall reliability of the Anacostia First High service area.

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

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

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: MU - Small Diameter Watermain Rehab. (2)  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Aug 2005
Construction:	Jul 2008

Project Completion:	Feb 2014
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Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	15,043,352
FY2014 Revised/FY2015 Proposed Life Budget	15,043,352
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	12,928	1,122	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	15,043	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: MV - Small Diameter Watermain Rehab. (3)  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	May 2006
Construction:	Mar 2009

<b>Project Completion:</b>	Jan 2016
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**Project Description:**  
 This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**  
 This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

DC - 49.05%  
 EPA/Fed - 50.95%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	15,533,139
FY2014 Revised/FY2015 Proposed Life Budget	15,533,139
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	12,335	145	953	74	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	13,795	1,738	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: MW - Small Diameter Watermain Rehab. (4)  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Aug 2008
Construction:	Oct 2007

<b>Project Completion:</b>	Mar 2017
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**Project Description:**  
 This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**  
 This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

DC - 69.40%  
 EPA/Fed - 30.60%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	7,713,453
FY2014 Revised/FY2015 Proposed Life Budget	7,713,453
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	5,593	201	519	341	139	0	0	0	0	0	0	0
<b>Commitments Budget</b>	6,213	1,500	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: MX - Small Diameter Watermain Rehab. (5)  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Jan 2008
<b>Construction:</b>	Oct 2008

<b>Project Completion:</b>	Dec 2016
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**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

DC - 60.93%  
 EPA/Fed - 39.07%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	13,313,815
FY2014 Revised/FY2015 Proposed Life Budget	13,433,058
<b>Increase/(Decrease)</b>	<b>119,243</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	7,775	1,922	295	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	10,933	2,500	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: N8 - Small Diameter Watermain Rehab. (6)  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Apr 2009
<b>Construction:</b>	Jan 2010

<b>Project Completion:</b>	Dec 2014
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**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

DC - 36.38%  
 EPA/Fed - 63.62%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	13,246,599
FY2014 Revised/FY2015 Proposed Life Budget	13,345,968
<b>Increase/(Decrease)</b>	<b>99,369</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	10,067	27	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	13,346	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: N9 - Small Diameter Watermain Rehab. (7)  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Aug 2010
<b>Construction:</b>	Jan 2012

<b>Project Completion:</b>	Aug 2014
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**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

DC - 33.99%  
 EPA/Fed - 66.01%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	18,512,243
FY2014 Revised/FY2015 Proposed Life Budget	18,710,981
<b>Increase/(Decrease)</b>	<b>198,738</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	13,261	1,531	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	18,711	0	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 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	Nov 2003
Construction:	Mar 2009

Project Completion:	Nov 2015
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Project Description:  
 This project is to install approximately 2,000 linear feet of 20-inch diameter water main in the 4th High Service Area, to relocate portions of the existing 20-inch cast iron water main from private properties to public space.

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	4,529,689
FY2014 Revised/FY2015 Proposed Life Budget	4,529,689
<b>Increase/(Decrease)</b>	0

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	3,026	51	258	19	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	4,030	500	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: O0 - Small Diameter Watermain Rehab. (8)  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jun 2011
Construction:	Apr 2013

Project Completion:	Mar 2016
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Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

DC - 35.41%  
 EPA/Fed - 64.59%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	18,779,435
FY2014 Revised/FY2015 Proposed Life Budget	19,097,416
<b>Increase/(Decrease)</b>	<b>317,981</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	1,758	4,841	5,324	1,483	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	19,097	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: O1 - Small Diameter Watermain Rehab. (9)  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jun 2012
Construction:	Nov 2013

Project Completion:	Nov 2015
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Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

DC - 68.98%  
 EPA/Fed - 31.02%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	23,700,000
FY2014 Revised/FY2015 Proposed Life Budget	24,097,476
<b>Increase/(Decrease)</b>	<b>397,476</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	1,074	4,539	10,093	1,063	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,397	22,700	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 2014 - 2023 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  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Mar 2013
Construction:	Jul 2014

<b>Project Completion:</b>	Nov 2016
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**Project Description:**

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace deteriorated pipe, and improve available fire flows and water quality.

**Impact on Operations:**

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	28,450,000
FY2014 Revised/FY2015 Proposed Life Budget	28,450,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	640	9,928	9,116	420	0	0	0	0	0	0	0
<b>Commitments Budget</b>	960	15,850	11,640	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 2014 - 2023 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

Phase	Start Date
Design:	Jan 2014
Construction:	Jun 2015

Project Completion:	Aug 2017
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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:

This project will have no material impact on the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	37,505,000
FY2014 Revised/FY2015 Proposed Life Budget	37,505,000
<b>Increase/(Decrease)</b>	<b>0</b>

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	0	4,290	1,451	12,099	6,787	0	0	0	0	0	0	0
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	0	8,100	20,055	9,350	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: QM - Small Valve Replacements - Contract 4  
 Managing Department: Engineering and Technical Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Sep 2002
<b>Construction:</b>	Jul 2004

<b>Project Completion:</b>
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**Project Description:**  
 This project includes the replacement of approximately 258, 12-inch and smaller, inoperable distribution valves. The replacement of these inoperable valves will improve the reliability of the system by limiting the number of valves that need to be closed under emergency conditions and limiting the number of customers that would otherwise lose water service. This project will also improve the effectiveness of the DWS flushing program.

**Impact on Operations:**  
 This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of small diameter water mains.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	<input style="width: 100px; height: 20px;" type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input style="width: 100px; height: 20px;" type="text"/>
<b>Increase/(Decrease)</b>	<input style="width: 100px; height: 20px;" type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Distribution Systems  
 Activity Group/Project Title: S3 - Large Valve Replacement (Contract 3-7)  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jul 1999
Construction:	Jan 2004

Project Completion:	Aug 2016
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Project Description:

This project replaces approximately 100 inoperable large diameter valves throughout the distribution system. This project includes four separate valve replacement contracts. Replacement of inoperable valves will improve the reliability of the system by reducing the number of valves that would need to be closed under emergency conditions. Increasing the number of operable valves in the system will also reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

This project will have no material impact on the operating budget, but it will improve valve operations efficiency during shutdown of large diameter water mains.

Effective Funding by User (percent):

DC - 60.96%  
 EPA/Fed - 39.04%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	22,972,325
FY2014 Revised/FY2015 Proposed Life Budget	23,031,946
<b>Increase/(Decrease)</b>	<b>59,621</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	19,651	850	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	22,572	460	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 2014 - 2023 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

Phase	Start Date
Design:	Mar 2010
Construction:	Mar 2011

Project Completion:	Oct 2015
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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%



FY2014 Approved Life Budget	14,451,654
FY2014 Revised/FY2015 Proposed Life Budget	14,626,544
<b>Increase/(Decrease)</b>	<b>174,890</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	5,091	1,959	2,866	98	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	10,050	4,576	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: AI - FY 2008 - DWS Water Projects  
 Managing Department: Water Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	May 2008

Project Completion:	Jun 2011
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Project Description:

This project is for the FY 2008 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. This Project is closed.

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%



FY2014 Approved Life Budget	6,967,611
FY2014 Revised/FY2015 Proposed Life Budget	6,967,611
<b>Increase/(Decrease)</b>	<b>0</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	6,968	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	6,968	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title:   
 Managing Department: Water Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	
<b>Construction:</b>	Apr 2009

<b>Project Completion:</b>
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**Project Description:**

This project is for the FY 2009 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 -  
 EPA/Fed -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: AF - FY 2010 - DWS Water Projects  
 Managing Department: Water Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Nov 2009

Project Completion:	May 2014
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Project Description:

This project is for the FY 2010 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%



FY2014 Approved Life Budget	8,772,856
FY2014 Revised/FY2015 Proposed Life Budget	8,772,856
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	8,537	26	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	8,773	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: BE - FY 2011 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Oct 2010

<b>Project Completion:</b>	Sep 2014
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**Project Description:**

This project is for the FY 2011 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%



FY2014 Approved Life Budget	11,238,342
FY2014 Revised/FY2015 Proposed Life Budget	11,238,342
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	11,012	3	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	11,238	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: CC - FY 2012 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Jan 2012

<b>Project Completion:</b>	Jan 2015
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**Project Description:**

This project is for the FY 2012 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%



FY2014 Approved Life Budget	8,083,000
FY2014 Revised/FY2015 Proposed Life Budget	8,281,738
<b>Increase/(Decrease)</b>	<b>198,738</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	4,994	1,878	85	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	8,282	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: CP - FY 2013 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Nov 2012

<b>Project Completion:</b>	Feb 2015
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**Project Description:**

This project is for the FY 2013 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%



FY2014 Approved Life Budget	8,673,000
FY2014 Revised/FY2015 Proposed Life Budget	8,673,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	2,031	3,349	1,135	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	6,767	1,906	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: D5 - FY 2014 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Jul 2014

<b>Project Completion:</b>	Jul 2015
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**Project Description:**

This project is for the FY 2014 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%



FY2014 Approved Life Budget	8,935,000
FY2014 Revised/FY2015 Proposed Life Budget	9,713,000
<b>Increase/(Decrease)</b>	<b>778,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	3,514	3,488	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	9,713	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: DG - FY 2015 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Jul 2015

<b>Project Completion:</b>	Jun 2016
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**Project Description:**

This project is for the FY 2015 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%



FY2014 Approved Life Budget	9,180,000
FY2014 Revised/FY2015 Proposed Life Budget	9,630,000
<b>Increase/(Decrease)</b>	<b>450,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	4,669	2,918	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	9,630	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: DY - FY 2016 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Jul 2016

<b>Project Completion:</b>	Jun 2017
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**Project Description:**

This project is for the FY 2016 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%



FY2014 Approved Life Budget	9,295,000
FY2014 Revised/FY2015 Proposed Life Budget	9,630,000
<b>Increase/(Decrease)</b>	<b>335,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	3,898	2,926	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	9,630	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: FK - FY 2017 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Feb 2017

<b>Project Completion:</b>	Feb 2018
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**Project Description:**

This project is for the FY 2017 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%



FY2014 Approved Life Budget	9,412,000
FY2014 Revised/FY2015 Proposed Life Budget	9,630,000
<b>Increase/(Decrease)</b>	<b>218,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	5,230	1,105	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	9,630	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: GS - FY 2018 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Feb 2018

<b>Project Completion:</b>	Feb 2019
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**Project Description:**

This project is for the FY 2018 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%



FY2014 Approved Life Budget	9,535,000
FY2014 Revised/FY2015 Proposed Life Budget	9,630,000
<b>Increase/(Decrease)</b>	<b>95,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	5,372	1,103	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	9,630	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: HY - FY 2019 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Oct 2018

<b>Project Completion:</b>	Dec 2019
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**Project Description:**

This project is for the FY 2019 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%



FY2014 Approved Life Budget	9,660,000
FY2014 Revised/FY2015 Proposed Life Budget	9,630,000
<b>Increase/(Decrease)</b>	<b>-30,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	5,684	490	0	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	9,630	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: JA - FY 2020 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Oct 2019

<b>Project Completion:</b>	Dec 2020
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**Project Description:**

This project is for the FY 2020 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%



FY2014 Approved Life Budget	9,955,000
FY2014 Revised/FY2015 Proposed Life Budget	9,630,000
<b>Increase/(Decrease)</b>	<b>-325,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	5,633	519	0	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	9,630	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: KW - FY 2021 - DWS Water Projects  
 Managing Department: Water Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Oct 2020

Project Completion:	Jan 2022
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Project Description:

This project is for the FY 2021 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%



FY2014 Approved Life Budget	10,255,000
FY2014 Revised/FY2015 Proposed Life Budget	9,630,000
<b>Increase/(Decrease)</b>	<b>-625,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	5,669	921	0	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	9,630	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title:   
 Managing Department: Water Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Jan 2022

<b>Project Completion:</b>	Jan 2023
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**Project Description:**

This project is for the FY 2022 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%



FY2014 Approved Life Budget	<input type="text" value="0"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text" value="9,664,000"/>
<b>Increase/(Decrease)</b>	<input type="text" value="9,664,000"/>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	5,009	1,763	0
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	9,664	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water On-Going Projects  
 Activity Group/Project Title: KY - FY 2023 - DWS Water Projects  
 Managing Department: Water Services  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Good Engineering, High pay back, Mission / Function

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	Jan 2023

<b>Project Completion:</b>	Jan 2024
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**Project Description:**

This project is for the FY 2023 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%



FY2014 Approved Life Budget	0
FY2014 Revised/FY2015 Proposed Life Budget	10,150,000
<b>Increase/(Decrease)</b>	<b>10,150,000</b>

**NEW**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	4,997	1,837
<b>Commitments Budget</b>	0	0	0	0	0	0	0	0	0	0	10,150	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Jun 2009
Construction:	May 2011

