

CCO CAPITAL MATERIAL MATERIAL

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

ADOPTED FEBRUARY 5, 2015 APPROVED FY 2015 - 2024

Matthew T. Brown, Board Chairman

George S. Hawkins, CEO and General Manager

Mark T. Kim, Chief Financial Officer

PARTNERSHIP for SUSTAINABILITY

Lowering the Lady Bird **Tunnel Boring Machine more** than 100 feet underground



STRATEGIC PLAN

Blue Horizon 2020 serves as a blueprint for future decision-making and provides a structure through which annual reviews can be accomplished to assure that the goals and objectives retain their relevance over time. By laying out a course of action, this plan represents a disciplined process for making fundamental decisions and shaping DC Water's future.

FOCUS AREAS

Leadership: Advocate and lead local, regional, and national collaborations, while internally developing the workforce of the future.

Value: Be recognized for the value it delivers by protecting public health and the environment, supporting community sustainability, and providing for economic vitality.

Innovation: Achieve international prominence in development and adoption of science, technology and processes in support of a culture of innovation.

VISION

To be a world-class utility.

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.

MISSION

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

GOALS

The goals in our 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.

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.

<u>INITIATIVES</u>

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

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ACKNOWLEDGEMENTS

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We would like to extend our appreciation to all the Finance, Accounting & Budget and Engineering & Technical Services departmental staff members whose hard work and dedication helped make this document possible.

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FY 2015 - FY 2024 CAPITAL IMPROVEMENT PROGRAM LETTER OF TRANSMITTAL

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

The Board of Directors
District of Columbia Water and Sewer Authority

We are pleased to present the District of Columbia Water and Sewer Authority's (DC Water) Capital Improvement Program (CIP) budget book as adopted by the DC Water Board of Directors on February 5, 2015. It is intended to satisfy, in part, the mandate provided for in District of Columbia Law 11-111, which specifies that "...the Board shall annually develop, adopt and submit to the Mayor, a multi-year financial plan for Capital and Operating expenses ..." The CIP budget book provides details for each service area, program area and associated projects and serves as a supplement to information contained in Section V of the Operating budget book.

As shown in the table which follows, the approved budget includes \$3.8 billion for the FY 2015 - FY 2024 Disbursement Budget and \$10.1 billion for the Lifetime Budget. The CIP budget supports the continuation of major capital asset investment in programs and projects that will upgrade the District's water distribution system, improve the condition of our local waterways, create clean energy and reduce operating costs in future years. The CIP includes all mandated projects as well as rehabilitation of assets required to meet permit and other regulatory requirements and also all immediate needs necessary to maintain existing service levels.

CAPITAL IMPROVEMENT PROGRAM (\$000's)

| , | Lifetime Budget | Disbursement* Budget |
|--|--|--|
| CAPITAL PROJECTS Wastewater Treatment Sanitary Sewer Combined Sewer Overflow Stormwater Water Subtotal | \$ 3,086,438 1,292,670 2,979,906 91,818 1,775,253 9,226,085 | \$ 883,171 405,384 1,623,631 12,889 610,250 3,535,325 |
| ADDITIONAL CAPITAL PROGRAMS Capital Equipment Automated Meter Reading/Customer Information System Washington Aqueduct Subtotal | 141,608 100,921 <u>296,972</u> 539,501 | 141,608 58,013 109,116 308,737 |
| LABOR Total | 334,755 \$ 10,100,341 | - \$ 3,844,062 |
| | • • • | |

^{*}Cash disbursements basis (FY2015 - FY2024)

The approved CIP includes projects within the Wastewater Treatment Service Area that are required to rehabilitate, upgrade and provide new facilities at Blue Plains to ensure compliance with the NPDES permit requirements and produce consistent, high-quality dewatered solids product. Within this service area are projects required for the Blue Plains Enhanced Nitrogen Removal Facilities Program to meet the stringent total Nitrogen discharge limit in the NPDES permit starting in January 2015.

The Wastewater Treatment Service Area also includes the implementation of the Biosolids Management Plan including the costs of construction for the Combined Heat and Power Facility, Main Process Train and Final Dewatering Facilities, with estimated completion in late FY 2015. Benefits of the Plan include production of a Class A biosolids product, which can be more widely reused at reduced costs; reduction in the carbon footprint relative to the existing lime stabilization process; and the on-site production renewably sourced electricity with an estimated net capacity of 10 MW that can be utilized at Blue Plains.

The Sanitary Sewer Service Area includes programs to support the replacement/rehabilitation of large diameter sewers that have reached their useful life or are in need of major repair (sanitary interceptor/trunk sewers). Major projects include construction of pumping station upgrades, new storage facilities, sewer main replacements, and rehabilitations and extensions.

The Combined Sewer Overflow (CSO) Service Area includes programs in support of the DC Clean Rivers Project (CSO Long Term Control Plan). This budget includes the acceleration of the North East Boundary Tunnel work included within the Anacostia River Tunnel portion of the Long Term Control Plan, which will be completed three years earlier than originally planned in order to provide flooding relief to the residents of the Bloomingdale and LeDroit neighborhoods of DC.

The Water Service Area includes programs designed to maintain safe, adequate and reliable potable water supply to customers and for fire protection. Major water projects include rehabilitation and replacements of water mains, storage facilities and pumping stations. For FY 2015 the Automated Meter Reading and Customer Information System projects have been moved to Additional Capital Programs.

The Washington Aqueduct, managed by the U.S. Army Corps of Engineers, provides water, at wholesale level, to DC Water and its partners in Northern Virginia, Arlington County and Falls Church. Major projects include improvements to water treatment plants, transmission and storage facilities and various pumping stations.

The Capital Equipment major programs include rehabilitation and replacement of large pumps, motors and centrifuges in Maintenance Services; infrastructure upgrades and various initiatives in Information Technology; and vehicles, skimmer boats and heavy duty equipment in Fleet Management.

Acknowledgements

Finally, we want to acknowledge DC Water staff for their commitment and dedication in developing this capital improvement program.

Sincerely,

Mark T. Kim

Chief Financial Officer

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Leonard R. Benson Chief Engineer



OVERVIEW

District of Columbia Water and Sewer Authority's ("DC Water") ten-year Capital Improvement Program (CIP) for FY 2015 to FY 2024 totals \$3.8 billion (cash disbursements basis), approximately the same amount as the past few years. Lifetime budgets increased in all service areas in the aggregate amount of \$741 million resulting in a total lifetime budget of \$10.1 billion.

While all mandates and immediate critical needs are incorporated into this ten-year plan, there are approximately \$321 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. The CSO ten-year disbursement increased along with the Additional Capital Program area (Capital Equipment, Automated Meter Reading/Customer Information System, and Washington Aqueduct). These increases are offset by the decrease in Wastewater Treatment, Sanitary Sewer, Stormwater and Water.

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 is unchanged at \$3.1 billion although there have been budget changes at the program area level. Plantwide Projects increased by \$46 million due to the addition of new projects to improve paving, mitigate hydrogen sulfide impacts and demolition to make way for future upgrades. Solids Processing Projects decreased by \$84 million due to the dropping of the Additional Dewatering Project (*Project XC*) from the CIP. Enhanced Nitrogen Removal Facilities increased by \$18 million largely due to an increase to Division D Bolling Overflow and Diversion (*Project FS*).

This service area continues to reflect the implementation of the Biosolids Management Plan including the remaining 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 FY 2015. The benefits of this plan include production of a Class A biosolids product, which can be more beneficially processed at reduced costs; reduction in the carbon footprint relative to the existing lime stabilization process; and the reduction of the electricity consumption for existing Blue Plains facilities due to on-site power generation.

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*), as well as The Enhanced Clarification Facility (*Project E8*).

SANITARY SEWER

The lifetime budget in this area has increased by \$138 million to \$1.3 billion, which was almost all due to an increase to the Sanitary Interceptor/Trunk Force Sewers. Additional funding for new ongoing projects starting in FY 2024 was responsible for an increase of \$56 million. Projects to rehabilitate sewers near or in creek beds were increased by \$34 million due to the requirements of National Environmental Policy Act (NEPA) compliance and addition of more sewers. The addition of a project to relocate the Fleet Management Facility for \$17 million in Sanitary Trunk Sewers, also contributed along with \$62 million for inspections and rehabilitations of major sewers.

Many of the 600 miles of 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. 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.

During FY 2009, DC Water completed a Sewer System Assessment and the Water Facility Plan ("Study"). 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 System Facilities Plan:

- 88% of the sewers and 94% of manholes inspected had some defects
- 12.3 miles of the approximately 210 miles of sewers in stream valleys had some defects
- There are about 316,000 linear feet of sewers with some portion under buildings. Of those inspected, approximately 17,000 linear feet of sewers have been found to have multiple and/or significant defects.

A draft 2014 Sewer System Facilities Plan (update to the 2009 Sewer System Facilities Plan) is completed and under review. The update will outline recommendations for sewer system infrastructure renewal needs and suggestions for operation and maintenance improvements through FY 2035 and include:

- Review of current and proposed sewer inspection rates
- Determination of investment need based on the findings of inspection and assessment of linear assets
- Evaluation results of and recommendations for the storm and sanitary pumping stations
- Evaluation results of and recommendations for sewer structures including inflatable dams and the swirl facility
- Recommendations for optimizing the operation of the sewer system

There continue to be significant sanitary collection sewer projects identified in the ten-year CIP that transmit some flow from our wholesale customers. These are projects in planning, design and some now under construction. 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.

COMBINED SEWER OVERFLOW

The lifetime budget for the Combined Sewer Overflow (CSO) Service Area has increased by \$66 million to \$3.0 billion, which include \$2.4 billion for the twenty-year DC Clean Rivers Project. This budget increase is due to an increase for the Poplar Point Pump Station and North East Boundary Tunnel, the latter being due to the acceleration and increased length required to provide flood relief to the residents of the Bloomingdale neighborhood in the District of Columbia.

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.

Offsetting the DC Clean Rivers Project budget increase are reductions in the Nine Minimum Controls Projects, some of which are now being dropped from the CIP.

STORMWATER

The lifetime budget for the Stormwater Service Area is unchanged at \$92 million. Projects within this service area include rehabilitation or replacement of certain storm sewer systems that have experienced structural deterioration, studies and analysis. Under the current Municipal Separation Stormwater Sewer System (MS4) permit issued to the District of Columbia Government, DC Water is responsible for the inspection, repair and cleaning of stormwater outfall structures. In 2014 the Stormwater Pump Stations Rehabilitation (*Project NG*) was added to the CIP and investigation work has started. The District Department of the Environment (DDOE) maintains the central responsibility for managing stormwater activities under the MS4 permit and has worked to coordinate with all agencies to oversee the activities and funding mechanisms necessary to ensure full compliance. 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.

EPA has inspected several District of Columbia / DC Water owned facilities to ensure proper pollution prevention measures are in place and found DC Water facilities in compliance. Earlier, DC Water developed a Pollution Prevention Plan (PPP) for all its facilities and implemented a program to ensure that the facilities do not contribute pollutants to the MS4 system.

WATER

The lifetime budget for the Water Service Area increased by \$147 million to \$1.8 billion. The largest increase was an addition of \$81 million to the Water Distribution Systems driven entirely by additional funding for ongoing projects in FY 2024. Water Storage Facilities increased by \$24 million largely as a result of increased budget for the St. Elizabeth Water Tank (Project MA). Water Projects Program Management increased by \$33 million due to addition of funding for Program Management Services from FY 2024 through to FY 2029.

The water distribution system includes appurtenances necessary for proper system operation, inspection, and repair. DC Water's system includes approximately 1,350 miles of pipe and over 43,860 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 9,510 public hydrants for water main system operational requirements and to support DC Fire and Emergency Services.

The Water Service Area includes a majority of the projects recommended in the 2009 Water System 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.

An update to the 2009 Water System Facilities Plan is currently underway and a draft updated plan was submitted in FY 2014. The updated Water System Facilities Plan outlines recommendations for the water service infrastructure renewal needs through FY 2035 and includes:

- 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
- Recommendation of a prioritized CIP

ADDITIONAL CAPITAL PROGRAMS

• CAPITAL EQUIPMENT AND AUTOMATED METER READING/CUSTOMER INFORMATION SYSTEM (AMR/CIS)

Capital Equipment – DC Water's Capital Equipment budget totals approximately \$142 million for FY 2015 – FY 2024, an increase of approximately \$2.2 million compared to the previous ten-year plan. The main drivers of this increase can be attributed to reallocation of resources to make necessary upgrades to DC Water's Fleet; and, 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, Security and Sewer Services.

Approximately 34 percent or \$49 million of spending in the Capital Equipment Area is on major maintenance services projects within Blue Plains. DC Water increases its commitment to scheduled replacement of its aging vehicle fleet with a budget of \$18 million, representing 13 percent of the Capital Equipment budget. Independent Offices budget totals \$19 million or 14 percent of the ten-year plan and primarily provides for Information Technology initiatives. Customer Care, which includes other equipment such as hydrant and valve equipment necessary for the maintenance of the District's public fire hydrant system, totals \$11 million or 8 percent of the Capital Equipment budget.