Project Completion:	Feb 2017
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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 - 72.94%  
 EPA/Fed - 27.06%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	11,329,156
FY2014 Revised/FY2015 Proposed Life Budget	11,527,894
<b>Increase/(Decrease)</b>	<b>198,738</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	4,503	1,087	1,172	367	14	0	0	0	0	0	0	0
<b>Commitments Budget</b>	8,544	2,984	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 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	Aug 2014
Construction:	Jan 2016

<b>Project Completion:</b>	Jul 2017
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**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%



FY2014 Approved Life Budget	642,772
FY2014 Revised/FY2015 Proposed Life Budget	646,747
<b>Increase/(Decrease)</b>	<b>3,975</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	197	0	16	69	106	0	0	0	0	0	0	0
<b>Commitments Budget</b>	197	60	0	390	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Pumping Facilities  
 Activity Group/Project Title: F8 - 16th & Alaska Ave Pump Sta Upgrades  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jun 2011
Construction:	Sep 2013

Project Completion:	Dec 2015
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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:

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

Effective Funding by User (percent):

DC - 80.66%  
 EPA/Fed - 19.34%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	4,618,903
FY2014 Revised/FY2015 Proposed Life Budget	4,698,398
<b>Increase/(Decrease)</b>	<b>79,495</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	584	161	1,279	177	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	747	3,951	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 2014 - 2023 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

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Dec 2013
<b>Construction:</b>	Mar 2014

<b>Project Completion:</b>	Mar 2018
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**Project Description:**  
 This project is to upgrade security systems at the following facilities: Bryant Street Pumping Station, Soldiers Home Reservoir, Brentwood Reservoir, Anacostia Tank No. 1 (Boulevard Tank), Anacostia Tank No. 2 (Good Hope Tank) and Fort Stanton Reservoirs Site and Fort Reno Site.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	1,959,686
FY2014 Revised/FY2015 Proposed Life Budget	1,999,433
<b>Increase/(Decrease)</b>	<b>39,747</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	119	70	172	312	173	89	0	0	0	0	0	0
<b>Commitments Budget</b>	119	1,880	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Pumping Facilities  
 Activity Group/Project Title: FH - Discharge Piping Bryant St. Pump Sta  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jun 2009
Construction:	Sep 2012

Project Completion:	Feb 2017
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Project Description:

This project provides for the replacement of six discharge pipes from the Bryant Street Pumping Station that are highly corroded. The discharge piping will be replaced from the cone valves inside the station to a point on Bryant Street away from the station site, to reduce the probability of a catastrophic pipe break next to the station wall and foundation.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	13,409,073
FY2014 Revised/FY2015 Proposed Life Budget	13,647,559
<b>Increase/(Decrease)</b>	<b>238,486</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	2,684	1,459	1,656	926	50	0	0	0	0	0	0	0
<b>Commitments Budget</b>	13,648	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Pumping Facilities  
 Activity Group/Project Title: FJ - Parking Ramp Rehab - Bryant St. PS  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jul 2009
Construction:	Apr 2010

<b>Project Completion:</b>
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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:**  
 This project will have no material impact on the operating budget.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Apr 2010
Construction:	

Project Completion:	Sep 2015
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Project Description:

This project will support the Department of Water Services Pumping Department maintenance program. Large, expensive, and long lived equipment needs to be periodically replaced due to wear or premature failure. Major pumps, motors, valves and related equipment will be replaced in each of the department's four pump stations as needed

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	1,560,000
FY2014 Revised/FY2015 Proposed Life Budget	1,560,000
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	378	218	119	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	1,040	260	260	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 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	Mar 2011
Construction:	May 2014

Project Completion:	Jul 2015
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Project Description:

This project will relocate the customer service group which is currently located at a commercial office building at 810 First Street NW, in downtown Washington, DC with an annual cost of the rent of approximately \$900,000 to \$1,000,000. The old Anacostia Pump Station is vacant and unused, having been replaced by a more modern Pump Station on the other end of the site. Renovation cost for converting this old, unused structure will pay for itself in six years.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	502,173
FY2014 Revised/FY2015 Proposed Life Budget	502,173
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	328	20	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	502	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Pumping Facilities  
 Activity Group/Project Title: HE - New Parking Structure & Building Modifications @ Bryant St PS  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Jan 2016
Construction:	Feb 2017

Project Completion:	Aug 2018
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Project Description:

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 a consolidated Water and Sewer Services department. 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%



FY2014 Approved Life Budget	13,546,000
FY2014 Revised/FY2015 Proposed Life Budget	13,546,000
Increase/(Decrease)	0

Disbursements Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	0	0	0	596	1,739	4,127	0	0	0	0	0	0
Commitments Budget	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
	0	0	0	2,060	11,486	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 pay back, Mission / Function over long term

Phase	Start Date
Design:	Sep 2016
Construction:	Aug 2017

<b>Project Completion:</b>	Jul 2018
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**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 (formed) 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 job-related materials; and storage of two large vacuum trucks, which are required to be housed inside a heated building during cold weather.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	2,966,000
FY2014 Revised/FY2015 Proposed Life Budget	2,966,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	13	446	869	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	0	359	2,607	0	0	0	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 Control  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Dec 2013
Construction:	Jun 2015

Project Completion:	Nov 2016
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Project Description:

This project is to install seven actuated spillover pressure regulating valves (PRVs) with flowmeter capabilities to replace existing manually operated PRVs that control spillover flow into the low service area, and to replace 24 globe valves with motor operated butterfly valves to allow full automation and remote control of the spillage header. The metering capability will allow operation to control flow being spilled into the 1st High, 2nd High and/or the low zones area more effectively.

Impact on Operations:

This project will have no material impact on the operating budget. However, the new flow meters will require regular maintenance causing some increase in the operating budget.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	1,360,000
FY2014 Revised/FY2015 Proposed Life Budget	3,360,000
<b>Increase/(Decrease)</b>	<b>2,000,000</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	53	192	1,015	139	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	320	3,040	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 2014 - 2023 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  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2012
Construction:	Sep 2013

Project Completion:	Feb 2017
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Project Description:

This project provides for improvements to HVAC systems at the Bryant Street Pumping Station and the Warehouse and Meter Shop Buildings to address system deficiencies and improve working conditions for the staff residing within these buildings. The HVAC improvements include some structural and controls modifications to the office space in the Warehouse and Meter Shop building. This project also provides for: replacement of the parking deck wearing surface and roof membrane and removal and reconstruction of top portions of the walls at the Warehouse and Shops building, and repair or replacement of select structural roof members, windows, gutters, flashing, sealant, roofing slate and masonry façade at the Bryant Street PS building.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	7,020,000
FY2014 Revised/FY2015 Proposed Life Budget	7,178,990
<b>Increase/(Decrease)</b>	<b>158,990</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	175	161	276	2,045	442	0	0	0	0	0	0	0
<b>Commitments Budget</b>	489	550	6,140	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Pumping Facilities  
 Activity Group/Project Title: JJ - Bryant Street Pump Station Improvements - Phase III  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	May 2020
Construction:	Oct 2021

Project Completion:	Apr 2023
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Project Description:  
 This project provided for the replacement of the parking deck wearing surface and membrane on the Warehouse and Shops building at the Bryant Street Pump Station 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/PI - 0.00%



FY2014 Approved Life Budget	1,100,000
FY2014 Revised/FY2015 Proposed Life Budget	0
<b>Increase/(Decrease)</b>	<b>-1,100,000</b>

**CLOSED**

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	0	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Pumping Facilities  
 Activity Group/Project Title: M6 - WPFA1 - Rehab. Bryant St. Pump Station  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Mar 1999
Construction:	Mar 2002

Project Completion:	Aug 2015
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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 some SCADA work for the water distribution system installed by DC Water IT services.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 70.38%  
 EPA/Fed - 29.62%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	62,748,467
FY2014 Revised/FY2015 Proposed Life Budget	62,827,962
<b>Increase/(Decrease)</b>	<b>79,495</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	59,871	316	144	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	61,828	1,000	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Pumping Facilities  
 Activity Group/Project Title: M7 - WPFA3 - Replacement of Anacostia Pump Station  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: High Profile, Good Neighbor Policy

Phase	Start Date
Design:	Apr 2004
Construction:	Mar 2007

Project Completion:	Dec 2015
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Project Description:

This project is to replace the 85 year old Anacostia Pumping Station to meet code requirements, add pumps for the new Anacostia First High South Service Area and maintain the reliability of the Anacostia 1st and 2nd High Service Area distribution system. It includes the installation of 3,000 feet of 30-inch water main to link the Anacostia Pumping Station to the Anacostia 1st High South Service Area. The new Pumping Station will have a capacity of 60 MGD and will be constructed on the same site as the original Pumping Station, which will remain in service until the new facility is completed and operational.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 46.27%  
 EPA/Fed - 53.73%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	32,736,354
FY2014 Revised/FY2015 Proposed Life Budget	32,756,228
<b>Increase/(Decrease)</b>	<b>19,874</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	31,975	19	248	20	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	32,061	695	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title: B0 - FY 2010 - DDOT Water Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** EPMC2 - Water Program Manager  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	Nov 2004

<b>Project Completion:</b>	Apr 2016
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Project Description:  
 This project is the annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	17,171,132
FY2014 Revised/FY2015 Proposed Life Budget	17,171,132
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	12,938	665	23	4	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	17,171	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title: BN - FY 2011 - DDOT Water Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	Oct 2010

<b>Project Completion:</b>	Mar 2016
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**Project Description:**

This project is for the FY 2011 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%



FY2014 Approved Life Budget	8,738,342
FY2014 Revised/FY2015 Proposed Life Budget	8,738,342
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	3,008	1,039	1,242	306	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	8,738	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title: CJ - FY 2012 - DDOT Water Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	Jul 2011

<b>Project Completion:</b>	Aug 2016
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**Project Description:**

This project is for the FY 2012 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%



FY2014 Approved Life Budget	6,275,000
FY2014 Revised/FY2015 Proposed Life Budget	6,473,738
<b>Increase/(Decrease)</b>	198,738

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	199	930	858	799	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	6,474	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title: CM - FY 2013 - DDOT Water Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	Oct 2013

<b>Project Completion:</b>	Nov 2014
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**Project Description:**

This project is for the FY 2013 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%



FY2014 Approved Life Budget	6,000,000
FY2014 Revised/FY2015 Proposed Life Budget	6,392,123
<b>Increase/(Decrease)</b>	<b>392,123</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	2,236	0	0	0	0	0	0	0	0	0	0
<b>Commitments Budget</b>	6,392	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title:   
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

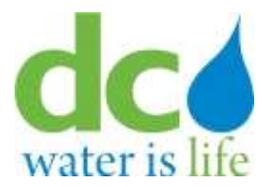
<b>Project Completion:</b>
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**Project Description:**  
 This project is for the FY 2014 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (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 -  
 EPA/Fed -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title:   
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

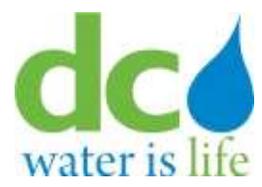
<b>Project Completion:</b>
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**Project Description:**  
 This project is for the FY 2015 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (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 -  
 EPA/Fed -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title:   
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>
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**Project Description:**  
 This project is for the FY 2016 annual program of water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Public Works. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title:   
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>
----------------------------

**Project Description:**  
 This project is for the FY 2017 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

**Impact on Operations:**  
 No significant O&M cost impact.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title:   
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>
----------------------------

**Project Description:**  
 This project is for the FY 2018 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 -  
 EPA/Fed -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title:   
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>
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**Project Description:**

This project is for the FY 2019 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 -  
 EPA/Fed -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: DDOT Water Projects  
 Activity Group/Project Title: J8 - FY 2020 - DDOT Water Projects  
 Managing Department: DC Dept. of Transportation  
**EPMC:** DETS - Engineering & Tech Services  
**Priority:** Board Policy, DC Water's commitment to outside agencies

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

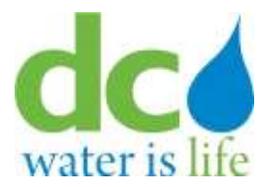
<b>Project Completion:</b>
----------------------------

**Project Description:**  
 This project is for the FY 2020 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 -  
 EPA/Fed -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY2014 Approved Life Budget	<input type="text"/>
FY2014 Revised/FY2015 Proposed Life Budget	<input type="text"/>
<b>Increase/(Decrease)</b>	<input type="text"/>

**DROPPED**

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>												
<b>Commitments Budget</b>												

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Dec 2008
Construction:	Jan 2010

Project Completion:	Feb 2020
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Project Description:

This project consists of replacing the expansion joint material, concrete floor slab and wall repairs within the Fort Stanton Reservoir No.2 to minimize the current leakage and repair the damage caused by an embankment failure. This project also includes electrical, instrumentation upgrades / improvements, venting modifications and reconfiguration of the drain / overflow piping and installation of impermeable membranes over three underground water storage reservoirs as required by EPA. Future upgrades / improvements to the storage facilities based upon planned inspection / assessments conducted every three years are also covered under this project.

Impact on Operations:

This project will have no material impact on the operating budget. However, a portion of this project (Job FA01) will reduce water loss, thus slowing the growth in water purchase costs.

Effective Funding by User (percent):

DC - 82.29%  
 EPA/Fed - 17.71%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	23,433,402
FY2014 Revised/FY2015 Proposed Life Budget	23,552,645
<b>Increase/(Decrease)</b>	<b>119,243</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	4,654	1,092	5,413	2,449	199	1,406	2,025	517	0	0	0	0
<b>Commitments Budget</b>	6,020	3,810	7,622	510	5,590	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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 pay back, Mission / Function over long term

<u>Phase</u>	<u>Start Date</u>
<b>Design:</b>	Apr 2019
<b>Construction:</b>	Sep 2020

<b>Project Completion:</b>	Feb 2024
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**Project Description:**  
 This project consists of rehabilitation of the coating systems for: Anacostia Tank No. 1 (Boulevard Tank), Anacostia Tank No. 2 (Good Hope Tank), and Fort Reno Tank 2.

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	7,000,000
FY2014 Revised/FY2015 Proposed Life Budget	7,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	113	323	773	2,076	1,223	476
<b>Commitments Budget</b>	0	0	0	0	0	0	580	6,420	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

Phase	Start Date
Design:	Nov 2010
Construction:	Jul 2014

<b>Project Completion:</b>	Jun 2017
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**Project Description:**

The project includes the construction of a 2.0 million gallon elevated water storage tank. The new storage tank will provide additional potable water storage for the Anacostia 1st High South service area, increasing pressures to the higher elevation areas and improving fire protection in the distribution system served by this storage tank. St. Elizabeth's Hospital has agreed to allow the tank to be located on the Hospital complex as this new facility will improve the reliability of the Hospital's water supply system.

**Impact on Operations:**

New tank will require periodic (10 to 15 years) maintenance involving painting.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	21,923,436
FY2014 Revised/FY2015 Proposed Life Budget	22,161,922
<b>Increase/(Decrease)</b>	<b>238,486</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	3,369	918	5,572	5,399	1,409	0	0	0	0	0	0	0
<b>Commitments Budget</b>	5,912	16,250	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 2014 - 2023 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: EPMC2 - Water Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Jun 2015
Construction:	Nov 2016

Project Completion:	Aug 2018
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Project Description:

This project includes the siting and feasibility study, design and construction for the future construction of a 2.0 million gallon storage tank to supply the 4th High Service Area on the west side of Rock Creek Park. This area does not have any usable storage and all water supply comes from the Fort Reno Pumping Station. The objective of the storage tank is to provide a source of supply should there be a failure of the pumping station, and provide storage capacity to improve the reliability of the water supply to this portion of the 4th High Service Area.

Impact on Operations:

New elevated water storage tank will require periodic (10 to 15 years) maintenance causing an increase on the operating budget.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	7,915,558
FY2014 Revised/FY2015 Proposed Life Budget	7,915,558
<b>Increase/(Decrease)</b>	<b>0</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	191	61	150	329	2,080	2,614	0	0	0	0	0	0
<b>Commitments Budget</b>	191	324	600	0	6,800	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Water Storage Facilities  
 Activity Group/Project Title: MR - 2nd High Water Storage  
 Managing Department: Engineering and Technical Services  
 EPMC: EPMC2 - Water Program Manager  
 Priority: Good Engineering, Low pay back, Mission / Function over long term

Phase	Start Date
Design:	Apr 2015
Construction:	Mar 2017

Project Completion:	Mar 2019
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Project Description:

This project includes the siting and feasibility study, design and construction of a water storage reservoir in the 2nd High Service Area east of Rock Creek Park. The reservoir will address storage deficiency and improve system reliability within the 2nd High service area located in northwest and northeast sections north of Florida Ave and Rhode Island Ave and south of Missouri Ave. The existing Van Ness reservoir (Washington Aqueduct facility) has capacity to supply 65% of the average daily usage in the 2nd High Service Area. The additional storage will provide flexibility to undertake routine maintenance of the existing and proposed reservoirs. In addition, a second reservoir in the area will allow taking one of the reservoirs out of service without having to pump into a closed system.

Impact on Operations:

New potable water reservoir will require periodic maintenance causing some increase in the operating budget.

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	15,489,872
FY2014 Revised/FY2015 Proposed Life Budget	15,728,358
<b>Increase/(Decrease)</b>	<b>238,486</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	598	102	252	531	1,465	6,587	1,661	0	0	0	0	0
<b>Commitments Budget</b>	598	205	1,105	0	13,820	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	May 2025
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**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 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%



FY2014 Approved Life Budget	30,610,000
FY2014 Revised/FY2015 Proposed Life Budget	30,610,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	1,465	3,508	5,528	5,658	5,466
<b>Commitments Budget</b>	0	0	0	0	0	0	0	30,610	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Sep 2018
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**Project Description:**

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

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	5,000,000
FY2014 Revised/FY2015 Proposed Life Budget	5,000,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	775	968	769	762	725	0	0	0	0	0	0
<b>Commitments Budget</b>	5,000	0	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 2014 - 2023 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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	

<b>Project Completion:</b>	Apr 2020
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**Project Description:**

This project is to provide engineering program management services for the water system capital improvements program (CIP), to develop a comprehensive water distribution system hydraulic model and run model simulations for evaluation of capital improvement alternatives; to perform pipe condition assessments of pipelines; to assess the potable water storage and pumping needs; to investigate alternatives to eliminate low water pressures; improve water quality in the distribution system; provide reliable and adequate fire protection; to perform conceptual design of proposed capital projects; and to develop a comprehensive facilities plan for incorporation into the capital improvements program. It also includes developing scopes of work, preparing cost estimates, negotiating task orders and reviewing design submittals for the implementation of the capital improvement program.

**Impact on Operations:**

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

Effective Funding by User (percent):

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



FY2014 Approved Life Budget	43,145,961
FY2014 Revised/FY2015 Proposed Life Budget	39,171,201
<b>Increase/(Decrease)</b>	<b>-3,974,760</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	6,854	2,790	4,278	3,607	3,617	3,621	3,645	2,153	0	0	0	0
<b>Commitments Budget</b>	14,471	0	24,700	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 2014 - 2023 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

Phase	Start Date
Design:	Aug 2004
Construction:	Dec 2004

<b>Project Completion:</b>	Sep 2026
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**Project Description:**

Replacement of approximately 30,050 lead water service lines with copper piping throughout the water distribution system. The Lead Service Replacement Program started in FY 2004 and will continue in conjunction with scheduled water main replacement and DDOT road work (new FY 2008 policy). This project replaces lead service lines within Public Space and offers the property owner the option to replace the lead service on private property at cost.

**Impact on Operations:**

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

Effective Funding by User (percent):

DC - 92.38%  
 EPA/Fed - 7.62%  
 WSSC - 0.00%  
 Fairfax - 0.00%  
 Loudoun/PI - 0.00%



FY2014 Approved Life Budget	191,040,000
FY2014 Revised/FY2015 Proposed Life Budget	189,040,000
<b>Increase/(Decrease)</b>	<b>-2,000,000</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	136,599	2,823	2,010	1,384	1,377	1,440	1,534	1,632	476	0	0	0
<b>Commitments Budget</b>	148,540	7,025	5,125	4,887	5,412	5,751	6,012	6,288	0	0	0	0

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Metering  
 Activity Group/Project Title: **EM1 Future Meter Replacements**  
 Managing Department: Customer Service **EMPC:**  
**Priority:** Good Utility Practice

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	
<b>Project Completion:</b>	

Project Description:  
 Project to fund ongoing meter and related equipment replacements and upgrades beyond the AMR program. This Project does not include meters being replaced as part of the Lead service line replacement program. In prior years this project was shown in the AMR budget.

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

Funding by User (percent):

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



FY 2014 Approved Life Budget	42,192,877
FY2014 Revised/FY2015 Proposed Life Budget	26,229,614
<b>Increase/(Decrease)</b>	<b>-15,963,263</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	3,785	3,392	2,974	3,127	2,022	1,964	2,430	2,484	2,998	2,323	2,487	
<b>Commitments Budget</b>	3,785	3,392	2,974	3,127	2,022	1,964	2,430	2,484	2,998	2,323	2,487	

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 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

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	3/4/2002
<b>Project Completion:</b>	

**Project Description:**  
 DC Water is replacing all meters with meters that automatically transmit consumption data via radio and cellular technology. This has improved the accuracy of meter reads to over 99.9 percent, and the labor needed for meter reading has been substantially reduced. By the end of FY 2008 a substantial amount of this project has been completed (approximately 120,000 meters had been installed, or 98.9% of the project). This project will be completed over the next two years.

**Impact on Operations:**  
 The cost of a single meter read will be reduced from approximately \$3 in FY 2002 to approximately \$1.13 when the program is fully implemented.

Funding by User (percent):

DC -	100.00%		FY 2014 Approved Life Budget	71,071,355
EPA -			FY2014 Revised/FY2015 Proposed Life Budget	0
WSSC -			<b>Increase/(Decrease)</b>	-71,071,355
Fairfax -				
Loudoun/PI -				

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	0	0	0	0	0	0	0	0	0	0	
<b>Commitments Budget</b>	0	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 2014 - 2023 Capital Improvement Program

Service Area Title: Water Service Area  
 Program Title: Metering  
 Activity Group/Project Title: **EM6 AMR/Billing System**  
 Managing Department: **EMPMC:**

<b>Phase</b>	<b>Start Date</b>
<b>Design:</b>	
<b>Construction:</b>	
<b>Project Completion:</b>	

**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 -		FY 2014 Approved Life Budget	8,000,000
EPA -		FY2014 Revised/FY2015 Proposed Life Budget	13,072,822
WSSC -		<b>Increase/(Decrease)</b>	5,072,822
Fairfax -			
Loudoun/PI -			

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	0	2,342	4,926	2,411	2,420	221	226	132	132	132	132	
<b>Commitments Budget</b>	0	2,342	4,926	2,411	2,420	221	226	132	132	132	132	

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

**WATER SERVICE AREA  
PROJECT ID NAME AND PAGE NUMBERS**

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**WATER SERVICE AREA  
PROJECT ID NAME AND PAGE NUMBERS**

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EM2	Automated Meter reading	VII-103
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F6	Steel Water Main Rehab - Phase I	VII-17
F8	16th & Alaska Ave Pump Sta Upgrades	VII-69
FA	Water Storage Facility Upgrades	VII-93
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FH	Discharge Piping Bryant St. Pump Sta	VII-71
FJ	Parking Ramp Rehab - Bryant St. PS	VII-72
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HA	FY 2011 DWS Water Pumping	VII-73
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HE	New Parking Structure & Building Modications @ B	VII-75
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**WATER SERVICE AREA  
PROJECT ID NAME AND PAGE NUMBERS**

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HX	Small Diameter Water Main Rehabilitation 16	VII-24
HY	FY2019 - DWS Water Projects	VII-62
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I8	Large Valve Replacement (Contract 11-13)	VII-25
IA	Large Valve Replacement (Contract 14-16)	VII-26
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**WATER SERVICE AREA  
PROJECT ID NAME AND PAGE NUMBERS**

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ME	Water System Program Management Services	VII-100
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MQ	878A1 - 2MG 4th High Storage Tank	VII-96
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MU	Small Diameter Watermain Rehab. (2)	VII-37
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NA	863A1 - Clean & Line 20 4th High Wtrmain	VII-43
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O1	Small Diameter Watermain Rehab. (9)	VII-45
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O3	930B5 -Cln & Line Wtrmains (13)	VII-47
QM	Small Valve Replacements - Contract 4	VII-48
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S5	WDSC6 - Lg.Dia.Wtrmain Int. Repairs	VII-50



**CAPITAL  
IMPROVEMENT  
PROGRAM**

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

**SECTION VIII  
WASHINGTON  
AQUEDUCT**

## **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: Capital projects include improvements to its two water treatment plants (Dalecarlia WTP and McMillan WTP), improvements to transmission and storage facilities, and various pumping station improvements. Additional details are included in the following sections.

### **Basin Waste Recovery/Residuals Disposal - \$98.6 Million**

*(project pages VIII-5)*

The residual project is the single largest project in the Aqueduct's CIP. The Aqueduct is required to remove 85 percent of incoming sediments, rather than periodically discharging them to the Potomac River. 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 required 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 dewateres the residuals on site and trucks them off-site for disposal. The project is now 100% complete and operational.

### **Dalecarlia Pumping Station Improvements - \$12.8 Million**

*(project pages VIII-6)*

The Dalecarlia Pumping Station was built over fifty years ago and beginning in FY 2013, the Aqueduct started a series of initiatives at Dalecarlia Pumping Station aimed at modernizing and upgrading the facility. These initiatives include: fire protection system improvements and building renovations (FY 2014); overhead crane and elevator replacements (FY 2014 - FY 2017); mechanical upgrades (FY 2016 - FY 2018) and valve and piping replacement (FY 2018 - FY 2020).