O AMR/CIS – In March 2002, Customer Service began replacing traditional water meters with automated meters. It is believed that DC Water was the first water utility to implement a fixed network Automated Meter Reading (AMR) system in the United States. This initiative provided for more accurate data and eliminated estimated billing. The lifetime budget for AMR is \$77 million and is driven by the cost of the advance meter infrastructure and ongoing enhancements.

The Customer Information and Billing System (CIS) manages DC Water's customer information including customer names, meter readings and other service requests, billing and payments. It also manages retail revenue generation through the application of DC Water's rates and charges against water consumption and other billing determinants. The lifetime budget for the evaluation, procurement and conversion of a new system is \$24 million.

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 lifetime budget for DC Water's share of Washington Aqueduct projects is \$297 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.

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 Finance, Accounting and Budget 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 culminated 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 January. The operating budgets, capital improvement program, and ten-year financial plan were forwarded to the full Board for consideration and action in February.

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

DISBURSEMENTS AND PROJECT LIFETIME BUDGETS

As in the past, we have presented the CIP on both a project lifetime 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 next fiscal year.

CAPITAL AUTHORITY REQUEST

Capital authority represents the amount of Congressionally-authorized funding that DC Water can use to administer its capital program. Sufficient authority is required to be in place prior to contracts being executed. Actual expenditures within the seven service areas may vary up or down for a particular year. However, they are "not to exceed the total" FY 2016 capital authority request in the amount of \$3,218,789,000. While excess capital authority may exist in a service area for a particular year, it is not available unless a Board and General Manager approved budget exists, or a budget transfer has been authorized, and then only after assessing whether currently available budget in other projects (within that service area) can fund the shortfall.

To ensure that adequate authority is in place to allow for project acceleration, the request for new and currently active capital projects are based on incremental commitments anticipated to occur within the FY 2016 – FY 2024 planning period. This total is adjusted for the remaining authority balance from the previous years' appropriation to arrive at the final authority request for a given year. Including planned FY 2016 – FY 2024 commitments 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. It should be noted that such changes and execution of any contract still require the 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

- Service Area currently, there are seven defined project service areas in DC Water's CIP: Wastewater Treatment, Sanitary Sewer, Combined Sewer Overflow, Stormwater, Water, Capital Equipment and AMR/CIS, and Washington Aqueduct. The service area categorization groups together similar projects based on facility location and type of work being done in the project.
- Program 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, Plant-wide Projects, Solids Processing and
 Enhanced Nitrogen Removal.
- Project ID / Project Title project ID is the alpha numeric code unique to each project. The project title reflects the descriptive name given to the project.

- Managing Department lists the department or organization responsible for managing 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.
- EPMC indicates which projects receive Engineering Program Management Consultant costs.
- 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. Although projects may have more than one priority associated with it, 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, Regulatory Requirements, 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 and 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.
 - o 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.
 - o 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.
 - o 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, Mission / Function Over Long Term This category includes projects that are needed for rehabilitation and upgrading of facilities and infrastructure, but have a lower priority than projects in 3A above, yet help DC Water to fulfill its mission over the long term.
- Project Description general description of the work to be done within the project.
- Impact on Operations describes the anticipated impact on DC Water's operations when the project is completed.
- Design / Construction / Project Completion Dates anticipated dates are shown.
- Effective Funding by User lists the anticipated project funding, by source and is based on the current Intermunicipal Agreement (IMA) and anticipates EPA funding where grants have been previously approved or in anticipation of that approval.
- Lifetime Budget the full project budget is approved and reviewed each year by DC Water's Board of Directors. 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.
- Disbursement / Commitment Budget 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 (innovations and maintenance):

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

Capital Improvement Program

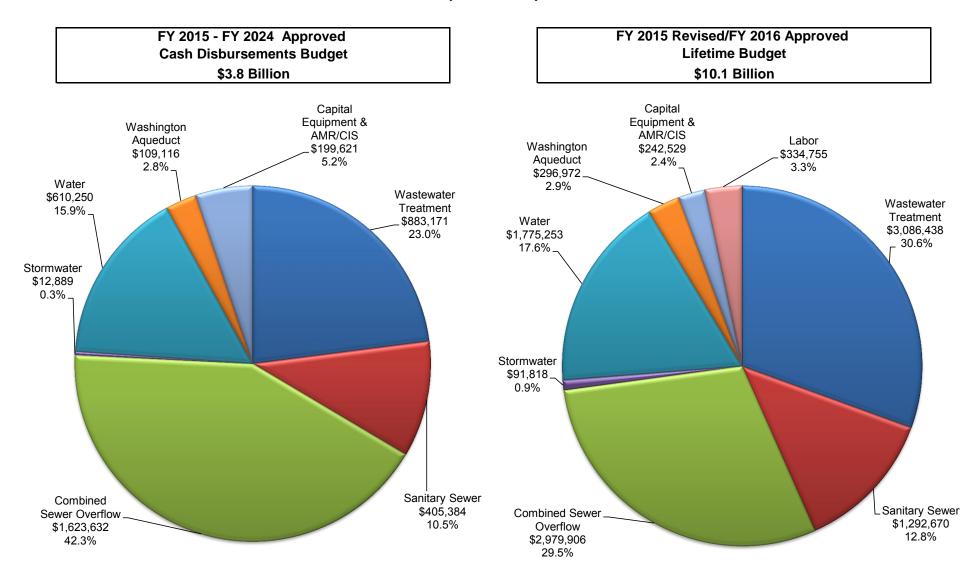
FY 2015 - FY 2024 (\$ in 000's)

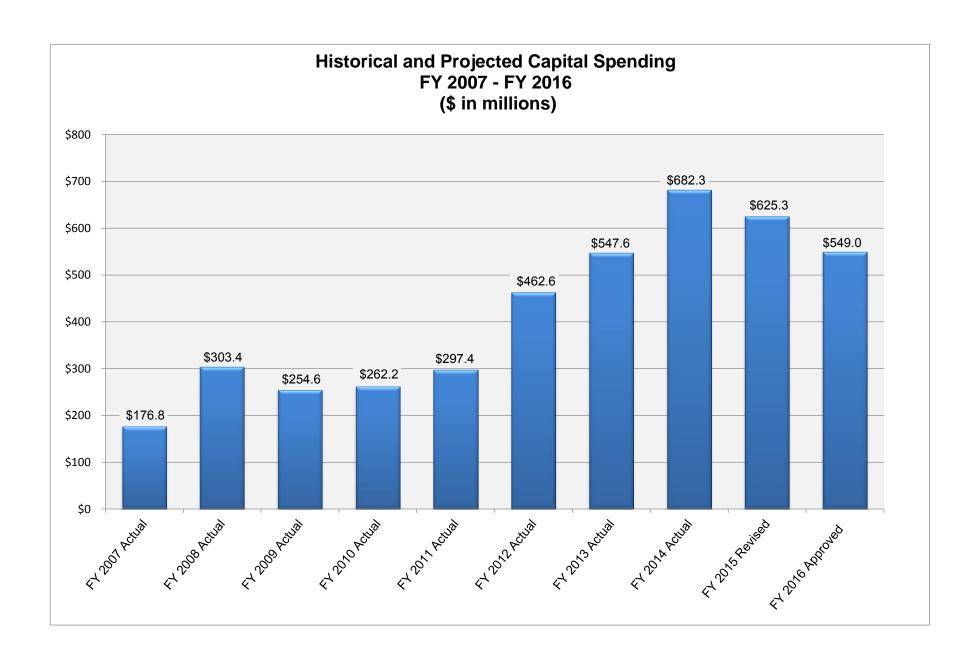
| Sources of Funds | | | | | | |
|----------------------------------|----|-----------|--------|--|--|--|
| Debt Financing (1) | \$ | 2,147,987 | 55.9% | | | |
| Wholesale Capital Payments | | 727,749 | 18.9% | | | |
| EPA Grants & CSO Appropriations | | 236,353 | 6.1% | | | |
| Interest Income on Bond Proceeds | | 16,500 | 0.4% | | | |
| Pay-Go Financing (2) | | 715,474 | 18.6% | | | |
| Total Sources | \$ | 3,844,063 | 100.0% | | | |

⁽¹⁾ Debt financing refers to the borrowing of funds through long-term revenue bonds, commercial paper and other short-term notes

Pay-go financing is any funds available after meeting the reserves and rate stabilization fund deposits

Capital Improvement Program Uses of Funds (\$ in 000's)





Capital Improvement Program

Disbursement Budget (\$ in 000's)

| | FY 2015 Revised | FY 2016 Approved | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Total |
|--|--------------------|---------------------|------------|------------|------------|-------------|------------|------------|------------|------------|--------------|
| WASTEWATER TREATMENT | | | | - | | · · | | | | | - |
| Liquid Processing Projects | \$ 20,566 | \$ 14,467 | \$ 28,586 | \$ 35,332 | \$ 35,529 | \$ 16,825 | \$ 11,626 | \$ 15,860 | \$ 6,994 | \$ 3,113 | \$ 188,899 |
| Plantwide Projects | 18,322 | 11,376 | 12,271 | 12,822 | 16,132 | 38,518 | 25,488 | 30,882 | 28,372 | 20,665 | 214,847 |
| Solids Processing Projects | 58,333 | 8,053 | 14,845 | 9,791 | 4,807 | 4,918 | 13,930 | 3,414 | 503 | 2 | 118,596 |
| Enhanced Nitrogen Removal Facilities | 109,039 | 115,478 | 65,566 | 52,460 | 5,993 | 4,007 | 962 | 595 | 1,225 | 5,505 | 360,830 |
| Subtotal | | 149,375 | 121,268 | 110,405 | 62,461 | 64,267 | 52,006 | 50,750 | 37,094 | 29,285 | 883,171 |
| SANITARY SEWER | , | , | , | , | , | , | , | | , | , | , |
| Sanitary Collection Sewers | 5,932 | 7,989 | 6,892 | 866 | 461 | 2,089 | 736 | 7,202 | 10,735 | 11,058 | 53,960 |
| Sanitary On-Going Projects | 8,256 | 7,133 | 6,516 | 5,887 | 6,816 | 5,455 | 7,462 | 7,109 | 13,243 | 10,380 | 78,257 |
| Sanitary Pumping Facilities | 1,377 | 973 | 612 | 282 | 473 | 2,429 | 70 | , <u> </u> | , _ | · - | 6,217 |
| Sanitary Sewer Projects Program Management | 10,105 | 6,486 | 5,567 | 7,045 | 5,531 | 4,068 | 2,707 | 4,577 | 5,337 | 4,611 | 56,032 |
| Sanitary Interceptor/Trunk Force Sewers | 14,587 | 19,596 | 31,489 | 28,878 | 26,429 | 30,919 | 14,921 | 14,636 | 16,396 | 13,068 | 210,918 |
| Subtotal | 40,258 | 42,175 | 51,076 | 42,956 | 39,711 | 44,960 | 25,896 | 33,524 | 45,712 | 39,116 | 405,384 |
| COMBINED SEWER OVERFLOW | • | | | | • | • | • | • | | • | • |
| CSO Program Management | 4,423 | 2,104 | 3,219 | 3,456 | 2,446 | 2,264 | 1,772 | 2,799 | 3,060 | 2,195 | 27,739 |
| Combined Sewer Projects | 10,769 | 30,575 | 31,066 | 27,400 | 20,248 | 10,490 | 10,858 | 11,464 | 12,778 | 4,492 | 170,140 |
| D.C. Clean Rivers Project | 255,909 | 206,024 | 125,245 | 98,235 | 142,900 | 163,816 | 124,328 | 100,940 | 123,599 | 84,755 | 1,425,752 |
| Subtotal | 271,101 | 238,703 | 159,531 | 129,091 | 165,594 | 176,571 | 136,958 | 115,203 | 139,437 | 91,442 | 1,623,631 |
| STORMWATER | | | | | | | | | | | |
| Stormwater Local Drainage | 28 | 75 | 182 | 92 | 27 | 78 | 27 | 261 | 111 | 382 | 1,263 |
| Stormwater On-Going Program | 489 | 691 | 449 | 478 | 532 | 546 | 585 | 736 | 721 | 774 | 6,000 |
| Stormwater Pumping Facilities | - | 128 | 781 | 912 | _ | _ | _ | - | _ | - | 1,821 |
| DDOT Stormwater Program | 27 | 30 | 27 | 21 | 20 | 2 | _ | - | _ | - | 129 |
| Stormwater Research and Program Management | 518 | 179 | 235 | 254 | 180 | 145 | 79 | 118 | 138 | 114 | 1,959 |
| Stormwater Trunk/Force Sewers | 1,497 | 76 | 53 | 91 | _ | _ | _ | - | _ | - | 1,717 |
| Subtotal | 2,559 | 1,178 | 1,726 | 1,848 | 760 | 772 | 691 | 1,115 | 970 | 1,270 | 12,889 |
| WATER | • | • | , | , | | | | • | | • | • |
| Water Distribution Systems | 33,291 | 37,486 | 27,496 | 26,297 | 29,433 | 39,700 | 45,075 | 43,354 | 47,700 | 56,356 | 386,188 |
| Water Lead Program | 2,350 | 1,304 | 955 | 1,037 | 1,796 | 2,055 | 2,314 | 1,749 | - | - | 13,560 |
| Water On-Going Projects | 7,070 | 7,383 | 6,793 | 5,475 | 5,859 | 5,541 | 5,823 | 5,631 | 6,708 | 7,472 | 63,754 |
| Water Pumping Facilities | 6,074 | 5,305 | 5,406 | 3,260 | 4,529 | 6,794 | 165 | 87 | - | - | 31,621 |
| DDOT Water Projects | 2,121 | 1,394 | 858 | 84 | · <u>-</u> | - | - | - | - | - | 4,457 |
| Water Storage Facilities | 6,323 | 9,028 | 11,937 | 9,150 | 1,846 | 3,336 | 8,749 | 4,003 | 1,345 | 567 | 56,282 |
| Water Projects Program Management | 7,777 | 5,645 | 5,523 | 5,559 | 5,332 | 3,823 | 6,074 | 6,329 | 4,076 | 4,249 | 54,388 |
| Subtotal | 65,006 | 67,546 | 58,968 | 50,862 | 48,795 | 61,249 | 68,201 | 61,153 | 59,828 | 68,645 | 610,250 |
| | • | | | | • | • | • | • | | • | • |
| Capital Projects | 585,183 | 498,977 | 392,570 | 335,162 | 317,321 | 347,818 | 283,752 | 261,745 | 283,041 | 229,758 | 3,535,326 |
| Capital i rojects | | 400,011 | | | 017,021 | 041,010 | | 201,140 | 200,041 | | 0,000,020 |
| CAPITAL EQUIPMENT and AMR/CIS | | | | | | | | | | | |
| Capital Equipment | 22,191 | 24,810 | 24,018 | 15,683 | 14,282 | 9,058 | 9,058 | 8,058 | 7,433 | 7,017 | 141,608 |
| Automated Meter Reading (AMR) | 5,314 | 7,384 | 6,707 | 6,345 | 5,672 | 1,000 | 500 | 500 | 500 | 500 | 34,422 |
| Customer Information System (CIS) | 2,586 | 7,005 | 8,000 | 5,000 | 1,000 | 1,000 | 300 | 300 | 300 | 300 | 23,591 |
| Subtotal | 30,091 | 39,199 | 38,725 | 27,028 | 20,954 | 10,058 | 9,558 | 8,558 | 7,933 | 7,517 | 199,621 |
| Cubicial | 30,031 | 33,133 | 30,723 | 27,020 | 20,934 | 10,030 | 9,550 | 0,330 | 1,333 | 7,517 | 133,021 |
| WASHINGTON AQUEDUCT | 10,000 | 10,864 | 10,850 | 10,936 | 11,060 | 11,045 | 11,226 | 11,212 | 11,081 | 10,842 | 109,116 |
| Additional Capital Programs | 40,091 | 50,063 | 49,575 | 37,964 | 32,014 | 21,103 | 20,784 | 19,770 | 19,014 | 18,359 | 308,737 |
| Total FY 2015 - FY 2024 | \$ 625,274 | \$ 549,040 | \$ 442,145 | \$ 373,126 | \$ 349,335 | \$ 368,921 | \$ 304,536 | \$ 281,515 | \$ 302,055 | \$ 248,117 | \$ 3,844,063 |
| * | | | | | | | | | | | |