### **Cabin John Bridge Repairs - \$.9 Million**

*(project pages VIII-7)*

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 2017 through FY 2019 are additional roadway and parapet repairs.

**McMillan Water Treatment Plant Improvements - \$37.4 Million**

*(project pages VIII-8)*

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 renovation. Major projects include clearwell maintenance and improvements north and south; security improvements; chemical system improvements; boat dock/chemical storage building renovation; east shaft pump replacement & building renovations; GIS system; roof replacements; instrumentation improvements; process improvements; East Building renovation; McMillan building renovations phase 2 & phase 3; and, roadway repairs.

**Appurtenant Transmission & Storage Facility - \$67.1 Million**

*(project pages VIII-9)*

Raw water is taken from Great Falls on the Potomac River into two raw water conduits, and 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; transmission main improvements; Georgetown Reservoir building improvements; security improvements; city tunnel repairs; conduit repairs; cross connection structure upgrade; Great Falls intake building improvements; Little Falls Pumping Station crane overhaul & mechanical upgrades; Champlain Street building renovation; Little Falls Pumping Station architectural improvements; Rock Creek blow-off valve replacements; sluice gate replacements and warehouse no. 6 & no. 8 improvements.

**Dalecarlia Water Treatment Plant Improvements - \$65.9 Million**

*(project pages VIII-10)*

The existing rapid-sand filtration Dalecarlia Water Treatment Plant (WTP) 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 - Phase II. Future projects include: chemical system improvements; clearwell maintenance & improvements - 15 and 30 MG; security improvements; visitors center exhibits; administration building improvements; backwash recovery facility improvements; basin no. 3 and no. 4 flocculation/sedimentation improvements; carbon facility tank renovations; GIS System; intake building renovation; process improvements; roof replacements; south connection building renovation; wash water tank renovations; west filter building improvements; fuel line replacements and roadway improvements.

### **Alternate Treatment Methods - \$3.7 Million**

*(project pages VIII-11)*

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 FY 2018, Aqueduct will begin the 30 MG clearwell mixing improvements project, while future projects include Georgetown mixing improvements starting 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 FY 2006 and FY 2007 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 our outreach efforts to Congressional staff, federal agencies and the Corps on this critical issue. We expect to develop a more efficient financing system in the near future.

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Washington Aqueduct  
 Program Title: Washington Aqueduct  
 Activity Group/Project Title: **WAD121 Basin Waste Recovery**  
 Priority: Federal Facilities Compliance Agreement

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	10/1/2007
<b>Project Completion:</b>	12/31/2012

**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 required that the new process be in place by December 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 dewateres the residual on site and trucks them off-site for disposal. The project is now 100% complete and operational.

**Impact on Operations:**

The estimated increase to the Washington Aqueduct operating budget due to the Residual Facilities is in the range of \$2.2 million 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 by User (percent):

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



FY 2014 Approved Life Budget	98,118,029
FY2014 Revised/FY2015 Proposed Life Budget	98,568,991
<b>Increase/(Decrease)</b>	<b>450,962</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	98,569											
<b>Commitments Budget</b>	98,569											

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Washington Aqueduct  
 Program Title: Washington Aqueduct  
 Activity Group/Project Title: **WAD122 Dalecarlia Pumping Station**  
 Priority: Good Engineering Practices

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	10/1/2010
<b>Project Completion:</b>	10/1/2020

**Project Description:**

This pumping station was built over 50 years ago and beginning in FY 2013, the Aqueduct started 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 2014); overhead crane & elevator replacements (FY 2014 - FY 2017); mechanical upgrades (FY 2016 - FY 2018) 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 -  
 Loudoun/PI -



FY 2014 Approved Life Budget	7,883,770
FY2014 Revised/FY2015 Proposed Life Budget	12,769,931
<b>Increase/(Decrease)</b>	<b>4,886,161</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	7,500	73	436	836	727	1,018	363	1,817				
<b>Commitments Budget</b>	7,500	73	436	836	727	1,018	363	1,817				

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Washington Aqueduct  
 Program Title: Washington Aqueduct  
 Activity Group/Project Title: **WAD123 Cabin John Bridge**  
 Priority: Good Engineering Practices

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	10/1/2010
<b>Project Completion:</b>	10/1/2019

**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 2017 through FY 2019 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 -  
 Loudoun/PI -



FY 2014 Approved Life Budget	912,750
FY2014 Revised/FY2015 Proposed Life Budget	908,609
<b>Increase/(Decrease)</b>	<b>-4,141</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>					145	182	582					
<b>Commitments Budget</b>					145	182	582					

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Washington Aqueduct  
 Program Title: Washington Aqueduct  
 Activity Group/Project Title: **WAD126 McMillian Water Treatment Plant Improvements**  
 Priority: Good Engineering Practices

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	10/1/2007
<b>Project Completion:</b>	10/1/2024

**Project Description:**

The McMillan Water Treatment Plant (WTP) 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 2014, FY 2016 - FY 2017, FY 2020 - FY 2021 & FY 2023 - FY 2024); security improvements (FY 2021 - FY 2023); chemical system improvements (FY 2022 - FY 2024); boat dock/chemical storage building renovation (FY 2016 - FY 2018); east shaft pump replacement & building renovations (FY 2013 - FY 2015, FY 2017 - FY 2019); GIS system (FY 2017 - FY 2019); roof replacements (FY 2016 - FY 2018); instrumentation improvements (FY 2015, FY 2020); process improvements (FY 2019 - FY 2021); EASA building renovation (FY 2017 - FY 2019) ; McMillan building renovations Phase 2 & Phase 3 (FY 2018 - FY 2020, FY 2022 - FY 2024); and roadway repairs (FY 2020 - FY 2022).

**Impact on Operations:**

Improvements to the McMillan 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 2014 Approved Life Budget	26,314,175
FY2014 Revised/FY2015 Proposed Life Budget	37,396,399
<b>Increase/(Decrease)</b>	<b>11,082,224</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	19,958	2,689	1,032	363	1,781	2,072	4,107	1,505	1,454	1,054	1,381	
<b>Commitments Budget</b>	19,958	2,689	1,032	363	1,781	2,072	4,107	1,505	1,454	1,054	1,381	

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Washington Aqueduct  
 Program Title: Washington Aqueduct  
 Activity Group/Project Title: **WAD127 Appurtenant Transmission and Storage Facilities**  
 Priority: Good Engineering Practices

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	10/1/2010
<b>Project Completion:</b>	10/1/2024

**Project Description:**

Raw water is taken from Great Falls on the Potomac River into two raw water conduits. Raw water is also taken at the Little Falls Pumping Station on the Potomac. Both discharge into the Dalecarlia Reservoir. This project area covers improvements to the Aqueduct's major transmission mains, storage facilities and outlying structures. Current major projects include: Little Falls Pumping Station motor control upgrades 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 (FY 2014 - FY 2016); Georgetown Reservoir building improvements (FY 2014 - FY 2015); security improvements (FY 2021 - FY 2023); city tunnel repairs (FY 2021- FY 2023); conduit repairs (FY 2016 - FY 2021); cross connection structure upgrade (FY 2015 - FY 2017); Great Falls intake building improvements (FY 2016 - FY 2018); Little Falls Pumping Station crane overhaul & mechanical upgrades (FY 2014 - FY 2018); Champlain Street building renovation (FY 2020 - FY 2022); Little Falls Pumping Station architectural improvements (FY 2022 - FY 2024); Rock Creek blow-off valve replacements (FY 2020 - FY 2022); sluice gate replacements (FY 2020 - FY 2021) and warehouse no. 6 & no. 8 improvements (FY 2016 - FY 2017 & FY 2015 - FY 2016) .

**Impact on Operations:**

Improvements to the appurtenant transmission and storage facility are not expected to have a significant impact on operating costs.

Funding by User (percent):

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



FY 2014 Approved Life Budget	45,164,000
FY2014 Revised/FY2015 Proposed Life Budget	67,080,410
<b>Increase/(Decrease)</b>	<b>21,916,410</b>

<b>Disbursements Budget</b>	<b>Pre FY 2014</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Post FY 2023</b>
	21,505	2,653	1,963	4,325	4,398	4,943	1,381	3,380	7,305	7,451	7,778	
<b>Commitments Budget</b>	<b>Pre FY 2014</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Post FY 2023</b>
	21,505	2,653	1,963	4,325	4,398	4,943	1,381	3,380	7,305	7,451	7,778	

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Washington Aqueduct  
 Program Title: Washington Aqueduct  
 Activity Group/Project Title: **WAD128 Dalecarlia Water Treatment Plant Improvements**  
 Priority: Good Engineering Practices

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	10/1/2007
<b>Project Completion:</b>	10/1/2024

**Project Description:**

The existing rapid-sand filtration Dalecarlia Water Treatment Plant was built in 1928, with significant improvements made over time, bringing total plant capacity to 220 MGD. Dalecarlia WTP will continue to improve its infrastructure with current projects including: maintenance building renovation, fire protection system improvements, chemical building electrical upgrades and east filter building renovation - ph II. Future projects include: chemical system improvements (FY 2022 - FY 2024); clearwell maintenance & improvements - 15 & 30 MG (FY 2014 - FY 2015, FY 2018 - FY 2019 & FY 2021 - FY 2022); security improvements (FY 2021 - FY 2023); visitors center exhibits (FY 2015 - FY 2017); administration building improvements (FY 2015 - FY 2017); backwash recovery facility improvements (FY 2014 - FY 2016); basin no. 3 & no. 4 flocculation/sedimentation improvements (FY 2018 - FY 2020); carbon facility tank renovations (FY 2017 - FY 2019); GIS System (FY 2018 - FY 2020); intake building renovation (FY 2014 - FY 2016); process improvements (FY 2019 - FY 2021); roof replacements (FY 2016 - FY 2018); south connection building renovation (FY 2020 - FY 2022); wash water tank renovations (FY 2021 - FY 2022); west filter building improvements (FY 2018 - FY 2020); fuel line replacements (FY 2020 - FY 2021) and roadway improvements (FY 2017 - FY 2019).

**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 -  
 Loudoun/PI -



FY 2014 Approved Life Budget	52,160,000
FY2014 Revised/FY2015 Proposed Life Budget	65,913,420
<b>Increase/(Decrease)</b>	<b>13,753,420</b>

	<u>Pre FY 2014</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>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Post FY 2023</u>
<b>Disbursements Budget</b>	26,582	5,234	7,487	5,619	4,107	2,799	4,180	4,180	1,803	2,617	1,308	
<b>Commitments Budget</b>	26,582	5,234	7,487	5,619	4,107	2,799	4,180	4,180	1,803	2,617	1,308	

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Washington Aqueduct  
 Program Title: Washington Aqueduct  
 Activity Group/Project Title: **WAD130 Alternate Treatment Methods**  
 Priority: Good Engineering Practices

Phase	Start Date
<b>Design:</b>	
<b>Construction:</b>	10/1/2008
<b>Project Completion:</b>	10/1/2021

**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 FY 2018, Aqueduct will begin the 30 MG clearwell mixing improvements project, while future projects include Georgetown mixing improvements starting 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 -



FY 2014 Approved Life Budget	1,241,000
FY2014 Revised/FY2015 Proposed Life Budget	3,720,394
<b>Increase/(Decrease)</b>	<b>2,479,394</b>

	Pre FY 2014	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Post FY 2023
<b>Disbursements Budget</b>	2,485					145	472	254	363			
<b>Commitments Budget</b>	2,485					145	472	254	363			

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

**CAPITAL EQUIPMENT SERVICE AREA  
PROJECT NAME AND PAGE NUMBERS**

<b>Project ID</b>	<b>Project Name</b>	<b>Page #</b>
WAD-121	Basin Waste Rcovery	VIII-5
WAD-122	Dalecarlia Pumping Station	VIII-6
WAD-123	Cabin John Bridge	VIII-7
WAD-126	McMillan Water treatment Plant Improvements	VIII-8
WAD-127	Appurtenent Transmission and Storage Facilities	VIII-9
WAD-128	Dalecarlia Water treatment Plant Improvements	VIII-10
WAD-130	Alternate Treatment Methods	VIII-11



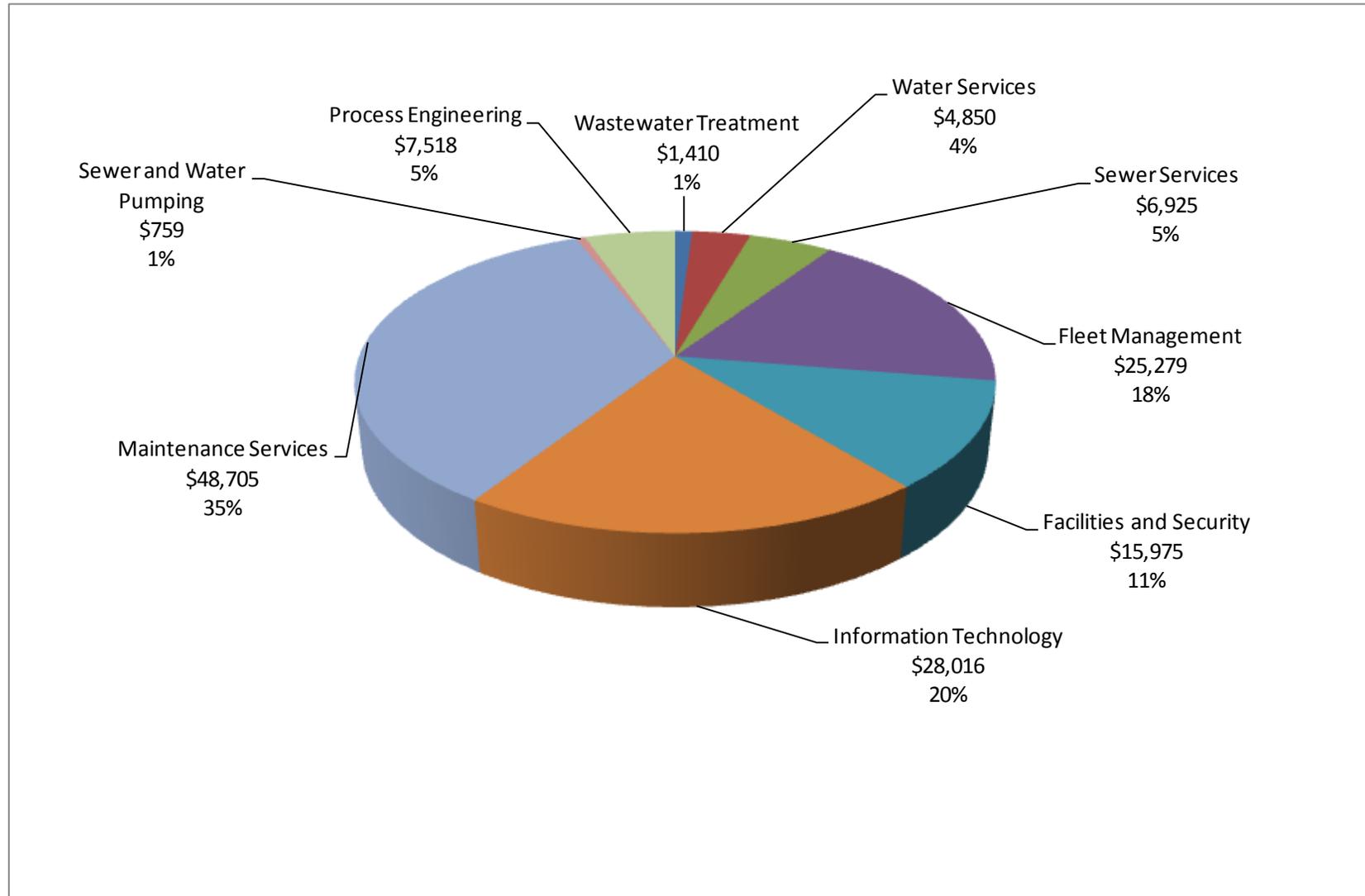
# CAPITAL IMPROVEMENT PROGRAM

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## SECTION IX CAPITAL EQUIPMENT



**CAPITAL EQUIPMENT DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES  
FY 2014 – FY 2023  
(\$ in 000's)**



## **CAPITAL EQUIPMENT**

DC Water's Capital Equipment disbursements budget totals approximately \$139.4 million for FY 2014 – FY 2023 plan, an increase of approximately \$43.4 million compared to the last ten-year plan. The main drivers of this increase can be attributed to reallocation of resources for – Fleet Management, to make necessary upgrades to DC Water's Fleet; and, Maintenance Services, for the maintenance of a great portion of our current CIP program facilities such as – Digesters, Tunnel Dewatering Pump Station, and the Enhanced Clarification Facility. There are smaller increases in Facilities and Security and Sewer Services.

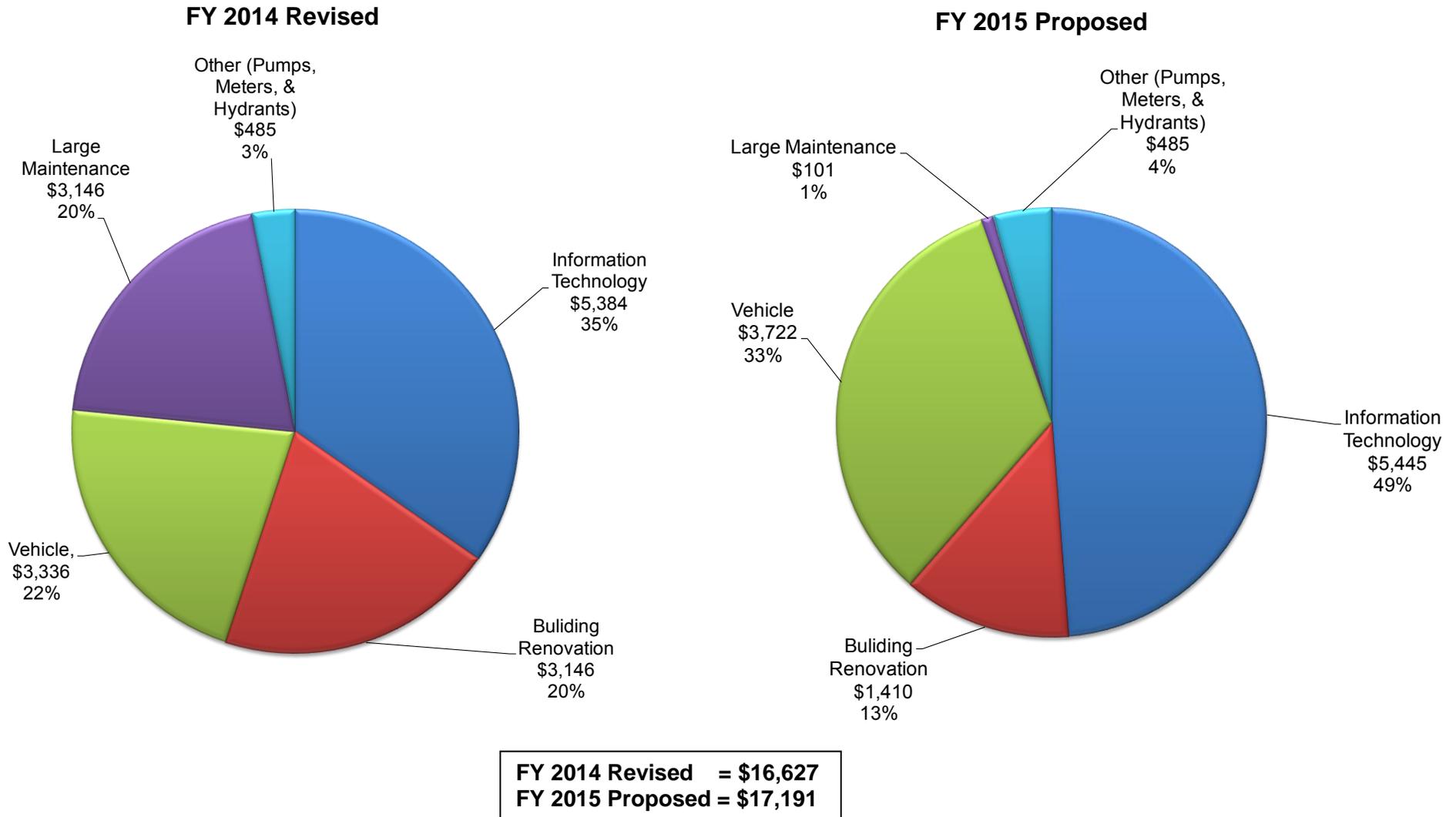
Approximately thirty five percent or \$48.7 million of spending in the capital equipment area is on major maintenance services projects, including Major Pump Rebuild/Replacements, Large Electric Motors and Centrifuge Rebuild. DC Water increases its commitment to scheduled replacement of its aging vehicle fleet with a budget of \$25.3 million, representing eighteen percent of the Capital Equipment disbursement budget. Finally, Information Technology totals \$28 million, or twenty percent of the ten-year plan. Other equipment including hydrant and valve equipment necessary for the maintenance of the District's public fire hydrant system, and Sewer Services total \$11.8 million or nine percent of the Capital Equipment disbursement budget.

The revised FY 2014 budget totals \$16.4 million, an increase of \$3.1 million above the approved FY 2014 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 2014 Revised vs. FY 2015 Proposed

(\$ in 000's)



## **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 ten-year disbursement totals.

### *Department of Wastewater Treatment - \$1.4 million*

Capital equipment expenditures for this department are for laboratory equipment to maintain a certified laboratory.

### *Department of Water Services - \$4.9 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 outlined in the revised FY 2014 and proposed FY 2015 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 - \$6.9 million*

This department is responsible for replacing catch basins, manhole covers and frames, and rehabilitating regulators and outfall gates. The ten-year plan provides for Flow Meter Sensors, Catch Basin Tops and Sewer Cleaning and Repair Equipment. Activities planned for FY 2014 and FY 2015 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 - \$25.3 million*

This year's capital budget emphasis is on replacing many of DC Water current vehicles and heavy duty vehicle equipment (such as Jet-Vacs, Valve turners, etc.) with more fuel efficient and environmental friendly vehicles. In addition, to support the efforts in reducing the carbon footprint, the Department is implementing comprehensive steps and coordinating with each department within DC Water, to prioritize their needs for the acquisition of vehicles/equipment designed to perform and support the responsibilities within the organization. In addition consideration has to be made in the acquisition of new industrial river cleaning equipment

(Skimmer Boats), as well heavy machinery (Jet-Vac equipment) to clean the catch basins and Valve-turners that DC Water has agreed to maintain for the Government of the District of Columbia and the Federal Government throughout the city.

*Department of Facilities and Security - \$16.0 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 HVAC improvements at various locations, furniture and fixtures and other facilities improvements. Additionally, of concern is that with the new increased security climate in FY 2014 and future years the security at all DC Water facilities will be upgraded and maintained at a level required by a critical facility in the Capital City of The USA.

*Department of Maintenance Services - \$48.7 million*

This department is responsible for rehabilitating and replacing large process equipment (pumps, electric motors, centrifuges, screens, variable frequency drives, and large motors throughout the Authority. A major emphasis has been placed on major pump rebuild/replacement at locations in Blue Plains. Additionally, funding will focus on large electric motor purchase and the rebuild/replacement of centrifuges. Consideration has also been made for a significant increase in equipment to be maintained at Blue Plains as a result of the increasing CIP program at the plant, and associated maintenance to ensure improved efficiency of plant processes.

*Department of Sewer and Water Pumping - \$0.8 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 CIP.

*Department of Process Engineering - \$7.5 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. With additional facilities coming on-line there will be a significant increase on equipment to maintain them.

*Department of Information Technology - \$28 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. DC Water's technology achievements have been recognized by various multi-national organizations and governmental entities. Our work during FY 2013, 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 2013, DC Water management performed 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.

**FY 2014 - FY 2023 CAPITAL EQUIPMENT BUDGET  
DISBURSEMENTS BASIS  
(\$ in 000's)**

Equipment Type	Owner- Dep'tt.	FY 2014 Revised	FY 2015 Proposed	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total FY '14-23	Project Sheet Ref.	Project Sheet Budget
<b><u>Wastewater Treatment</u></b>														
Lab Equipment	WWT	\$140	\$150	\$140	\$140	\$140	\$140	\$140	\$140	\$140	\$140	\$1,410	EB5	\$1,410
<b>Total</b>		<b>\$140</b>	<b>\$150</b>	<b>\$140</b>	<b>\$1,410</b>									
<b><u>Water Services</u></b>														
Water Service Replacement	DWS	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$2,600	EA2	\$2,600
System Valve Replacements	DWS	225	225	225	225	225	225	225	225	225	225	2,250	EW1	\$2,250
<b>Total</b>		<b>\$485</b>	<b>\$485</b>	<b>\$485</b>	<b>\$485</b>	<b>\$485</b>	<b>\$485</b>	<b>\$485</b>	<b>\$485</b>	<b>\$485</b>	<b>\$485</b>	<b>\$4,850</b>		
<b><u>Sewer Services</u></b>														
Sewer Pipes/Fittings	DSS	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$400	EA4	
Sewer Inspection Equipment	DSS	10	20	20	20	10	10	10	10	10	10	130	EA4	
Manhole Covers/Frames	DSS	40	40	40	40	40	40	40	40	40	40	400	EA4	
Regulator and Gate Rehabilitation	DSS	10	20	20	20	20	20	20	20	20	20	190	EA4	
Sewer Cleaning and Repair Equipment	DSS	55	55	55	55	55	55	55	55	55	55	550	EA4	
Portable Pumps	DSS	50	50	50	50	50	50	50	50	50	50	500	EA4	
Sewer Flow Meters/Sensor Replacements	DSS	50	50	75	75	75	75	75	75	75	75	700	EA4	
Catch Basin Tops/Frames/Covers	DSS	75	75	75	75	75	75	75	75	75	60	735	EA4	
Safety Equipment ( <i>shoring</i> )	DSS	50	50	50	50	50	50	75	75	75	50	575	EA4	\$4,180
100 W Emergency Generator & Load Center	DSS	50	50	50	50	50	50	50	50	50	50	500	ES4	\$500
CIPP Trenchless Equipment	DSS	200	100	50	200	50	50	50	50	50	50	850	EW6	\$850
TV for Jet Machine	DSS	60	60	60	60	60	60	75	75	75	60	645	EG5	\$645
Replace CCTV	DSS	250	-	-	-	-	250	-	-	-	250	750	SS1	\$750
<b>Total</b>		<b>\$940</b>	<b>\$610</b>	<b>\$585</b>	<b>\$735</b>	<b>\$575</b>	<b>\$825</b>	<b>\$615</b>	<b>\$615</b>	<b>\$615</b>	<b>\$810</b>	<b>\$6,925</b>		
<b><u>Fleet Management</u></b>														
Vehicles	FLEET	\$3,057	\$3,722	\$3,241	\$3,097	\$2,391	\$1,908	\$1,294	\$1,600	\$2,295	\$2,395	\$25,000	EB6	
Vehicles - SafePak														
Keybox/Panasonic Hardware	FLEET	279	-	-	-	-	-	-	-	-	-	279	EB6	\$25,279
<b>Total</b>		<b>\$3,336</b>	<b>\$3,722</b>	<b>\$3,241</b>	<b>\$3,097</b>	<b>\$2,391</b>	<b>\$1,908</b>	<b>\$1,294</b>	<b>\$1,600</b>	<b>\$2,295</b>	<b>\$2,395</b>	<b>\$25,279</b>		