FY 2015 - FY 2024 Capital Improvement Program

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

| | _ | FY 2015 Approved | FY 2015 Revised / FY 2016 Approved | Variance |
|--|----------|---------------------|---|----------|
| WASTEWATER TREATMENT | | | | |
| Liquid Processing Projects | | \$831,760 | \$841,382 | \$9,622 |
| Plantwide Projects | | 446,508 | 493,003 | 46,495 |
| Solids Processing Projects | | 793,044 | 709,416 | (83,628) |
| Enhanced Nitrogen Removal Facilities | | 1,024,481 | 1,042,636 | 18,155 |
| | Subtotal | 3,095,793 | 3,086,438 | (9,355) |
| SANITARY SEWER | | | | |
| Sanitary Collection Sewers | | 212,995 | 216,546 | 3,551 |
| Sanitary On-Going Projects | | 200,741 | 202,500 | 1,759 |
| Sanitary Pumping Facilities | | 44,193 | 44,096 | (97) |
| Sanitary Sewer Projects Program Management | | 111,214 | 112,576 | 1,362 |
| Sanitary Interceptor/Trunk Force Sewers | | 585,475 | 716,950 | 131,475 |
| | Subtotal | 1,154,618 | 1,292,670 | 138,052 |
| COMBINED SEWER OVERFLOW | | | | |
| CSO Program Management | | 68,464 | 74,094 | 5,630 |
| Combined Sewer Projects | | 549,625 | 514,019 | (35,606) |
| DC Clean Rivers Project | | | | |
| Anacostia Tunnel | | 1,806,541 | 1,902,752 | 96,211 |
| Potomac Tunnel | | 383,700 | 410,394 | 26,694 |
| Rock Creek Tunnel | | 65,342 | 76,442 | 11,100 |
| DC Clean Rivers Green Infrastructures | | 40,000 | 2,206 | (37,794) |
| | Subtotal | 2,913,672 | 2,979,906 | 66,234 |
| STORMWATER | | | | |
| Stormwater Extensions/Local Drainage | | 22,829 | 22,832 | 3 |
| Stormwater On-Going Program | | 12,988 | 13,173 | 185 |
| Stormwater Pumping Facilities | | 25,000 | 25,000 | - |
| DDOT Stormwater Program | | 3,237 | 3,237 | - |
| Stormwater Projects Program Management | | 12,051 | 11,979 | (72) |
| Stormwater Trunk/Force Sewers | | 15,341 | 15,597 | 256 |
| | Subtotal | 91,446 | 91,818 | 372 |

FY 2015 - FY 2024 Capital Improvement Program

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

| _ | FY 2015 Approved | FY 2015 Revised / FY 2016 Approved | Variance |
|---|---------------------|---|-----------|
| WATER | | | |
| Water Distribution Systems | 940.902 | 1,022,285 | 81,383 |
| Water Lead Program | 189.040 | 189.040 | - |
| Water On-Going Projects | 140,871 | 144,292 | 3,421 |
| Water Pumping Facilities | 167,217 | 177,401 | 10,184 |
| DDOT Water Projects | 38.775 | 33.867 | (4,908) |
| Water Storage Facilities | 76,358 | 100,715 | 24,357 |
| Water Projects Program Management | 74,781 | 107,653 | 32,872 |
| Subtotal | 1,627,944 | 1,775,253 | 147,309 |
| Capital Projects | 8,883,473 | 9,226,085 | 342,612 |
| CAPITAL EQUIPMENT and AMR/CIS | | | |
| Capital Equipment | 139,436 | 141,608 | 2,172 |
| Automated Meter Reading/Customer Information System | 50,181 | 100,921 | 50,740 |
| Subtotal | 189,617 | 242,529 | 52,912 |
| WASHINGTON AQUEDUCT | 286,358 | 296,972 | 10,614 |
| Additional Capital Programs | 475,975 | 539,501 | 63,526 |
| LABOR | - | 334,755 | 334,755 |
| Total DC Water CIP Lifetime | \$9,359,448 | \$10,100,341 | \$740,893 |

Notes:

¹ Lifetime budgets shown here represent total budgets for projects that are active during the current ten-year CIP. Lifetime budgets include historical spending prior to the beginning, spending during and projected spending beyond the current ten-year plan. Projects completed in FY 2014 will be dropped from the CIP next year.

² Labor includes \$100 million of historical labor as of FY 2014.

New Capital Projects

| Project ID | Project Title | Service Area | Lifetime Budget |
|------------|---|-------------------------|--------------------|
| НН | New Fleet Management Facility | Sanitary Sewer | \$19,500,000 |
| J2 | Replace/Upgrade Primary Treatment Mechanisms | Wastewater | 2,750,000 |
| JV | DSS Sewer Pumping Project | Sanitary Sewer | 3,800,000 |
| K7 | Large Diameter Water Main Replacement 6, 7, & 8 | Water | 69,920,000 |
| KB | Large Valve Replacement Contracts 23, 24, & 25 | Water | 19,220,000 |
| KH | Small Diameter Water Main Rehabilitation 21 | Water | 50,640,000 |
| KZ | FY2024 - DWS Water Projects | Water | 10,460,000 |
| LB | Water Program Mgt. Services 2G | Water | 35,480,000 |
| LE | High Strength Waste Receiving Facility (Includes FOG) | Wastewater | 9,700,000 |
| NV | FY2024 DSS Stormwater Projects | Stormwater | 870,000 |
| NW | FY2024 DSS Sanitary Projects | Sanitary Sewer | 14,147,500 |
| NX | Small Local Sewer Rehabilitation 15 | Sanitary Sewer | 19,600,000 |
| NY | Large Local Sewer Rehabilitation 15 | Sanitary Sewer | 21,324,000 |
| NZ | Floatable Debris Dock Replacement | Combined Sewer Overflow | 995,000 |
| O4 | Southwest Interceptor Inspection & Rehab | Sanitary Sewer | 4,530,000 |
| 07 | East Rock Creek Diversion Inspection & Rehab | Sanitary Sewer | 6,600,000 |
| OA | West Rock Creek Diversion Inspection & Rehab | Sanitary Sewer | 3,900,000 |
| OB | Inflatable Dams Replacement FY24 | Combined Sewer Overflow | 6,675,000 |
| OD | Plantwide Paving | Wastewater | 8,000,000 |
| OE | Plantwide Drainage & Runoff | Wastewater | 6,146,000 |
| OF | Process & Service Water Rehabilitation | Wastewater | 3,950,000 |
| OG | City Water & Sewer Upgrades at WWTP | Wastewater | 1,250,000 |
| ОН | Plantwide Demolition | Wastewater | 11,100,000 |
| OI | Plantwide Painting & Signage | Wastewater | 450,000 |
| OK | Plantwide H2S Mitigation | Wastewater | 10,000,000 |
| ON | Plantwide Grounding Upgrades | Wastewater | 5,500,000 |
| OP | Plantwide Sump Pump Rehabilitation | Wastewater | 2,500,000 |
| OQ | Plantwide Roofing Upgrades | Wastewater | 9,500,000 |
| OY | Blue Plains Safety | Wastewater | 350,000 |
| OZ | Grit Chambers 1 & 2 Upgrades | Wastewater | 11,000,000 |
| PD | Secondary East & West Upgrades | Wastewater | 8,200,000 |
| PE | Nitrification Reactor/Sedimentation Upgrades | Wastewater | 6,750,000 |
| PF | Chemical System/Building Upgrades | Wastewater | 22,500,000 |
| | Subtotal | | \$407,307,500 |

New Capital Projects

| Project ID | Project Title | Service Area | Lifetime Budget |
|------------|--|-------------------|--------------------|
| DC1 | Portable Pumps | Capital Equipment | \$345,000 |
| DC2 | Flow Meters/Sensor Replacements | Capital Equipment | 538,000 |
| DC3 | Water Treatment System | Capital Equipment | 100,000 |
| DC4 | SCADA Hardware | Capital Equipment | 410,000 |
| DC5 | Emergengy Maintenance Custodian Locks for Hydrants | Capital Equipment | 150,000 |
| DC6 | 100 W Emergency Generator & Load Center | Capital Equipment | 325,000 |
| EL1 | Process Computer Control System | Capital Equipment | 509,000 |
| EL2 | Additional Reserve | Capital Equipment | 21,895,000 |
| EL3 | Invoice Portal/Submission | Capital Equipment | 100,000 |
| EL4 | Financial Reprogramming/GL Resource | Capital Equipment | 120,000 |
| EL5 | Locators | Capital Equipment | 120,000 |
| EL6 | Camera Attached to Snake | Capital Equipment | 40,000 |
| EL7 | Portable Camera | Capital Equipment | 60,000 |
| EL8 | Water Sample Lab Equipment | Capital Equipment | 40,000 |
| EP6 | Blue Plains Capital Equipment | Capital Equipment | 44,439,000 |
| EP7 | Backflow Preventer Rentals | Capital Equipment | 13,000 |
| EP8 | Sharepoint | Capital Equipment | 500,000 |
| EQ8 | Authority-wide Fencing | Capital Equipment | 250,000 |
| EQ9 | Environmental Health & Safety Mgmt System | Capital Equipment | 100,000 |
| | Subtotal | | \$70,054,000 |
| | | TOTAL | \$477,361,500 |