**FY 2014 - FY 2023 CAPITAL EQUIPMENT BUDGET  
DISBURSEMENTS BASIS  
(\$ in 000's)**

Equipment Type	Owner- Deptt.	FY 2014 Revised	FY 2015 Proposed	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total FY '14-23	Project Sheet Ref.	Project Sheet Budget
<b><u>Facilities and Security</u></b>														
HVAC at Various Locations	FAC. & SECURITY	\$250	\$250	\$300	\$300	\$300	\$350	\$350	\$400	\$400	\$400	\$3,300	EF3	\$3,300
Photocopier Purchase	FAC. & SECURITY	200	100	200	100	500	100	200	100	200	100	1,800	EF5	\$1,800
Authority-wide fire suppress/detection	FAC. & SECURITY	125	250	250	125	125	150	150	150	150	150	1,625	EF7	\$1,625
Elevator -various locations	FAC. & SECURITY	150	75	75	75	75	75	75	200	75	75	950	EF8	\$950
Plumbing at Various Locations	FAC. & SECURITY	50	25	50	25	50	25	50	25	50	25	375	EX6	
Furniture and Fixtures	FAC. & SECURITY	200	200	200	200	600	200	200	200	200	200	2,400	EX6	
Facilities Improvements	FAC. & SECURITY	250	250	250	250	250	250	250	250	250	250	2,500	EX6	
Signage	FAC. & SECURITY	10	10	10	10	10	10	10	10	10	10	100	EX6	
Rollup Doors	FAC. & SECURITY	100	100	100	100	100	100	100	100	100	100	1,000	EX6	
Authority-wide Fencing	FAC. & SECURITY	50	25	50	25	50	25	150	25	50	25	475	EX6	\$6,850
Roofing	FAC. & SECURITY	50	50	50	50	50	50	250	50	50	50	700	EG7	\$700
Security- Misc. Enhancements	FAC. & SECURITY	50	50	50	50	50	50	50	50	50	50	500	EG8	\$500
Appliances	FAC. & SECURITY	25	25	25	25	25	25	25	25	25	25	250	EW7	\$250
<b>Total</b>		<b>\$1,510</b>	<b>\$1,410</b>	<b>\$1,610</b>	<b>\$1,335</b>	<b>\$2,185</b>	<b>\$1,410</b>	<b>\$1,860</b>	<b>\$1,585</b>	<b>\$1,610</b>	<b>\$1,460</b>	<b>\$15,975</b>		
<b><u>Information Technology</u></b>														
Desktop Replacements	I.T.	\$500	\$565	\$500	\$500	\$500	\$250	\$250	\$250	\$250	\$250	\$3,815	EA6	\$3,815
Cabling	I.T.	160	175	175	175	175	175	175	175	175	175	1,735	EA7	\$1,735
Telephone Systems Upgrades	I.T.	110	325	130	800	360	-	-	-	-	-	1,725	EA8	\$1,725
Radios	I.T.	575	30	30	30	30	30	30	30	30	30	845	EB4	\$845
Redundant Data Center	I.T.	200	210	450	200	60	60	60	60	60	60	1,420	EB8	\$1,420
Infrastructure Upgrade	I.T.	405	1,055	585	605	1,035	605	605	530	527	605	6,557	EC4	\$6,557
Enterprise Archiving	I.T.	100	-	10	10	10	150	150	10	10	10	460	EG2	\$460
Enterprise Storage Upgrades	I.T.	525	375	125	125	125	125	125	125	125	125	1,900	EG3	\$1,900
Finance/Procurement System	FINANCE	353	500	500	-	-	-	-	-	-	-	1,353	EG4	\$1,353
Materials Management System	PROCUREMENT	400	-	-	-	-	-	-	-	-	-	400	EP3	\$400
Field Service / Mobile Equipment	FLEET	275	175	100	100	100	100	100	100	100	100	1,250	ET5	\$1,250
Enterprise Backup Solution	I.T.	300	500	100	100	500	100	100	100	100	100	2,000	ET7	\$2,000
Ceridian (Software & Implementation)	FINANCE	208	30	30	30	30	30	30	30	30	30	478	EZ4	\$478
Document Management System	I.T.	500	275	100	300	100	100	100	100	100	100	1,775	EZ8	\$1,775
CS-Leak Detection	DWS	-	50	-	-	-	-	-	-	-	-	50	EK2	\$50

**FY 2014 - FY 2023 CAPITAL EQUIPMENT BUDGET  
DISBURSEMENTS BASIS  
(\$ in 000's)**

Equipment Type	Owner- Dep'tt.	FY 2014 Revised	FY 2015 Proposed	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total FY '14-23	Project Sheet Ref.	Project Sheet Budget
Safety System- Enterprise Performance Dashboard	SAFETY	100	200	-	-	-	-	-	-	-	-	300	EK3	\$300
VoIP Upgrades	GM	375	100	-	-	-	-	-	-	-	-	475	EK4	\$475
	I.T.	75	300	-	-	-	300	-	-	-	-	675	EH4	\$675
Time & Attendance Clocks - Inc. Software (DayForce) / Manuals	FINANCE	223	280	-	-	-	-	-	-	-	-	503	EH6	\$503
Performance Management System	HCM	-	100	-	-	-	-	-	-	-	-	100	HC1	\$100
Succession Planning Module -( Learning & Development - Enhance Enterprise System)	HCM	-	100	-	-	-	-	-	-	-	-	100	EH2	\$100
Talent Management - Recruitment/Applicant Tracking module	HCM	-	100	-	-	-	-	-	-	-	-	100	HC2	\$100
<b>Total</b>		<b>\$5,384</b>	<b>\$5,445</b>	<b>\$2,835</b>	<b>\$2,975</b>	<b>\$3,025</b>	<b>\$2,025</b>	<b>\$1,725</b>	<b>\$1,510</b>	<b>\$1,507</b>	<b>\$1,585</b>	<b>\$28,016</b>		
<b><u>Maintenance Services</u></b>														
Major Pump Rebuild/Replacement	MAINTENANCE	\$1,000	\$2,000	\$1,800	\$1,600	\$1,500	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$16,900	EC1	\$16,900
Large Electric Motors	MAINTENANCE	400	450	450	450	550	550	550	550	550	550	5,050	EC2	\$5,050
High Priority Rehab Program	MAINTENANCE	500	500	500	500	600	600	600	600	600	600	5,600	EC3	\$5,600
Centrifuge Rebuild / Replace	MAINTENANCE	630	630	630	630	756	756	756	756	756	756	7,056	EM4	\$7,056
Mechanical /Electrical Replacements	MAINTENANCE	616	616	1,091	2,090	1,650	950	2,433	2,433	1,745	475	14,099	EW8	\$14,099
<b>Total</b>		<b>\$3,146</b>	<b>\$4,196</b>	<b>\$4,471</b>	<b>\$5,270</b>	<b>\$5,056</b>	<b>\$4,656</b>	<b>\$6,139</b>	<b>\$6,139</b>	<b>\$5,451</b>	<b>\$4,181</b>	<b>\$48,705</b>		
<b><u>Sewer and Water Pumping</u></b>														
Major Pump Rebuild/Replacement	SEWER & WATER PUMPING	24	24	24	24	25	25	25	25	26	26	250	EI1	\$250
High Priority Rehab Program	SEWER & WATER PUMPING	47	77	50	30	31	52	55	55	57	55	509	EI3	\$509
<b>Total</b>		<b>\$71</b>	<b>\$101</b>	<b>\$74</b>	<b>\$54</b>	<b>\$57</b>	<b>\$77</b>	<b>\$80</b>	<b>\$80</b>	<b>\$84</b>	<b>\$81</b>	<b>\$759</b>		
<b><u>Process Engineering</u></b>														
Actuators	PROCESS ENGG.	\$372	\$372	\$186	\$186	\$186	\$186	\$186	\$186	\$186	\$186	\$2,230	PE1	\$2,230
Flow Meters	PROCESS ENGG.	209	209	104	104	104	104	104	104	104	104	1,253	PE2	\$1,253
PLCs	PROCESS ENGG.	1035	100	173	173	100	100	100	100	100	100	2,080	PE3	\$2,080
Digesters- Major Equipment Replacement	PROCESS ENGG.	-	391	196	196	196	196	196	196	196	196	1,955	PE4	\$1,955
<b>Total</b>		<b>\$1,616</b>	<b>\$1,072</b>	<b>\$658</b>	<b>\$658</b>	<b>\$586</b>	<b>\$586</b>	<b>\$586</b>	<b>\$586</b>	<b>\$586</b>	<b>\$586</b>	<b>\$7,518</b>		
<b>Total Capital Equipment</b>		<b>\$16,627</b>	<b>\$17,191</b>	<b>\$14,099</b>	<b>\$14,749</b>	<b>\$14,499</b>	<b>\$12,112</b>	<b>\$12,924</b>	<b>\$12,740</b>	<b>\$12,772</b>	<b>\$11,723</b>	<b>\$139,436</b>		

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EA2 Water Service Replacement**  
 Department: Water Services  
 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 2014 Approved Budget	2,600,000
FY2014 Revised/FY2015 Proposed Budget	2,600,000
<b>Increase/(Decrease)</b>	<b>0</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	260	260	260	260	260	260	260	260	260	260
<b>Commitments Budget</b>	260	260	260	260	260	260	260	260	260	260

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EA4 Sewer Service Utility Equipment**  
 Department: Sewer Services  
 Priority: Good Utility Practice

**Project Description:**  
 Annual rehabilitation and replacement of catch basins, pipes, pumps, manholes and cleaning and repair equipment.

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

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	3,516,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	4,180,000
WSSC -		<b>Increase/(Decrease)</b>	664,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	380	400	425	425	415	415	440	440	440	400
<b>Commitments Budget</b>	380	400	425	425	415	415	440	440	440	400

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EA6 Desktop Replacements**  
 Department: Information Technology  
 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		FY 2014 Approved Budget	5,067,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	3,815,000
WSSC -		<b>Increase/(Decrease)</b>	-1,252,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	500	565	500	500	500	250	250	250	250	250
<b>Commitments Budget</b>	500	565	500	500	500	250	250	250	250	250

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EA7 Cabling**  
 Department: Information Technology  
 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		FY 2014 Approved Budget	1,691,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	1,735,000
WSSC -		<b>Increase/(Decrease)</b>	44,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	160	175	175	175	175	175	175	175	175	175
<b>Commitments Budget</b>	160	175	175	175	175	175	175	175	175	175

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EA8 Telephone System Upgrades**  
 Department: Information Technology  
 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		FY 2014 Approved Budget	2,015,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	1,725,000
WSSC -		<b>Increase/(Decrease)</b>	-290,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	110	325	130	800	360					
<b>Commitments Budget</b>	110	325	130	800	360					

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EB4 Radios**  
 Department: Information Technology  
 Priority: IT Best Practice (Life Cycle Management)

**Project Description:**

Radio system upgrade to next generation digital radio system and annual system enhancements, which are required to ensure operational safety and security.

**Impact on Operations:**

Ongoing annual maintenance renewal and City-Wide radio fee.