Closed / Dropped Capital Projects

| Project ID | Project Title | Service Area | Cost at Completion |
|------------------|--|-------------------------|-----------------------|
| Closed Projects | | | |
| A9 | FY2010 - DSS Sanitary Sewer Projects | Sanitary Sewer | \$13,100,000 |
| AF | FY2010 - DWS Water Projects | Water | 8,772,856 |
| AN | FY2010 - DSS Storm Sewer Projects | Stormwater | 618,000 |
| BE | FY2011 - DWS Water Projects | Water | 11,238,342 |
| C1 | FY2001 - DSS Storm Sewer Project | Stormwater | 247,000 |
| C4 | FY2004- DSS Storm Sewer Project | Stormwater | 497,000 |
| C7 | FY2007- DSS Storm Sewer Project | Stormwater | 497,000 |
| C8 | FY2008 - DSS Storm Sewer Project | Stormwater | 497,000 |
| GB | Small Local Sewer Rehab 5 | Sanitary Sewer | 12,000,000 |
| GU | Crosstown Water Main Rehabilitation | Water | 12,865,508 |
| 19 | Sewer Rehab.10th-12th St, Bet. Penn | Sanitary Sewer | 1,150,000 |
| K2 | CSO-Long Term Control Plan | Combined Sewer Overflow | 14,518,848 |
| K3 | East Side Pumping Station | Combined Sewer Overflow | 17,193,005 |
| K4 | Poplar Point Pumping Station | Combined Sewer Overflow | 5,751,001 |
| K5 | Dry-Weather Overflow Elimination | Combined Sewer Overflow | 12,128,271 |
| L3 | Rock Creek Sewage Pumping Station | Sanitary Sewer | 11,131,290 |
| L4 | Upper Anacostia Sew. Pump. Station | Sanitary Sewer | 9,134,559 |
| L5 | Earl Place Sewage Pumping Station | Sanitary Sewer | 2,097,568 |
| Q8 | FY2008 - DSS Sanitary Sewer Project | Sanitary Sewer | 4,640,000 |
| TQ | 504H3 - Nitrification Facility | Wastewater | 47,417,263 |
| - | The state of the s | _ | \$185,494,511 |
| Dropped Projects | | _ | \$100,494,011 |
| Al | FY 2008 - DWS Water Projects | Water | \$6,967,611 |
| AP | FY 2009 - DSS Sanitary Sewer Projects | Sanitary Sewer | 5,609,337 |
| BK | CSO Nine Minimum Control Projects | Combined Sewer Overflow | 1,354,048 |
| CK | WWTP Sampler Program | Wastewater | 1,286,308 |
| D2 | Outfall Sewer Rehabiliation | Combined Sewer Overflow | 51,035,833 |
| DL | Citywide Fire Hydrant Program | Water | 23,964,267 |
| FF | WWTP Flood Protection | Wastewater | 607,513 |
| H9 | Blue Plains Capital Equipment | Wastewater | 2,239,898 |
| 11 | Selective Sewer Separation & I/I Sewer Rehabilitation | Sanitary Sewer | 4,291,947 |
| JJ | Bryant Street PS Improvements - Phase III | Water | 0 |
| Q7 | FY 2007 - DSS Sanitary Sewer Project | Sanitary Sewer | 5,602,789 |
| 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 |
| | | | \$358,020,453 |

| Project ID | Project Name | Page # |
|------------|--|----------|
| A2 | Liquid Processing Program Management | III - 8 |
| A4 | Future Sewer System Upgrades | IV - 54 |
| A6 | Lining, 22nd & Psts., NW/NWBSO Repair | VI - 5 |
| A7 | Supplemental Environmental Projects / Nine Minimium Controls | V - 7 |
| A9 | FY2010 - DSS Sanitary Sewer Projects | IV - 25 |
| AF | FY2010 - DWS Water Projects | VII - 48 |
| AK | WSSC Interconnections | VII - 7 |
| AL | Plantwide Project Program Management | III - 31 |
| AM | Solids Processing Program Management | III - 70 |
| AN | FY2010 - DSS Stormwater Projects | VI - 15 |
| AO | FY2009 - DSS Stormwater Projects | VI - 14 |
| AR | FY2009 - DDOT Stormwater Projects | VI - 34 |
| AT | Stormwater Program Management | VI - 45 |
| AU | Sanitary Sewer Program Management | IV - 51 |
| AV | CSO Program Management | V - 5 |
| AY | Upgrades to Ft. Reno Pumping Station | VII - 63 |
| AZ | COF Renovations | III - 32 |
| В0 | FY2010 - DDOT Water Projects | VII - 78 |
| В3 | FY2010 - DDOT Stormwater Projects | VI - 35 |
| BA | DC Water Low Impact Development Projects | V - 8 |
| BB | Potomac Pumping Station Rehab | V - 9 |
| BD | FY2011 - DSS Stormwater Projects | VI - 16 |
| BE | FY2011 - DWS Water Projects | VII - 49 |
| BF | FY2011 - DSS Sanitary Sewer Projects | IV - 26 |
| BG | Dual Purpose Rehabilitation | III - 9 |
| ВН | Rock Creek CSO Projects | V - 10 |
| BI | Enhanced Nitrogen Removal (ENR) North | III - 82 |
| BM | FY2011 - DDOT Stormwater Projects | VI - 36 |
| BN | FY2011 - DDOT Water Projects | VII - 79 |
| ВО | Future Stormwater Projects | VI - 46 |

| Project ID | Project Name | Page # |
|------------|---|----------|
| BP | Grit Chamber Facilities Phase II | III - 10 |
| BQ | Primary Treatment Facilities Ph II | III - 11 |
| BR | Nitrification/Denitrification Fac | III - 12 |
| BT | Filtration/Disinfection Fac PH II | III - 13 |
| BV | RWWPS No. 2 Upgrades | III - 14 |
| BW | Lead Service Replacement Program | VII - 47 |
| BX | Gravity Thickener Upgrades Ph II | III - 71 |
| BY | Additional Chemical Systems PH III | III - 33 |
| BZ | Large Valve Repl. (Contracts 8, 9 & 10) | VII - 8 |
| C1 | FY2001 - DSS Stormwater Project | VI - 9 |
| C4 | FY2004 - DSS Stormwater Project | VI - 10 |
| C6 | FY2006 - DSS Storm Sewer Project | VI - 11 |
| C7 | FY2007 - DSS Stormwater Project | VI - 12 |
| C8 | FY2008 - DSS Stormwater Project | VI - 13 |
| C9 | Large Diameter Water Mains 1 | VII - 9 |
| СВ | FY2012 - DDOT Stormwater Projects | VI - 37 |
| CC | FY2012 - DWS Water Projects | VII - 50 |
| CD | FY2012 - DSS Stormwater Projects | VI - 17 |
| CE | FY2012 - DSS Sanitary Sewer Projects | IV - 27 |
| CH | Misc Facility Projects | III - 34 |
| CJ | FY2012 - DDOT Water Projects | VII - 80 |
| CL | FY2013 - DDOT Stormwater Projects | VI - 38 |
| CM | FY2013 - DDOT Water Projects | VII - 81 |
| CN | FY2013 - DSS Stormwater Projects | VI - 18 |
| СР | FY2013 - DWS Water Projects | VII - 51 |
| CQ | FY2013 - DSS Sanitary Sewer Projects | IV - 28 |
| CV | Laboratory Upgrades | III - 35 |
| CW | Security at Blue Plains | III - 36 |
| CX | Sewer Facilities Security Upgrades | IV - 41 |
| CY | Anacostia LTCP Projects | V - 31 |

| Project ID | Project Name | Page # |
|------------|--|-----------|
| CZ | Potomac LTCP Projects | V - 32 |
| D5 | FY2014 - DWS Water Projects | VII - 52 |
| D6 | FY2014 - DSS Sanitary Sewer Projects | IV - 29 |
| D7 | FY2014 - DSS Stormwater Projects | VI - 19 |
| D8 | FY2014 - DDOT Stormwater Projects | VI - 39 |
| DA | DWT Research / Pilot Projects | III - 15 |
| DC1 | Portable Pumps | VIII - 42 |
| DC2 | Flow Meters/Sensor Replacements | VIII - 43 |
| DC3 | Water Treatment System-Emergency & Planned Events | VIII - 44 |
| DC4 | SCADA Hardware | VIII - 45 |
| DC5 | Emergency Maintenance Custodian Locks for Hydrants | VIII - 46 |
| DC6 | 100 W Emergency Generator & Load Center | VIII - 47 |
| DD | O Street Development Effort | V - 11 |
| DE | Small Diameter Water Main Rehab 12 | VII - 10 |
| DF | Rehab 24 Steel Main - Rock Creek | VII - 11 |
| DG | FY2015 - DWS Water Projects | VII - 53 |
| DI | FY2015 - DSS Sanitary Sewer Projects | IV - 30 |
| DJ | FY2015 - DSS Stormwater Projects | VI - 20 |
| DK | FY2015 - DDOT Stormwater Projects | VI - 40 |
| DM | UAMI Relief Sewer | IV - 55 |
| DN | Sewer Inspection Program | IV - 52 |
| DP | Chemical Building Enhancements | III - 37 |
| DQ | Non-OEM PLC Interfaces/Replacements | III - 38 |
| DR | Low Area Trunk Sewer Rehabilitation | IV - 56 |
| DS | New Headquarters Building | V - 12 |
| DT | FY2016 - DDOT Stormwater Projects | VI - 41 |
| DU | Water System Laboratory Facilities | VII - 64 |
| DW | FY2016 - DSS Sanitary Sewer Projects | IV - 31 |
| DX | FY2016 - DSS Stormwater Projects | VI - 21 |
| DY | FY2016 - DWS Water Projects | VII - 54 |

| Project ID | Project Name | Page # |
|------------|---|-----------|
| DZ | Rock Creek CSS LTCP Project | V - 33 |
| E8 | Enhanced Clarification Facilities | III - 83 |
| E9 | Nitrogen Removal Facilities | III - 84 |
| EA2 | Water Service Replacement | VIII - 37 |
| EA4 | Sewer Service Utility Equipment | VIII - 29 |
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FY 2016 Budget Calendar

| Month | Event |
|------------------|--|
| May 6 | General Manager's Budget Kickoff Meeting |
| May 6 | Distribute budget manual and other preparation materials |
| May 15 | FY 2015 Final Capital and Operating numbers submitted to update Financial Plan |
| June 6 | FY 2016 Operating and Capital Budget proposals due to Finance, Accounting and Budget (Team FAB) |
| June -July | Individual Operating and Capital Budget Reviews with Team FAB, OGM, IT and Support Services |
| June | Committee review/discussion of Revised FY 2015 Budget Proposal Delivered to Full Board for Action |
| July – August | Begin Preliminary 10-year Financial Plan update, including Inter-Municipal Agreement, Treasury - Debt Service, CSO, and EPA grants |
| | CFO Budget review |
| August | Operating and Capital Budget Review with General Manager/Executive Team |
| November 29 | FY 2016 Final Budget Decision Process Completed |
| December - March | Budget Preparation and Production |
| January 8, 2015 | Budget Workshop: GM's Proposed FY 2016 Budget briefing to Board members |
| January | Board Committees Conduct In-depth Review of Budget Proposal |
| | Committees forward Recommendations to full Board for Deliberation/Action |
| February 5, 2015 | Board Adoption |
| | Submission to the District of Columbia |



CAPITAL IMPROVEMENT 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 2.2 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.

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 decrease of \$9.3 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 improvements to the existing nitrogen removal facilities were placed in operation before the permit stipulated date of October 12, 2014, and compliance with reduced nitrogen limits starting on January 1, 2015 in full compliance with the permit.

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 – \$841.4 million

(project pages III-8 to III-30)

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) \$26.3 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 basins to service the secondary treatment process and dedicate four basins to service the enhanced nitrogen removal process. The design and construction is combined with Project BI, Secondary Treatment Facilities Upgrade, ENR-N.

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

- Headworks HVAC Rehabilitation (Project IX) \$15.8 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 FY 2013. Implementation of the recommendations is now being planned.
- Raw Wastewater Pump Station 2 (Project BV) \$42.6 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 the project is currently under design. Design completion is anticipated by the end of FY 2015.
- 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:

- Grit Chambers 1 and 2 Upgrades (Project OZ) \$11.0 million An upgrade to Grit Chambers 1 and 2 is necessary to address potential safety and operation issues caused by deterioration of the facility due to hydrogen sulfide related corrosion. An investigation and concept design to address the potential safety issues was performed in FY 2014 and implementation of the associated recommendations is planned for FY 2015.
- Secondary Reactors/Sedimentation Basin Upgrades (Project PD) \$8.2 million An upgrade to the chemical feed systems to
 the secondary reactors is planned to minimize chemical costs to the secondary system, as well as provide a safer alternative
 to the chemicals currently used. This project also includes facility upgrades that are scheduled to begin in FY 2020, to
 address equipment deficiencies due to aging equipment.

Plantwide Facilities Program - \$493.0 million

(project pages III-31 to III-69)

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.

One major project under this program was completed in FY 2014:

New Warehouse/Visitor Center/Security Facility (Project HC) \$18.0 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

Major projects under this program that are now underway include:

- Electrical Power System Switchgear (Project TZ) \$58.8 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.
- Instrumentation and Control Engineering Program Management (Project GP) \$9.1 million This project will ensure that new
 projects, from design through construction, are properly coordinated with DC Water standards for I&C and Electrical.

Major new projects under this program:

- Hydrogen Sulfide Mitigation (Project OK) \$10.0 million This project will provide for implementation of projects to provide for the protection of equipment subject to damage by the effects of hydrogen sulfide.
- Roofing Upgrades (Project OQ) \$9.5 million This project will provide for roof rehabilitation where damage to roofing systems
 have been observed and documented as well as for planned roof replacement where roofing systems have reached the end
 of their 20 year expected life.
- Chemical System/Building Upgrades (Project PF) \$22.5 million This project will determine condition of existing chemical
 unloading and feed systems and perform the necessary upgrades/rehabilitation to the existing metal salts building, sodium
 hypochlorite and sodium bisulfate tanks and feed systems.

Solids Processing Program – \$709.4 million

(project pages III-70 to III-81)

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 reduce biosolids operating costs when it is placed in operation as it produces power from digester gas to meet a portion of DC Water's electric demand at Blue Plains. The digestion process will eliminate a significant portion 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) \$535.6 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 95% 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 91% complete while the final dewatering facilities first contract is complete, and the second contract is 88% complete.
- Gravity Thickening Upgrade (Project BX) \$31.5 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, scum pumps, covers and ventilation system. Detailed design is underway with an expected completion in FY 2015 and construction is expected to begin in FY 2016.

Enhanced Nitrogen Removal Facilities – \$1,042.6 million

(project pages III-82 to III-91)

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) \$72.6 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 and result in an overall savings in energy consumption. Construction began in FY 2013.
- Enhanced Clarification Facilities (Project E8) \$215.6 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) \$270.6 million This project includes an expanded facility to remove additional nitrogen from the wastewater prior to discharge to the Potomac River as well as improvements to upstream processes that are required to ensure the reliability of the expanded system. Two construction contracts for this project began in FY 2011; the first contract is 100% complete and the second contract is 89% complete. The project is on schedule to meet NPDES permit compliance dates.
- Biosolids Filtrate Treatment Facilities (Project EE) \$104.6 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 was initiated in FY 2014 and the project is currently 7% complete.
- Wet Weather Mitigation, Diversion at Bolling and Tunnel Dewatering Pump Station (Projects EG, FR, H7 and FS) \$270.2 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.

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: A2 - Liquid Processing Program Management

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 34,544,321 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 37,468,016 |
| Life Budget Increase/Decrease | 2,923,695 |
| Allocated Labor as of FY 2014 | 558,633 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 10,139 | 3,771 | 2,786 | 4,421 | 4,243 | 1,485 | 1,987 | 2,333 | 1,919 | 718 | 653 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 13,997 | 6,037 | 7,200 | 0 | 5,500 | 4,734 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2024

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/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

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% | |



| FY2015 Approved Life Budget | 25,520,221 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 26,344,461 |
| Life Budget Increase/Decrease | 824,240 |
| Allocated Labor as of FY 2014 | 239,318 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 13,306 | 4,536 | 3,724 | 734 | 549 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 24,018 | 2,326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2011

Feb 2012

Oct 2018

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: BP - Grit Chamber Facilities Phase II

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 5,434,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 5,434,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 34 | 448 | 572 | 3,006 | 61 | 1 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 427 | 152 | 4,856 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2015

Jun 2017

Oct 2019

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: BQ - Primary Treatment Facilities Ph II

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 14,625,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 14,625,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | - |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 53 | 557 | 739 | 977 | 7,856 | 1,736 | 9 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 1,320 | 0 | 360 | 12,945 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2015

May 2018

Mar 2021

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: BR - Nitrification/Denitrification Fac

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

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 - | 40.67% |
|--------------|--------|
| EPA/Fed - | 0.55% |
| WSSC - | 45.84% |
| Fairfax - | 8.38% |
| Loudoun/PI - | 4.56% |



| _ | |
|--|------------|
| FY2015 Approved Life Budget | 52,247,125 |
| FY2015 Revised/FY2016 Approved Life Budget | 52,769,094 |
| Life Budget Increase/Decrease | 521,969 |
| Allocated Labor as of FY 2014 | 711,429 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 35,453 | 3,001 | 1,285 | 2,531 | 4,115 | 1,667 | 159 | 416 | 418 | 234 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 38,955 | 4,942 | 7,485 | 0 | 0 | 1,387 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2007

Mar 2009

Sep 2023

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/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

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 - | 39.73% |
|--------------|--------|
| EPA/Fed - | 5.57% |
| WSSC - | 42.66% |
| Fairfax - | 7.80% |
| Loudoun/PI - | 4.24% |



| FY2015 Approved Life Budget | 19,915,522 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 20,888,367 |
| Life Budget Increase/Decrease | 972,845 |
| Allocated Labor as of FY 2014 | 634,669 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 17,456 | 709 | 357 | 488 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 17,979 | 2,909 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2009

Apr 2011

Aug 2018

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: BV - RWWPS No. 2 Upgrades

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

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.

| | <u>E</u> | ffect | <u>tive</u> | <u>Fund</u> | <u>ing b</u> | <u>y Use</u> | r (perc | <u>:ent):</u> |
|--|----------|-------|-------------|-------------|--------------|--------------|---------|---------------|
|--|----------|-------|-------------|-------------|--------------|--------------|---------|---------------|

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



| FY2015 Approved Life Budget | 42,392,209 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 42,643,519 |
| Life Budget Increase/Decrease | 251,310 |
| Allocated Labor as of FY 2014 | 30,214 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,970 | 1,470 | 2,725 | 15,453 | 11,367 | 1,319 | 30 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 4,209 | 210 | 37,750 | 475 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2012

Apr 2016

Jan 2020

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 43.71%
EPA/Fed - 0.00%
WSSC - 43.90%
Fairfax - 8.02%
Loudoun/PI - 4.37%



| FY2015 Approved Life Budget | 4,101,235 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 4,101,235 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 72,516 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 I | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 4,020 | 71 | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 I | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 4,101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2016

Service Area Title: Wastewater Treatment Service Area

Liquid Processing **Program Title:**

IX - Headworks HVAC Rehab **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Good Engineering, Low pay back, Mission / Function over long term **Priority:**

diagrams. The required facilities may require the construction of additional odor scrubber capacity.

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

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% | |



| FY2015 Approved Life Budget | 15,740,350 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 15,835,495 |
| Life Budget Increase/Decrease | 95,145 |
| Allocated Labor as of FY 2014 | 825 |

Phase

Design:

Proiect Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 169 | 473 | 5 | 808 | 2,228 | 8,713 | 398 | 20 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 461 | 0 | 1,174 | 22 | 14,179 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2016

May 2018

Nov 2020

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/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

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% | |



| FY2015 Approved Life Budget | 107,714,000 |
|--|-------------|
| FY2015 Revised/FY2016 Approved Life Budget | 134,714,000 |
| Life Budget Increase/Decrease | 27,000,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

Start Date

Sep 2015

Sep 2016

Oct 2030

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 33 | 630 | 1,548 | 1,958 | 967 | 15 | 2,597 | 7,495 | 4,426 | 2,026 | 92,765 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 2,500 | 4,500 | 0 | 0 | 0 | 20,000 | 0 | 0 | 220 | 9,892 | 97,602 |

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

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/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

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% | |



| FY2015 Approved Life Budget | 40,433,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 49,433,000 |
| Life Budget Increase/Decrease | 9,000,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 67 | 253 | 417 | 177 | 0 | 0 | 0 | 0 | 0 | 274 | 45,514 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 1,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,771 | 39,662 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2015

Jul 2016

Oct 2032

NEW

Start Date

Sep 2020

Sep 2021

Jan 2024

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: J2 - Replace/Upgrade Primary Treatment Mechanisms

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

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

Impact on Operations:

The likelihood for degradation in operational performance will increase significantly if the necessary equipment upgrade and rehabilitation is not performed. This could necessitate a more costly replacement of equipment which more extensive impacts of the treatment process will be caused by construction activities.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 2,750,000 |
| Life Budget Increase/Decrease | 2,750,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 30 | 0 | 68 | 174 | 235 | 163 | 289 | 833 | 473 | 155 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 400 | 0 | 0 | 350 | 2,000 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/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: Mar 2023

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 1,483,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 1,493,000 |
| Life Budget Increase/Decrease | 10,000 |
| Allocated Labor as of FY 2014 | 2,008 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 120 | 359 | 11 | 0 | 0 | 563 | 345 | 86 | 73 | 15 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 230 | 0 | 0 | 0 | 0 | 1,263 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/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

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%



| FY2015 Approved Life Budget | 8,011,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,011,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 289 | 356 | 0 | 0 | 0 | 5 | 6,503 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 660 | 110 | 0 | 0 | 0 | 0 | 520 | 6,721 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2024 Sep 2026

Mar 2029

NEW

Start Date

Mar 2015

Sep 2015

Sep 2021

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: OZ - Grit Chambers 1 & 2 Upgrades

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Health Safety

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,000,000 |
| Life Budget Increase/Decrease | 11,000,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 2,702 | 632 | 0 | 0 | 1 | 1,880 | 2,205 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 6,000 | 0 | 0 | 0 | 5,000 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Feb 2015

Feb 2016

May 2023

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: PD - Secondary East & West Upgrades

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,200,000 |
| Life Budget Increase/Decrease | 8,200,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 486 | 0 | 0 | 0 | 0 | 1 | 2,029 | 3,474 | 1,127 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 600 | 0 | 0 | 0 | 0 | 7,000 | 600 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Jan 2017

Jan 2018

Sep 2022

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: PE - Nitrification Reactor/Sedimentation Upgrades

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,750,000 |
| Life Budget Increase/Decrease | 6,750,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 57 | 247 | 1,029 | 674 | 1,403 | 1,648 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 750 | 2,000 | 0 | 4,000 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: TF - 504C5 - GRIT CHAMBER BLDG 1&2

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

| DC - | 15.06% |
|--------------|--------|
| EPA/Fed - | 26.27% |
| WSSC - | 45.84% |
| Fairfax - | 8.38% |
| Loudoun/PI - | 4.46% |



| FY2015 Approved Life Budget | 70,879,208 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 70,886,008 |
| Life Budget Increase/Decrease | 6,800 |
| Allocated Labor as of FY 2014 | 2,185,905 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 72,134 | 747 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 70,886 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 1998

Jan 2003

May 2015

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

TK - 504G3 - BIOLOGICAL NUTRIENT REMOVAL **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

This project 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

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 operating costs. Upgrade of the blowers, conversion to a fine bubble diffuser system, and automated dissolved oxygen control system is expected to result in an annual energy cost savings.