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	2,085,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	845,000
WSSC -		<b>Increase/(Decrease)</b>	-1,240,000
Fairfax -			
Loudoun/PI -			

<b>Disbursements Budget</b>	<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>	<u>FY 2022</u>	<u>FY 2023</u>
	575	30	30	30	30	30	30	30	30	30
<b>Commitments Budget</b>	<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>	<u>FY 2022</u>	<u>FY 2023</u>
	575	30	30	30	30	30	30	30	30	30

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EB5 Laboratory Equipment**  
 Department: Wastewater Treatment  
 Priority: Good Utility Practice  
**Project Description:**  
 Annually occurring purchase of laboratory equipment and devices.  
**Impact on Operations:**  
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	0
EPA -		FY2014 Revised/FY2015 Proposed Budget	1,410,000
WSSC -		<b>Increase/(Decrease)</b>	1,410,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	140	150	140	140	140	140	140	140	140	140
<b>Commitments Budget</b>	<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>	<u>FY 2022</u>	<u>FY 2023</u>
	140	150	140	140	140	140	140	140	140	140

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EB6 Vehicle Purchases**  
 Department: Fleet Services  
 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		FY 2014 Approved Budget	15,591,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	25,279,000
WSSC -		<b>Increase/(Decrease)</b>	9,688,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	3,336	3,722	3,241	3,097	2,391	1,908	1,294	1,600	2,295	2,395
<b>Commitments Budget</b>	3,336	3,722	3,241	3,097	2,391	1,908	1,294	1,600	2,295	2,395

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EB8 Redundant Data Center**  
 Department: Information Technology  
 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		FY 2014 Approved Budget	1,700,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	1,420,000
WSSC -		<b>Increase/(Decrease)</b>	-280,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	200	210	450	200	60	60	60	60	60	60
<b>Commitments Budget</b>	<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>	<u>FY 2022</u>	<u>FY 2023</u>
	200	210	450	200	60	60	60	60	60	60

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EC1 Pump Repair and Replacement**  
 Department: Maintenance Services  
 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, FY 2014 will include rebuilds of Spent Wash Water Pumps, High Pressure Reclaimed Effluent Pumps, and Filter Influent Pumps. FY 2014 will include replacement of the Nitrification Return Sludge Pumps. Also, we will start to service all new equipment coming on line as part of the increased CIP program.

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

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	6,084,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	16,900,000
WSSC -		<b>Increase/(Decrease)</b>	10,816,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	1,000	2,000	1,800	1,600	1,500	1,800	1,800	1,800	1,800	1,800
<b>Commitments Budget</b>	<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>	<u>FY 2022</u>	<u>FY 2023</u>
	1,000	2,000	1,800	1,600	1,500	1,800	1,800	1,800	1,800	1,800

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EC2 Large Electric Motors**  
 Department: Maintenance Services  
 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 2014 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. Also, we will start to service all new equipment coming on line as part of the increased CIP 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 2014 Approved Budget	2,237,000
FY2014 Revised/FY2015 Proposed Budget	5,050,000
<b>Increase/(Decrease)</b>	<b>2,813,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	400	450	450	450	550	550	550	550	550	550
<b>Commitments Budget</b>	400	450	450	450	550	550	550	550	550	550

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EC3 High Priority Rehab Program**  
 Department: Maintenance Services  
 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, Variable Frequency Drivers for Secondary Pumping and replace hanger bearing in solids processing conveyors. Also, we will start to service all new equipment coming on line as part of the increased CIP program.

**Impact on Operations:**

This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	1,550,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	5,600,000
WSSC -		<b>Increase/(Decrease)</b>	4,050,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	500	500	500	500	600	600	600	600	600	600
<b>Commitments Budget</b>	<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>	<u>FY 2022</u>	<u>FY 2023</u>
	500	500	500	500	600	600	600	600	600	600

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EC4 Infrastructure Upgrade**  
 Department: Information Technology  
 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		FY 2014 Approved Budget	6,403,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	6,557,000
WSSC -		<b>Increase/(Decrease)</b>	154,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	405	1,055	585	605	1,035	605	605	530	527	605
<b>Commitments Budget</b>	405	1,055	585	605	1,035	605	605	530	527	605

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EF3 HVAC at Various Locations**  
 Department: Facilities and Security  
 Priority: Good Utility Practice

**Project Description:**  
 Annual program to repair and replace HVAC equipment within DC Water.

Facilities maintains the heating, ventilation and air conditioning of both manned and un-manned structures within the purview of the DC Water system, much of which is necessary to ensure optimal operating conditions for the equipment maintained therein.

This program covers HVAC equipment which requires repairs or replacements outside of the normal renovation cycles of the structures in which they are located.

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

Funding by User (percent):

DC - Joint Use - Indirect Cost  
 EPA -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY 2014 Approved Budget	1,985,000
FY2014 Revised/FY2015 Proposed Budget	3,300,000
<b>Increase/(Decrease)</b>	<b>1,315,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	250	250	300	300	300	350	350	400	400	400
<b>Commitments Budget</b>	250	250	300	300	300	350	350	400	400	400

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EF5 Photocopier Purchase**  
 Department: Facilities and Security  
 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 operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	1,240,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	1,800,000
WSSC -		<b>Increase/(Decrease)</b>	560,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	200	100	200	100	500	100	200	100	200	100
<b>Commitments Budget</b>	<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>	<u>FY 2022</u>	<u>FY 2023</u>
	200	100	200	100	500	100	200	100	200	100

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EF7 Authority-wide fire supression/detection**  
 Department: Facilities and Security  
 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		FY 2014 Approved Budget	1,190,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	1,625,000
WSSC -		<b>Increase/(Decrease)</b>	435,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	125	250	250	125	125	150	150	150	150	150
<b>Commitments Budget</b>	<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>	<u>FY 2022</u>	<u>FY 2023</u>
	125	250	250	125	125	150	150	150	150	150

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EF8 Elevator Repairs**  
 Department: Facilities and Security  
 Priority: Good Utility Practice

**Project Description:**

This project is for the repair of 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 operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost  
 EPA -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY 2014 Approved Budget	749,000
FY2014 Revised/FY2015 Proposed Budget	950,000
<b>Increase/(Decrease)</b>	<b>201,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	150	75	75	75	75	75	75	200	75	75
<b>Commitments Budget</b>	150	75	75	75	75	75	75	200	75	75

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EG2 Enterprise Archiving**  
 Department: Information Technology  
 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 2014 Approved Budget	485,000
FY2014 Revised/FY2015 Proposed Budget	460,000
<b>Increase/(Decrease)</b>	<b>-25,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	100		10	10	10	150	150	10	10	10
<b>Commitments Budget</b>	100		10	10	10	150	150	10	10	10

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EG3 Enterprise Storage Upgrades**  
 Department: Information Technology  
 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 -  
 Loudoun/PI -



FY 2014 Approved Budget	1,950,000
FY2014 Revised/FY2015 Proposed Budget	1,900,000
<b>Increase/(Decrease)</b>	<b>-50,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	525	375	125	125	125	125	125	125	125	125
<b>Commitments Budget</b>	525	375	125	125	125	125	125	125	125	125

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EG4 Finance/Procurement System**  
 Department: Information Technology - Finance, Accounting & Budget  
 Priority: IT Best Practice

**Project Description:**  
 Review of financial management and contract management systems for potential upgrades/replacements and convergence.

**Impact on Operations:**  
 Ongoing annual maintenance and system support.

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	2,212,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	1,353,000
WSSC -		<b>Increase/(Decrease)</b>	<b>-859,000</b>
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	353	500	500							
<b>Commitments Budget</b>	353	500	500							

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EG5 TV for Jet Machine**  
 Department: Sewer Services  
 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 operational productivity.

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	330,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	645,000
WSSC -		<b>Increase/(Decrease)</b>	315,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	60	60	60	60	60	60	75	75	75	60
<b>Commitments Budget</b>	60	60	60	60	60	60	75	75	75	60

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

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EG7 Roofing**  
 Department: Facilities and Security  
 Priority: Good Utility Practice

**Project Description:**

This project will be used to replace all gutter seams on East Side, Bryant Street Main Pumping Station plus other intermediate roof repairs throughout DC Water.

**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		FY 2014 Approved Budget	250,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	700,000
WSSC -		<b>Increase/(Decrease)</b>	450,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	50	50	50	50	50	50	250	50	50	50
<b>Commitments Budget</b>	50	50	50	50	50	50	250	50	50	50

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EG8 Security Enhancements - Miscellaneous**  
 Department: Facilities and Security  
 Priority: Good Utility Practice

**Project Description:**

This project is for Security Enhancements throughout DC Water, which includes 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		FY 2014 Approved Budget	190,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	500,000
WSSC -		<b>Increase/(Decrease)</b>	310,000
Fairfax -			
Loudoun/PI -			

<b>Disbursements</b>	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Budget</b>	50	50	50	50	50	50	50	50	50	50
<b>Commitments</b>	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Budget</b>	50	50	50	50	50	50	50	50	50	50

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EH2 Succession Planning Module**  
 Department: Information Technology - Human Capital Mgmt.  
 Priority: Good Utility Practice

**Project Description:**

This program provides system implementation support to executive and senior staff in fulfilling development needs.

**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 2014 Approved Budget	0
FY2014 Revised/FY2015 Proposed Budget	100,000
<b>Increase/(Decrease)</b>	<b>100,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>		100								
<b>Commitments Budget</b>		100								

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EH4 VoIP Upgrades**  
 Department: Information Technology  
 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 2014 Approved Budget	525,000
FY2014 Revised/FY2015 Proposed Budget	675,000
<b>Increase/(Decrease)</b>	<b>150,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	75	300				300				
<b>Commitments Budget</b>	75	300				300				

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EH6 Time & Attendance Clocks - Dayforce**  
 Department: Information Technology - Finance, Accounting & Budget  
 Priority: Good Utility Practice

**Project Description:**

Scheduled Time Clock Replacement Program and implementation of the Dayforce Time & Attendance tool. This project includes support for the training manuals and development of procedures.

**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 2014 Approved Budget	310,000
FY2014 Revised/FY2015 Proposed Budget	503,000
<b>Increase/(Decrease)</b>	<b>193,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	223	280								
<b>Commitments Budget</b>	223	280								

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EI1 Major Pump Rebuild/Replacement**  
 Department: Sewer and Water Pumping Maintenance  
 Priority: Good Utility Practice

**Project Description:**  
 Annual program for the repair and replacement of Major Pumps at Water and Sewer Pumping facilities.

In addition to addressing problems which arise during the year, FY 2014. This project will include rebuilds of Spent Wash Water Pumps, High Pressure Reclaimed Effluent Pumps, and Filter Influent Pumps. FY 2014 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 -



FY 2014 Approved Budget	900,000
FY2014 Revised/FY2015 Proposed Budget	250,000
<b>Increase/(Decrease)</b>	<b>-650,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	24	24	24	24	25	25	25	25	26	26
<b>Commitments Budget</b>	24	24	24	24	25	25	25	25	26	26

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EI3 High Priority Rehab Program - Water & Sewer Pumping**  
 Department: Sewer and Water Pumping Maintenance  
 Priority: Good Utility Practice

**Project Description:**

Major rebuild/replacement of critical process equipment, outside Blue Plains Advance Wastewater Treatment Plant. This is required in order to maintain regular service to customers throughout the City. The equipment to be serviced and maintained includes: Backflow Preventers, Rotamat Screens (Degrit), Dual Purpose Sedimentation Basin Gates, Gravity Thickener Collectors, Variable Frequency Drivers for Secondary Pumping and replacement of hanger bearing in solids processing conveyors.

**Impact on Operations:**

This project will have no effect on the operating budget.

Funding by User (percent):

DC -  
 EPA -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY 2014 Approved Budget	0
FY2014 Revised/FY2015 Proposed Budget	509,000
<b>Increase/(Decrease)</b>	<b>509,000</b>

**NEW**

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	47	77	50	30	31	52	55	55	57	55
<b>Commitments Budget</b>	47	77	50	30	31	52	55	55	57	55

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EK2 CS-Leak Detection**  
 Department: Information Technology - Water Services

**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 -



FY 2014 Approved Budget	119,000
FY2014 Revised/FY2015 Proposed Budget	50,000
<b>Increase/(Decrease)</b>	<b>-69,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>		50								
<b>Commitments Budget</b>		50								

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EK3 Safety System**  
 Department: Information Technology - Safety

**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 -  
 Loudoun/PI -



FY 2014 Approved Budget	100,000
FY2014 Revised/FY2015 Proposed Budget	300,000
<b>Increase/(Decrease)</b>	<b>200,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	100	200								
<b>Commitments Budget</b>	100	200								

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EK4 Enterprise Performance Dashboard**  
 Department: Information Technology - GM's Office

**Priority:**

**Project Description:**

In an effort to support transparency as well as overall organizational efficiency, this project is to support a dashboard 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  
 EPA -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY 2014 Approved Budget	750,000
FY2014 Revised/FY2015 Proposed Budget	475,000
<b>Increase/(Decrease)</b>	<b>-275,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	375	100								
<b>Commitments Budget</b>	375	100								

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EM4 Centrifuge Repair and Replacement**  
 Department: Maintenance Services

**Priority:**

**Project Description:**

Repair and replacement of Centrifuges at Blue Plains.

**Impact on Operations:**

This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost  
 EPA -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY 2014 Approved Budget	4,245,000
FY2014 Revised/FY2015 Proposed Budget	7,056,000
<b>Increase/(Decrease)</b>	<b>2,811,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	630	630	630	630	756	756	756	756	756	756
<b>Commitments Budget</b>	630	630	630	630	756	756	756	756	756	756

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EP3 Materials Management System**  
 Department: Information Technology - Procurement  
 Priority: Good Utility Practice

**Project Description:**

This project is to streamline the computer-based Procurement sourcing and Contract maintenance functionality anticipated to be completed and fully operational in FY 2014.

**Impact on Operations:**

This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	1,183,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	400,000
WSSC -		<b>Increase/(Decrease)</b>	<b>-783,000</b>
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	400									
<b>Commitments Budget</b>	400									

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **ES4 100W Emergency Generator & Load Center**  
 Department: Sewer Services

**Priority:**

**Project Description:**

This project will simulate conditions that the generator will encounter, therefore 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 -  
 Loudoun/PI -



FY 2014 Approved Budget	50,000
FY2014 Revised/FY2015 Proposed Budget	500,000
<b>Increase/(Decrease)</b>	<b>450,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	50	50	50	50	50	50	50	50	50	50
<b>Commitments Budget</b>	50	50	50	50	50	50	50	50	50	50

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **ET5 Field Service/Mobile Equipment**  
 Department: Information Technology - Fleet  
 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		FY 2014 Approved Budget	1,475,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	1,250,000
WSSC -		<b>Increase/(Decrease)</b>	-225,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	275	175	100	100	100	100	100	100	100	100
<b>Commitments Budget</b>	275	175	100	100	100	100	100	100	100	100

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **ET7 Enterprise Backup Solution**  
 Department: Information Technology  
 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 -



FY 2014 Approved Budget	1,340,000
FY2014 Revised/FY2015 Proposed Budget	2,000,000
<b>Increase/(Decrease)</b>	<b>660,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	300	500	100	100	500	100	100	100	100	100
<b>Commitments Budget</b>	300	500	100	100	500	100	100	100	100	100

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EW1 System Valve Replacement**  
 Department: Water Services  
 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 -  
 Loudoun/PI -



FY 2014 Approved Budget	2,104,000
FY2014 Revised/FY2015 Proposed Budget	2,250,000
<b>Increase/(Decrease)</b>	<b>146,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	225	225	225	225	225	225	225	225	225	225
<b>Commitments Budget</b>	225	225	225	225	225	225	225	225	225	225

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EW6 Cured In-Place Pipe (CIPP) Trenchless Equipment**  
 Department: Sewer Services  
 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 have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	375,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	850,000
WSSC -		<b>Increase/(Decrease)</b>	475,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	200	100	50	200	50	50	50	50	50	50
<b>Commitments Budget</b>	200	100	50	200	50	50	50	50	50	50

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EW7 Appliances**  
 Department: Facilities and Security

**Priority:**

**Project Description:**

This project will annually replace major appliances throughout the Authority.

**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 2014 Approved Budget	50,000
FY2014 Revised/FY2015 Proposed Budget	250,000
<b>Increase/(Decrease)</b>	<b>200,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	25	25	25	25	25	25	25	25	25	25
<b>Commitments Budget</b>	25	25	25	25	25	25	25	25	25	25

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EW8 Membrane Diffuser, Mechanical/Electrical**  
 Department: Maintenance Services

**Priority:**

**Project Description:**

This project is for the 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 are anticipated to 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 contingent on the facility not having operational shut downs.

**Impact on Operations:**

This project will have no effect on the operating budget

Funding by User (percent):

DC - Joint Use - Indirect Cost		FY 2014 Approved Budget	1,066,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	14,099,000
WSSC -		<b>Increase/(Decrease)</b>	13,033,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	616	616	1,091	2,090	1,650	950	2,433	2,433	1,745	475
<b>Commitments Budget</b>	616	616	1,091	2,090	1,650	950	2,433	2,433	1,745	475

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EX6 Facilities Improvements - Various**  
 Department: Facilities and Security  
 Priority: Good Utility Practice

**Project Description:**

Annual program for improvements to DC Water-wide facilities including HVAC replacement, elevator rehabilitation, 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		FY 2014 Approved Budget	5,978,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	6,850,000
WSSC -		<b>Increase/(Decrease)</b>	872,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	660	610	660	610	1,060	610	760	610	660	610
<b>Commitments Budget</b>	<u>660</u>	<u>610</u>	<u>660</u>	<u>610</u>	<u>1,060</u>	<u>610</u>	<u>760</u>	<u>610</u>	<u>660</u>	<u>610</u>

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EZ4 Payroll/HR System - Ceridian**  
 Department: Information Technology - Finance, Accounting & Budget  
 Priority: IT Best Practice

**Project Description:**

Swipe card entry enhancement to payroll system and employee remote access to individual payroll information. This project also involves enhancements to the system integration of the Payroll/HR system.

**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 2014 Approved Budget	270,000
FY2014 Revised/FY2015 Proposed Budget	478,000
<b>Increase/(Decrease)</b>	<b>208,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	208	30	30	30	30	30	30	30	30	30
<b>Commitments Budget</b>	208	30	30	30	30	30	30	30	30	30

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **EZ8 Document Management System**  
 Department: Information Technology  
 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		FY 2014 Approved Budget	2,800,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	1,775,000
WSSC -		<b>Increase/(Decrease)</b>	-1,025,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	500	275	100	300	100	100	100	100	100	100
<b>Commitments Budget</b>	500	275	100	300	100	100	100	100	100	100

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **HC1 Compensation - Performance Management System**  
 Department: Information Technology - Human Capital Mgmt.

**Priority:**

**Project Description:**

Implementation/upgrade to the Performance Management System to promote efficiencies and streamline employee evaluations.

**Impact on Operations:**

This project will have no impact on the operating budget.

Funding by User (percent):

DC -  
 EPA -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY 2014 Approved Budget	0
FY2014 Revised/FY2015 Proposed Budget	100,000
<b>Increase/(Decrease)</b>	<b>100,000</b>

**NEW**

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>		100								
<b>Commitments Budget</b>		100								

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **HC2 Talent Management - Recruitment/Applicant Tracking**  
 Department: Information Technology - Human Capital Mgmt.

**Priority:**

**Project Description:**

This project is to upgrade the Recruitment/Applicant Tracking Module.

**Impact on Operations:**

This project will have no impact on the operating budget.

Funding by User (percent):

DC -  
 EPA -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY 2014 Approved Budget	0
FY2014 Revised/FY2015 Proposed Budget	100,000
<b>Increase/(Decrease)</b>	<b>100,000</b>

**NEW**

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>		100								
<b>Commitments Budget</b>		100								

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **PE1 Actuators**  
 Department: Process Engineering  
 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 -  
 Loudoun/PI -



FY 2014 Approved Budget	1,859,000
FY2014 Revised/FY2015 Proposed Budget	2,230,000
<b>Increase/(Decrease)</b>	<b>371,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	372	372	186	186	186	186	186	186	186	186
<b>Commitments Budget</b>	372	372	186	186	186	186	186	186	186	186

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **PE2 Flow Meters**  
 Department: Process Engineering  
 Priority: Good Utility Practices

**Project Description:**

This project will replace critical flow meters at the end of their useful life in advance of failure, along with flow meters that have failed. Flow metering technology 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 -  
 Loudoun/PI -



FY 2014 Approved Budget	1,044,000
FY2014 Revised/FY2015 Proposed Budget	1,253,000
<b>Increase/(Decrease)</b>	<b>209,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	209	209	104	104	104	104	104	104	104	104
<b>Commitments Budget</b>	209	209	104	104	104	104	104	104	104	104

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **PE3 PLCs**  
 Department: Process Engineering  
 Priority: Good Utility Practices

**Project Description:**

This project is for the replacement program targeting failed and problematic units in advance of their complete failure. PLCs are susceptible to hydrogen sulfide related corrosion and the replacement units will have to be protected against corrosive gases. PLC systems average \$50,000 per installation and also have an average life of ten years. These devices averaged seven years in FY 2013. There will be 69 PLC systems remaining on the plant site in FY 2013 that need to be maintained/replaced.

**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 -  
 Loudoun/PI -



FY 2014 Approved Budget	2,193,000
FY2014 Revised/FY2015 Proposed Budget	2,080,000
<b>Increase/(Decrease)</b>	<b>-113,000</b>

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	1,035	100	173	173	100	100	100	100	100	100
<b>Commitments Budget</b>	1,035	100	173	173	100	100	100	100	100	100

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **PE4 Digesters - Major Equipment Replacement**  
 Department: Process Engineering  
 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 anticipated to 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 contingent on the facility not having operational shut downs.

**Impact on Operations:**

This project will have no impact on the operating budget.

Funding by User (percent):

DC - Joint Use - Direct Cost		FY 2014 Approved Budget	1,564,000
EPA -		FY2014 Revised/FY2015 Proposed Budget	1,955,000
WSSC -		<b>Increase/(Decrease)</b>	391,000
Fairfax -			
Loudoun/PI -			

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>		391	196	196	196	196	196	196	196	196
<b>Commitments Budget</b>		391	196	196	196	196	196	196	196	196

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

District of Columbia Water and Sewer Authority  
 FY 2014 - 2023 Capital Improvement Program

Service Area Title: Capital Equipment  
 Program Title: Capital Equipment  
 Activity Group/Project Title: **SS1 Replace Closed Captioned TV**  
 Department: Sewer Services  
 Priority: Good Utility Practices

**Project Description:**  
 Replace Closed Captioned TV equipment employed to evaluate and determine the status of sewer laterals and other assets underground.

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

Funding by User (percent):

DC -  
 EPA -  
 WSSC -  
 Fairfax -  
 Loudoun/PI -



FY 2014 Approved Budget	0
FY2014 Revised/FY2015 Proposed Budget	750,000
<b>Increase/(Decrease)</b>	<b>750,000</b>

**NEW**

	<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>	<u>FY 2022</u>	<u>FY 2023</u>
<b>Disbursements Budget</b>	250	0	0	0	0	250	0	0	0	250
<b>Commitments Budget</b>	250	0	0	0	0	250	0	0	0	250

*(projected disbursements do not include contingencies)*

*(dollars in thousands)*

**CAPITAL EQUIPMENT SERVICE AREA  
PROJECT NAME AND PAGE NUMBERS**

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EA4	Sewer Services	IX-12
EA6	Desktop Replacement Systems	IX-13
EA7	Cable Renewal	IX-14
EA8	Telephone Renewal	IX-15
EB4	Radio Equipment	IX-16
EB5	Laboratory Equipment	IX-17
EB6	Fleet Management	IX-18
EB8	Redundant Data Center	IX-19
EC1	Pump Repairs/Replacement	IX-20
EC2	Large Electric Motors	IX-21
EC3	High Priority Rehab Program	IX-22
EC4	Network System Renewal	IX-23
EF3	HVAC at Various Locations	IX-24
EF5	Photocopier Purchase	IX-25
EF7	Authority Wide Fire Suppression System	IX-26
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EG2	Enterprise Archiving	IX-28
EG3	Network Storage System Renewal	IX-29
EG4	Finance/Procurement System	IX-30
EG5	TV for Jet Machine	IX-31
EG7	Roofing	IX-32
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**CAPITAL EQUIPMENT SERVICE AREA  
PROJECT NAME AND PAGE NUMBERS**

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EH2	Succession Planning Module	IX-34
EH4	VOIP Upgrades	IX-35
EH6	Time & Attendance Clocks	IX-36
EI1	Major Pump Rebuild/Replacement	IX-37
EI3	High Priority Rehab Program - Water & Sewer Pump	IX-38
EK2	CS-Leak Detection	IX-39
EK3	Safety System	IX-40
EK4	Enterprise Performance Dashboard	IX-41
EM4	Centrifuge Repair and Replacement	IX-42
EP3	eProcurement System	IX-43
ES4	100 W Emergency Genertor & Load Center	IX-44
ET5	Handheld Inventory	IX-45
ET7	Enterprise Backup Solution	IX-46
EW1	System Valve Replacements	IX-47
EW6	Cured In-Place Pipe (CIPP) Trenchless Equipment	IX-48
EW7	Appliances	IX-49
EW8	Membrane Difuser, Mechanical/Electrical	IX-50
EX6	WASA-wide Fencing	IX-51
EZ4	Payroll/HR System	IX-52
EZ8	Document Management System	IX-53
HC1	Compensation - Performance Management System	IX-54
HC2	Talent Management - Recruitment/Applicant tracking	IX-55
PE1	Actuators	IX-56

**CAPITAL EQUIPMENT SERVICE AREA  
PROJECT NAME AND PAGE NUMBERS**

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PE3	PLC's	IX-58
PE4	Digesters - Major Equipment Replacement	IX-59
SS1	Replace Close Captioned TV	IX-60