Effective Funding by User (percent):



process aeration blowers and reactors to optimize the process, reduce energy consumption and provide reliable operation.

| <u>.</u> | |
|--|------------|
| FY2015 Approved Life Budget | 95,049,887 |
| FY2015 Revised/FY2016 Approved Life Budget | 95,049,884 |
| Life Budget Increase/Decrease | -3 |
| Allocated Labor as of FY 2014 | 3,352,949 |

Phase

Design:

Proiect Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 98,393 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 1998

Jun 1999

Jan 2014

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: TO - 504H1 - SECONDARY TREATMENT FAC

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project 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.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 70,603,223 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 70,603,223 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 2,616,286 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 73,160 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 70,603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 1999

Feb 2002

Nov 2015

CLOSED

Start Date

Apr 2003

Jun 2005

Sep 2014

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/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

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 - | 6.08% | |
| WSSC - | 45.58% | |
| Fairfax - | 8.33% | |
| Loudoun/PI - | 4.54% | |



| FY2015 Approved Life Budget | 47,067,765 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 47,266,942 |
| Total DC Water Allocated Labor | 2,238,215 |
| Total Project Cost | 49,505,157 |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 49,505 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 | Post FY 2024 |
|-------------------------|-----------------------|----------------|------------------|----------------|------------------|------------------|----------------|----------------|----------------|----------------|---------------------|--------------|
| Commitments Budget | Pre FY 2015 47,267 | FY 2015 | FY 2016 0 | FY 2017 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/Project Title: UC - 504J1 - FILTRATION/DISINFECTION FACI

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

This project 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% |



| FY2015 Approved Life Budget | 80,841,242 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 99,309,602 |
| Life Budget Increase/Decrease | 18,468,360 |
| Allocated Labor as of FY 2014 | 2,496,876 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 65,667 | 1,925 | 992 | 562 | 5,894 | 11,340 | 9,080 | 240 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 64,545 | 1,932 | 0 | 14,763 | 6,800 | 11,269 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2002

Mar 2004

Oct 2020

Service Area Title: Wastewater Treatment Service Area

Program Title: Liquid Processing

Project ID/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

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% |



| FY2015 Approved Life Budget | 15,747,220 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 15,806,485 |
| Life Budget Increase/Decrease | 59,265 |
| Allocated Labor as of FY 2014 | 841,310 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 16,105 | 91 | 1 | 187 | 189 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 15,362 | 0 | 444 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2001

Apr 2007

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: AL - Plantwide Project Program Management

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 41.42%
EPA/Fed - 0.00%
WSSC - 45.68%
Fairfax - 8.35%
Loudoun/PI - 4.54%



| FY2015 Approved Life Budget | 38,285,798 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 37,016,156 |
| Life Budget Increase/Decrease | -1,269,642 |
| Allocated Labor as of FY 2014 | 218,557 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 7,778 | 798 | 2,273 | 2,356 | 926 | 1,368 | 6,712 | 4,002 | 2,128 | 680 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 8,786 | 4,400 | 3,900 | 0 | 6,100 | 4,550 | 9,280 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: AZ - COF Renovations

Managing Department: Facilities and Security

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

This project provides for the 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 - | 71.25% |
|--------------|--------|
| EPA/Fed - | 0.00% |
| WSSC - | 22.48% |
| Fairfax - | 4.11% |
| Loudoun/PI - | 2.16% |



| FY2015 Approved Life Budget | 17,517,097 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 17,542,611 |
| Life Budget Increase/Decrease | 25,514 |
| Allocated Labor as of FY 2014 | 618,861 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 15,460 | 381 | 207 | 522 | 455 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 15,929 | 373 | 1,240 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2011

Apr 2013

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/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

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% | |



| FY2015 Approved Life Budget | 3,821,638 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,821,638 |
| Life Budget Increase/Decrease | 0 |
| | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 162 | 57 | 3,156 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 315 | 0 | 3,507 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Jun 2022

Sep 2024

Jun 2028

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: CH - Misc Facility Projects

Managing Department: Facilities and Security

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

This will rehabilitate and upgrade various facilities and apparatus throughout the Wastewater Treatment Plant (WWTP). 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 - | 62.31% |
|--------------|--------|
| EPA/Fed - | 0.00% |
| WSSC - | 29.43% |
| Fairfax - | 5.38% |
| Loudoun/PI - | 2.87% |



| FY2015 Approved Life Budget | 7,768,267 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 7,884,522 |
| Life Budget Increase/Decrease | 116,255 |
| Allocated Labor as of FY 2014 | 80,393 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 6,605 | 393 | 26 | 87 | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 7,031 | 639 | 214 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: CV - Laboratory Upgrades

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Health Safety

Project Description:

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

Impact on Operations:

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% |



| FY2015 Approved Life Budget | 8,346,159 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,509,591 |
| Life Budget Increase/Decrease | 163,432 |
| Allocated Labor as of FY 2014 | 178,508 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 7,538 | 186 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 8,469 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2007

Sep 2010

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/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

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% |



| FY2015 Approved Life Budget | 4,141,761 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,716,761 |
| Life Budget Increase/Decrease | 4,575,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | | | | | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 435 | 811 | 592 | 77 | 1,746 | 1,697 | 640 | 96 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2013

Jan 2021

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: DP - Chemical Building Enhancements

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Health Safety

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 1,868,580 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 1,891,145 |
| Life Budget Increase/Decrease | 22,565 |
| Allocated Labor as of FY 2014 | 11,422 |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 1.145 | FY 2015 F | Y 2016 | FY 2017 106 | FY 2018 110 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|----------------------|-----------|--------|--------------------|--------------------|---------|---------|---------|---------|---------|---------|--------------|
| Commitments | Pre FY 2015 | FY 2015 F | Y 2016 | | | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,591 | 0 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2008

Sep 2011

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

DQ - Non-OEM PLC Interfaces/Replacements **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

capability, with proper interfaces, to communicate with the Ovation control software within the PCCS.

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

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% |



| FY2015 Approved Life Budget | 2,107,090 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 2,132,604 |
| Life Budget Increase/Decrease | 25,514 |
| === = ================================ | , |

Phase

Design: Construction:

Proiect Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,573 | 209 | 134 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 2,133 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: EI - Plantwide Painting of Steel Pipes

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

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% |



| FY2015 Approved Life Budget | 4,960,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 4,960,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 557 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 58 | 0 | 0 | 0 | 0 | 0 | 1,246 | 1,299 | 1,347 | 15 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 80 | 0 | 0 | 0 | 0 | 0 | 4.880 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2019

Oct 2022

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: EN - WWTP - Central Fire Alarm System

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Health Safety

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% |



| FY2015 Approved Life Budget | 3,027,578 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,032,083 |
| Life Budget Increase/Decrease | 4,505 |
| Allocated Labor as of FY 2014 | 46,661 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 2,686 | 72 | 0 | 45 | 47 | 48 | 1 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 2,841 | 0 | 192 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2010

Oct 2019

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: GP - I & C & Elec - EPMC

Managing Department: Engineering and Technical Services

EPMC: I & C & Elec - EPMC

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

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% |



| FY2015 Approved Life Budget | 10,928,126 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,131,115 |
| Life Budget Increase/Decrease | -1,797,011 |
| Allocated Labor as of FY 2014 | 609,191 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 2,754 | 1,863 | 1,005 | 1,130 | 532 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 4,423 | 4,708 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2018

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: GW - Control Systems Replacement

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

This project 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% | |



| FY2015 Approved Life Budget | 37,000,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 37,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 730 | 603 | 800 | 13,708 | 15,995 |
| Commitments | <u>Pre FY 2015</u> | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,000 | 1,700 | 34,300 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2022

Sep 2023

May 2026

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Effective Funding by User (percent):

(projected disbursements do not include contingencies)

Project ID/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

Project Description:

PhaseStart DateDesign:Aug 2011Construction:Oct 2012

Project Completion:

Apr 2017

(dollars in thousands)

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.

DC -41.46% **FY2015 Approved Life Budget** 18,373,600 EPA/Fed -0.00% FY2015 Revised/FY2016 Approved Life Budget 18,373,600 WSSC -45.65% water is life Life Budget Increase/Decrease Fairfax -8.35% 596.357 4.54% Allocated Labor as of FY 2014 Loudoun/PI -Disbursements Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 0 16.484 1,212 34 13 0 0 0 0 0 0 0 Commitments FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 Pre FY 2015 FY 2023 **Post FY 2024** Budget 0 18,249 125 0 0 0 0 0 0 0 0 0

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

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: HJ - COF Renovations

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

PhaseStart DateDesign:Oct 2020Construction:Oct 2021

Project

Completion: Oct 2024

DC Water's administration functions have outgrown their current home in the COF. Planning and design of new Administrative Headquarters building at the Main and O Street Campus is presently underway. Once complete, administrative functions, unrelated or non-critical to the plant's functions will move to the new building. And functions that are presently forced to operate from remote or temporary facilities, will be properly housed in a modernized COF. The following modifications are proposed to assist DC Water in achieving these objectives: (1) Demolish IT Building, making space available for additional parking; (2) Renovate (Interior space) office areas to relocate the following programs to the modernized COF: DETS (from the CMF/Nitrification Blower Building), IT (from IT Building), Consultants (from Blue Plains trailers); (3) Renovate Facilities Department's area; and (4) Add enlarged IT server. Description corrected July 2015.

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% |



| FY2015 Approved Life Budget | 8,872,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,872,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | - |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 910 | 3,783 | 1,431 | 666 | 2 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,683 | 6,272 | 917 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/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

| Design: | Nov 2020 |
|---------------|----------|
| Construction: | Nov 2021 |
| | |

Start Date

Project

Phase

Completion: Jun 2023

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% |



| FY2015 Approved Life Budget | 4,032,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 5,782,000 |
| Life Budget Increase/Decrease | 1,750,000 |
| Allocated Labor as of FY 2014 | |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 763 | 485 | 307 | 1,693 | 938 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 1,750 | 0 | 590 | 3,242 | 200 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: HL - DWT - Process and Operations Jobs

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 3,396,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 7,106,447 |
| Life Budget Increase/Decrease | 3,710,447 |
| Allocated Labor as of FY 2014 | 25,297 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,597 | 479 | 949 | 644 | 445 | 225 | 227 | 1,042 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 2,731 | 1,875 | 300 | 300 | 300 | 300 | 1.300 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2011

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: HU - Blue Plains Logisitics

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

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% |



| FY2015 Approved Life Budget | 6,243,287 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,258,212 |
| Life Budget Increase/Decrease | 14,925 |
| Allocated Labor as of FY 2014 | 104,892 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 3,854 | 1,118 | 164 | 275 | 175 | 23 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 5,400 | 580 | 278 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2012

Dec 2018

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: IC - Electrical Monitoring Systems

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 4,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 7,250,000 |
| Life Budget Increase/Decrease | 3,250,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 365 | 0 | 0 | 146 | 966 | 2,593 | 1,175 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 350 | 0 | 0 | 800 | 6,100 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2018

Jul 2019

Jul 2021

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/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

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% | |



| FY2015 Approved Life Budget | 2,775,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,775,000 |
| Life Budget Increase/Decrease | 1,000,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 196 | 0 | 0 | 0 | 375 | 1,533 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 1,000 | 0 | 0 | 575 | 2,200 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Sep 2018

Sep 2019

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/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

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% |



| FY2015 Approved Life Budget | 13,234,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,234,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 63 | 0 | 0 | 70 | 0 | 210 | 858 | 3,179 | 5,203 | 893 | 14 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 110 | 0 | 1,213 | 368 | 11,543 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2020

Nov 2021

Dec 2025

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/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

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% |



| FY2015 Approved Life Budget | 3,335,175 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,348,157 |
| Life Budget Increase/Decrease | 12,982 |
| Allocated Labor as of FY 2014 | 29,910 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|--------------------|------------------|----------------|----------------|----------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,844 | 255 | 18 | 337 | 341 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | EV 2015 | EV 2046 | EV 2047 | EV 2040 | EV 0040 | EV 0000 | EV 0004 | EV 2022 | EV 2022 | EV 2024 | Doot EV 2024 |
| Commitments | <u>FIE FI 2013</u> | <u>F1 2013 .</u> | <u>FY 2016</u> | <u>FY 2017</u> | F 1 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2011

Apr 2013

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Effective Funding by User (percent):

Pre FY 2015

(projected disbursements do not include contingencies)

3,947

5,553

LP - Wastewater Asset Management Tech Support **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

This project 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.

Phase

Design: Construction:

Proiect Completion: Start Date

Oct 2020

0

0

Post FY 2024

(dollars in thousands)

FY 2024

0

0

Impact on Operations:

Commitments

Budget

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

DC -49.95% **FY2015 Approved Life Budget** 10,000,000 0.00% EPA/Fed -FY2015 Revised/FY2016 Approved Life Budget 10,000,000 WSSC -38.92% water is life Life Budget Increase/Decrease 7.22% Fairfax -3.91% 14.540 Allocated Labor as of FY 2014 Loudoun/PI -Disbursements Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 550 1,946 847 927 965 794 782 1 0 0 0

0

500

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

0

FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023

0

0

0

0

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: LS - Misc. Facilities Projects FY2013

Managing Department: Facilities and Security

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

This project provides for the 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 - 59.87%
EPA/Fed - 0.00%
WSSC - 31.34%
Fairfax - 5.73%
Loudoun/PI - 3.05%



| FY2015 Approved Life Budget | 2,239,950 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,239,950 |
| Life Budget Increase/Decrease | 4,000,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 363 | 1,065 | 1,119 | 1,493 | 665 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,342 | 3,067 | 1,831 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/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

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.

| <u>Effective</u> | <u>Funding</u> | by User | (percent): |
|------------------|----------------|---------|------------|
| | | | |

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



| FY2015 Approved Life Budget | 4,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 4,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 275 | 0 | 0 | 1,481 | 1,478 | 2 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 375 | 0 | 0 | 3,625 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2020

Oct 2021

Oct 2022

NEW

Start Date

May 2015

Sep 2015

Dec 2020

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: OD - Plantwide Paving

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

This project will be to provide annual funding from FY 2015 through FY 2018 period to provide for paving and roadway repair at Blue Plains on an ongoing basis for areas that were not covered by current construction projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,000,000 |
| Life Budget Increase/Decrease | 8,000,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 140 | 212 | 353 | 366 | 840 | 3,169 | 1,000 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 500 | 1,000 | 0 | 0 | 1,500 | 5,000 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Sep 2015

Sep 2016

Dec 2020

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: OE - Plantwide Drainage & Runoff

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

This project will be to provide for drainage improvements and rehabilitation/replacement of existing storm water pumping stations at Blue Plains. The program is to provide annual expenditures over the next 4 fiscal years to accomplish the necessary rehabilitation.

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%



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,146,000 |
| Life Budget Increase/Decrease | 6,146,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 7 | 20 | 1,104 | 1,266 | 690 | 871 | 300 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 26 | 4,120 | 500 | 0 | 0 | 1,500 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Jan 2020

Jan 2021

Feb 2022

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: OF - Process & Service Water Rehabilitation

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,950,000 |
| Life Budget Increase/Decrease | 3,950,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 548 | 2,076 | 497 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 3,950 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Sep 2020

Sep 2021

Sep 2022

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: OG - City Water & Sewer Upgrades at WWTP

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 1,250,000 |
| Life Budget Increase/Decrease | 1,250,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 512 | 508 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 1,250 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Oct 2020

Oct 2021

Jan 2024

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: OH - Plantwide Demolition

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,100,000 |
| Life Budget Increase/Decrease | 11,100,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,314 | 4,444 | 1,886 | 586 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,100 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: OI - Plantwide Painting & Signage

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

| Phase | Start Date |
|---------------|------------|
| Design: | Oct 2020 |
| Construction: | Oct 2021 |
| | |

Project

Completion: Dec 2021

| Effective | Funding by | <u>user</u> | <u>(percent</u> | <u>):</u> |
|-----------|------------|-------------|-----------------|-----------|
| · | | | | |

| 41.22% |
|--------|
| 0.00% |
| 45.84% |
| 8.38% |
| 4.56% |
| |



| FY2015 Approved Life Budget | 0 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 450,000 |
| Life Budget Increase/Decrease | 450,000 |
| Allocated Labor as of FY 2014 | |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 227 | 42 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 450 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Sep 2018

Sep 2019

Nov 2025

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: OK - Plantwide H2S Mitigation

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 10,000,000 |
| Life Budget Increase/Decrease | 10,000,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 1 | 272 | 711 | 1,328 | 1,787 | 1,504 | 879 | 1,154 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 10,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Sep 2017 Sep 2018

Mar 2021

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: ON - Plantwide Grounding Upgrades

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 5,500,000 |
| Life Budget Increase/Decrease | 5,500,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 583 | 1,948 | 1,409 | 215 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 3,500 | 2,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: OP - Plantwide Sump Pump Rehabilitation

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

| Phase | Start Date |
|---------------|------------|
| Design: | Sep 2016 |
| Construction: | Sep 2017 |

Project Completion:

oletion: Oct 2019

| Effective I | <u>Funding</u> | by User | (percent) | Ŀ |
|-------------|----------------|---------|-----------|---|
| | | | | |

| 41.22% |
|--------|
| 0.00% |
| 45.84% |
| 8.38% |
| 4.56% |
| |



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 2,500,000 |
| Life Budget Increase/Decrease | 2,500,000 |
| Allocated Labor as of FY 2014 | |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 357 | 939 | 529 | 7 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 2,500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Jan 2020

Jan 2021

Apr 2025

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: OQ - Plantwide Roofing Upgrades

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,500,000 |
| Life Budget Increase/Decrease | 9,500,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 297 | 1,127 | 1,789 | 2,588 | 1,451 | 890 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 1,500 | 8,000 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Feb 2015

Sep 2024

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: OY - Blue Plains Safety

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Health Safety

Project Description:

This project will provide funding for safety related improvements from FY 2015 through FY 2021 at an annual average of \$50,000 per year.

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%



| FY2015 Approved Life Budget | 0 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 350,000 |
| Life Budget Increase/Decrease | 350,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 28 | 42 | 0 | 0 | 0 | 38 | 40 | 42 | 43 | 45 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | _ | 50 | 50 | _ | _ | _ | 50 | 50 | 50 | 50 | 50 | • |

(projected disbursements do not include contingencies)

NEW

Start Date

Jun 2015

Jun 2016

Oct 2022

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: PF - Chemical System/Building Upgrades

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Health Safety

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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

water is life

| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 22,500,000 |
| Life Budget Increase/Decrease | 22,500,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 1,023 | 1,479 | 1,963 | 1,427 | 2,795 | 3,396 | 2,465 | 1,505 | 43 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 7,000 | 0 | 5,000 | 0 | 3,000 | 4,500 | 3,000 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

TA - Process Computer Control System **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Potential Failure/Ability to continue meeting permit requirement Priority:

Project Description:

Proiect Completion: Jul 2016

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, PCCS in conjunction with the Grit & Screen Facility Upgrades and Gravity Thickener Upgrade is expected to save in labor costs. PCCS in conjunction with the Primary Treatment, Secondary Treatment and Nitrification Facility Upgrade projects is expected to save in labor costs.

| DC - | 41.36% | |
|--------------|--------|--|
| EPA/Fed - | 0.00% | |
| WSSC - | 45.73% | |
| Fairfax - | 8.36% | |
| Loudoun/PI - | 4.55% | |



| FY2015 Approved Life Budget | 65,018,191 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 65,175,056 |
| Life Budget Increase/Decrease | 156,865 |
| Allocated Labor as of FY 2014 | 2,092,960 |

Phase

Design:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 62,561 | 827 | 126 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 64,980 | 195 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 1998

Aug 2002

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: TZ - 504l6 - 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

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 - | 40.83% |
|--------------|--------|
| EPA/Fed - | 0.39% |
| WSSC - | 45.84% |
| Fairfax - | 8.38% |
| Loudoun/PI - | 4.56% |



| FY2015 Approved Life Budget | 31,260,744 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 58,863,870 |
| Life Budget Increase/Decrease | 27,603,126 |
| Allocated Labor as of FY 2014 | 268,485 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 6,626 | 2,353 | 784 | 3 | 223 | 624 | 12,084 | 956 | 5,489 | 12,760 | 2,380 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 11,206 | 2,172 | 0 | 1,500 | 70 | 648 | 16,925 | 213 | 26,129 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2003

Mar 2024

Service Area Title: Wastewater Treatment Service Area

Program Title: Plantwide

Project ID/Project Title: YD - 700D5 - MISCELLANEOUS PROJECTS

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

This project 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 - | 38.39% |
|--------------|--------|
| EPA/Fed - | 3.47% |
| WSSC - | 45.35% |
| Fairfax - | 8.29% |
| Loudoun/PI - | 4.50% |



| FY2015 Approved Life Budget | 51,765,790 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 51,840,054 |
| Life Budget Increase/Decrease | 74,264 |
| Allocated Labor as of FY 2014 | 1,077,600 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 36,990 | 2,491 | 1,304 | 453 | 1,044 | 2,175 | 1,468 | 1,027 | 543 | 319 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 41,401 | 1,286 | 1,116 | 1,976 | 4,200 | 1,011 | 850 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2011

Jul 2011

Sep 2023

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/Project Title: AM - Solids Processing Program Management

Managing Department: Engineering and Technical Services

EPMC: EPMC4 - Biosolids Program Manager

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

Project Description:

This project provides program management services during planning, design and construction of biosolids 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 - 41.60%
EPA/Fed - 0.00%
WSSC - 45.55%
Fairfax - 8.33%
Loudoun/PI - 4.53%

water is life

| FY2015 Approved Life Budget | 23,700,674 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 17,460,585 |
| Life Budget Increase/Decrease | -6,240,089 |
| Allocated Labor as of FY 2014 | 1,127,538 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 5,817 | 1,889 | 1,680 | 2,110 | 1,241 | 0 | 1,053 | 1,633 | 1,078 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 6,757 | 6,353 | 0 | 0 | 0 | 0 | 4,350 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2022

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/Project Title: BX - Gravity Thickener Upgrades Ph II

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

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 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% | |



| - | |
|--|------------|
| FY2015 Approved Life Budget | 31,202,485 |
| FY2015 Revised/FY2016 Approved Life Budget | 31,539,507 |
| Life Budget Increase/Decrease | 337,022 |
| Allocated Labor as of FY 2014 | 41,389 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 2,641 | 629 | 4,379 | 10,575 | 6,026 | 642 | 22 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 3,769 | 3,050 | 24,720 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2011

Nov 2015

Nov 2019

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/Project Title: EV - Area Substation No. 6

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

Solids Processing

EV - Area Substation No. 6

Engineering and Technical Services

Design:

Construction: Apr 2010

Project

Phase

Completion: Sep 2019

Start Date

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% |



| FY2015 Approved Life Budget | 21,778,040 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 21,983,480 |
| Life Budget Increase/Decrease | 205,440 |
| Allocated Labor as of FY 2014 | 458,704 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|----------------|---------|----------------|---------|---------|---------|----------------|--------------|
| Budget | 19,589 | 190 | 118 | 0 | 362 | 424 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | <u>FY 2018</u> | FY 2019 | <u>FY 2020</u> | FY 2021 | FY 2022 | FY 2023 | <u>FY 2024</u> | Post FY 2024 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/Project Title: 12 - Biosolids Loadout Crane Rehabilitation

Managing Department: Engineering and Technical Services

EPMC: EPMC4 - Biosolids Program Manager

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

Project Description:

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

Impact on Operations:

This project will have no material impact 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% |



| FY2015 Approved Life Budget | 4,050,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 4,050,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 51,843 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 F | Y 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|-----------|--------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 2,793 | 491 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 F | Y 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 4,050 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2013

Sep 2015

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/Project Title: 13 - Biosolids Blending Development Center

Managing Department: Engineering and Technical Services

EPMC: EPMC4 - Biosolids Program Manager

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

Project Description:

PhaseStart DateDesign:Oct 2014Construction:Mar 2015

Project Completion:

Jul 2015

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% |



| FY2015 Approved Life Budget | 700,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 700,000 |
| | |
| Life Budget Increase/Decrease | 0 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|----------------|----------------|---------|---------|---------|---------|---------|---------|----------------|--------------|
| Budget | 0 | 566 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 '((- | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | FY 2015 | <u>FY 2016</u> | <u>FY 2017</u> | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | <u>FY 2024</u> | Post FY 2024 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Solids Processing **Program Title:**

Project ID/Project Title:

Managing Department: Engineering and Technical Services

EPMC: EPMC4 - Biosolids Program Manager

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

Project Description:

Oct 2019 Design: Construction: Feb 2021 16 - Combined Heat & Power as Backup Power

Project

Phase

Completion: Oct 2023

Start Date

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% |



| FY2015 Approved Life Budget | 1,500,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 1,500,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 204 | 654 | 327 | 2 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 1,350 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/Project Title: LD - Pre-Dewatering Additional Centrifuges

Managing Department: Engineering and Technical Services

EPMC: EPMC4 - Biosolids Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

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% |



| FY2015 Approved Life Budget | 9,170,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,170,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 122 | 1,152 | 5,764 | 175 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 200 | 8,970 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2019

May 2020

Jan 2022

NEW

Start Date

May 2019

Jun 2020

Feb 2022

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/Project Title: LE - High Strength Waste Receiving Facility (Includes FOG)

Managing Department: Engineering and Technical Services

EPMC: EPMC4 - Biosolids Program Manager

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

| Project Des | cription: |
|--------------------|-----------|
|--------------------|-----------|

Local, readily available high strength liquid wastes produced by industrial processing plants for food, beverages and pharmaceuticals among others, have been proven to enhance digester gas production. This project will provide a high strength waste receiving/processing facility on-site at Blue Plains. The facility would include 5 receiving tanks, freeze protection as well as pumps to transfer the pre screened liquid waste to either the Cambi thermal hydrolysis process or directly to the anaerobic digesters. Odor control would also be provided. These high strength wastes will be delivered by tanker trucks from the local area industries to the receiving facility at Blue Plains.

Impact on Operations:

Additional operations personnel will be required to operate the facility however the revenue generated would more than pay for the increased costs after the initial payback period.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,700,000 |
| Life Budget Increase/Decrease | 9,700,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 353 | 919 | 5,652 | 824 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 696 | 9,004 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/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

| Pro | iect | Descri | ption: |
|-----|------|--------|--------|
| | | | |

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 Management 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% |



| FY2015 Approved Life Budget | 524,841,559 |
|--|-------------|
| FY2015 Revised/FY2016 Approved Life Budget | 535,654,354 |
| Life Budget Increase/Decrease | 10,812,795 |
| Allocated Labor as of FY 2014 | 9,833,670 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 475,825 | 52,537 | 591 | 51 | 52 | 13 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 528,860 | 6,795 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2002

Dec 2010

Jun 2016

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/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

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%



| FY2015 Approved Life Budget | 48,529,602 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 48,669,994 |
| Life Budget Increase/Decrease | 140,392 |
| Allocated Labor as of FY 2014 | 2,075,689 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 49,785 | 418 | 271 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 48,329 | 341 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2005

Mar 2009

Nov 2016

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/Project Title: XZ - Solids Processing Building / DSLF

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project 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 - | 39.90% | |
|--------------|--------|--|
| EPA/Fed - | 1.33% | |
| WSSC - | 45.84% | |
| Fairfax - | 8.38% | |
| Loudoun/PI - | 4.55% | |



| FY2015 Approved Life Budget | 23,743,798 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 26,753,798 |
| Life Budget Increase/Decrease | 3,010,000 |
| Allocated Labor as of FY 2014 | 666,677 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 12,055 | 1,382 | 1,015 | 2,084 | 2,110 | 3,253 | 1,652 | 676 | 683 | 175 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 13,944 | 0 | 7,460 | 0 | 3,000 | 0 | 2,350 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2005

Jan 2023

Service Area Title: Wastewater Treatment Service Area

Program Title: Solids Processing

Project ID/Project Title: YZ - Digestion Facilities Site Preparation

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

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% |



| FY2015 Approved Life Budget | 2,234,454 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 2,234,454 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 87,215 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,981 | 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 2,234 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2000

Nov 2001

Jun 2015

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Project ID/Project Title: BI - Enhanced Nitrogen Removal (ENR) North

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

This project was formally Project Bl00 - 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 - | 30.06% |
|--------------|--------|
| EPA/Fed - | 11.16% |
| WSSC - | 45.84% |
| Fairfax - | 8.38% |
| Loudoun/PI - | 4.56% |



| FY2015 Approved Life Budget | 72,009,155 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 72,628,380 |
| Life Budget Increase/Decrease | 619,225 |
| Allocated Labor as of FY 2014 | 1,051,486 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 30,964 | 16,307 | 13,707 | 187 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 68,656 | 3,972 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2009

Mar 2013

Mar 2017

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Project ID/Project Title: E8 - Enhanced Clarification Facilities

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

Construction: Oct 2012

Construction: Aug 2013

Project

Phase

Completion: Nov 2018

Start Date

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% | |



| - | |
|--|-------------|
| FY2015 Approved Life Budget | 219,040,500 |
| FY2015 Revised/FY2016 Approved Life Budget | 215,601,328 |
| Life Budget Increase/Decrease | -3,439,172 |
| Allocated Labor as of FY 2014 | 397,622 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 22,150 | 7,549 | 35,486 | 35,532 | 27,688 | 236 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Project ID/Project Title: E9 - Nitrogen Removal Facilities

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Design: Mar 2009
Construction: Jan 2011

Start Date

Project

Phase

Completion: Sep 2017

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 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 - | 35.68% |
|--------------|--------|
| EPA/Fed - | 5.56% |
| WSSC - | 45.83% |
| Fairfax - | 8.38% |
| Loudoun/PI - | 4.56% |



| FY2015 Approved Life Budget | 267,797,417 |
|--|-------------|
| FY2015 Revised/FY2016 Approved Life Budget | 270,562,376 |
| Life Budget Increase/Decrease | 2,764,959 |
| Allocated Labor as of FY 2014 | 5,233,907 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 238,082 | 18,988 | 1,599 | 247 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 265,809 | 4,754 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Project ID/Project Title: EE - Filtrate Treatment Facilities

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Project Description:

This project provides 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 - | 40.26% | |
|--------------|--------|--|
| EPA/Fed - | 0.96% | |
| WSSC - | 45.84% | |
| Fairfax - | 8.38% | |
| Loudoun/PI - | 4.56% | |



| FY2015 Approved Life Budget | 103,386,994 |
|--|-------------|
| FY2015 Revised/FY2016 Approved Life Budget | 104,596,621 |
| Life Budget Increase/Decrease | 1,209,627 |
| Allocated Labor as of FY 2014 | 716,773 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 18,060 | 32,735 | 22,918 | 5,501 | 6,996 | 1,000 | 205 | 2 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 91,168 | 1,420 | 960 | 11,049 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2009

Mar 2014

Oct 2020

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Project ID/Project Title: EG - Blue Plains Tunnel

Managing Department: Engineering and Technical Services

EPMC: EPMC5 - LTCP Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

| Proi | iect | Des | crir | htior | ١. |
|------|------|-------------|-------|--------------|----|
| | COL | D C3 | CI IL | JUIOI | •• |

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

Impact on Operations:

Dewatering pump station costs will increase operating and maintenance costs beginning in FY 2018.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 177,380,058 |
|--|-------------|
| FY2015 Revised/FY2016 Approved Life Budget | 177,380,058 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 2,160,204 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 135,067 | 17,252 | 11,245 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 176,190 | 1,190 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2011

May 2011

Aug 2023

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Project ID/Project Title: FG - Secondary Treatment Upgrades for TN

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Design: Feb 2022
Construction: Feb 2024

Start Date

Project

Phase

Completion: Jul 2028

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% | |



| FY2015 Approved Life Budget | 56,925,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 57,034,022 |
| Life Budget Increase/Decrease | 109,022 |
| Allocated Labor as of FY 2014 | 6,719 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 446 | 1,024 | 55 | 1 | 554 | 142 | 0 | 0 | 591 | 1,221 | 5,505 | 43,340 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,649 | 0 | 0 | 440 | 435 | 0 | 0 | 0 | 2,835 | 66 | 50,328 | 1,282 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Enhanced Nitrogen Removal Facilities Project **Program Title:**

FR - BP Tunnel Dewatering Pumping Sta **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

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

Phase **Start Date** Design: Aug 2013 Construction: Aug 2013

Project

Completion: Feb 2019

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% |



| FY2015 Approved Life Budget | 32,314,878 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 33,045,690 |
| Life Budget Increase/Decrease | 730,812 |
| Allocated Labor as of FY 2014 | 234,071 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 5,869 | 5,352 | 6,099 | 5,363 | 3,777 | 181 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 31,684 | 500 | 0 | 862 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Project ID/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.

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.

|--|

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



| FY2015 Approved Life Budget | 41,685,660 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 53,404,794 |
| Life Budget Increase/Decrease | 11,719,134 |
| Allocated Labor as of FY 2014 | 334,596 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 2,741 | 5,903 | 18,784 | 11,880 | 4,730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 7,410 | 45,994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2013

Oct 2014

Mar 2018

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Project ID/Project Title: H7 - Blue Plains Tunnel Site Preparation

Managing Department: Engineering and Technical Services

EPMC: EPMC5 - LTCP Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

This project is to demolish existing abandoned digesters to make way for the new dewatering pump station and the Enhanced Clarification Facility (ECF). This revised location was necessary because these facilities would not fit at the original planned location.

Impact on Operations:

There are no anticipated impacts on operations or maintenance costs.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 6,360,303 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,360,303 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 176,090 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 5,962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 6,360 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2009

Feb 2010

Aug 2013

Service Area Title: Wastewater Treatment Service Area

Program Title: Enhanced Nitrogen Removal Facilities Project

Project ID/Project Title: LM - ENR Program Management

Managing Department: Engineering and Technical Services

EPMC: NRPM - Nitrogen Removal Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

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

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 - 41.77% EPA/Fed - 0.00% WSSC - 45.41% Fairfax - 8.30% Loudoun/PI - 4.52%



| FY2015 Approved Life Budget | 47,581,235 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 52,022,899 |
| Life Budget Increase/Decrease | 4,441,664 |
| Allocated Labor as of FY 2014 | 65,745 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 9,724 | 3,930 | 5,585 | 6,852 | 8,711 | 4,431 | 3,799 | 956 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 15,214 | 9,717 | 8,200 | 8,800 | 10,092 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2021

Capital Projects

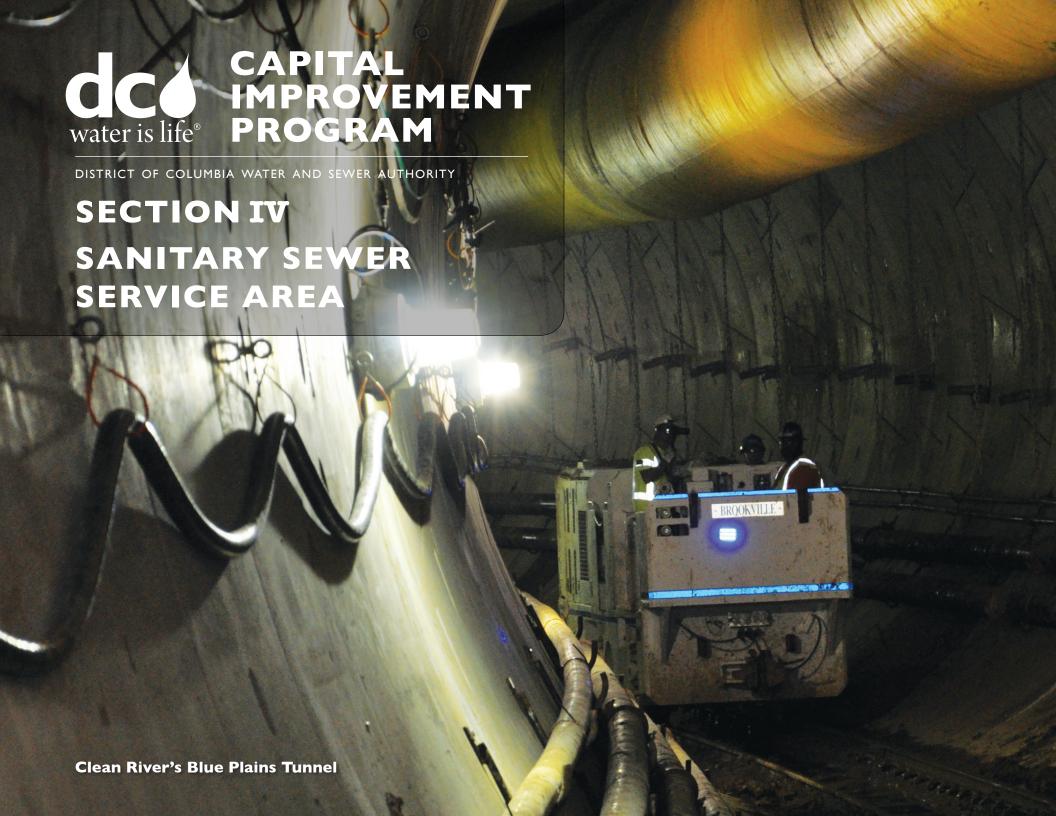
| Project ID | Project Name | Page # |
|------------|---------------------------------------|----------|
| A2 | Liquid Processing Program Management | III - 8 |
| AL | Plantwide Project Program Management | III - 31 |
| AM | Solids Processing Program Management | III - 70 |
| AZ | COF Renovations | III - 32 |
| BG | Dual Purpose Rehabilitation | III - 9 |
| BI | Enhanced Nitrogen Removal (ENR) North | III - 82 |
| BP | Grit Chamber Facilities Phase II | III - 10 |
| BQ | Primary Treatment Facilities Ph II | III - 11 |
| BR | Nitrification/Denitrification Fac | III - 12 |
| BT | Filtration/Disinfection Fac PH II | III - 13 |
| BV | RWWPS No. 2 Upgrades | III - 14 |
| BX | Gravity Thickener Upgrades Ph II | III - 71 |
| BY | Additional Chemical Systems PH III | III - 33 |
| CH | Misc Facility Projects | III - 34 |
| CV | Laboratory Upgrades | III - 35 |
| CW | Security at Blue Plains | III - 36 |
| DA | DWT Research / Pilot Projects | III - 15 |
| DP | Chemical Building Enhancements | III - 37 |
| DQ | Non-OEM PLC Interfaces/Replacements | III - 38 |
| E8 | Enhanced Clarification Facilities | III - 83 |
| E9 | Nitrogen Removal Facilities | III - 84 |
| EE | Filtrate Treatment Facilities | III - 85 |
| EG | Blue Plains Tunnel | III - 86 |
| El | Plantwide Painting of Steel Pipes | III - 39 |
| EN | WWTP - Central Fire Alarm System | III - 40 |
| EV | Area Substation No. 6 | III - 72 |
| FG | Secondary Treatment Upgrades for TN | III - 87 |
| FR | BP Tunnel Dewatering Pumping Sta | III - 88 |
| FS | Div D - Bolling Overflow & Diversion | III - 89 |
| GP | I & C & Elec - EPMC | III - 41 |
| GW | Control Systems Replacement | III - 42 |

Capital Projects

| Project ID | Project Name | Page # |
|------------|---|----------|
| H7 | Blue Plains Tunnel Site Preparation | III - 90 |
| HC | New Warehouse/Visitor Center/Security Facility | III - 43 |
| HJ | COF Renovations | III - 44 |
| HK | CMF Renovations and Consolidation | III - 45 |
| HL | DWT - Process and Operations Jobs | III - 46 |
| HU | Blue Plains Logisitics | III - 47 |
| 12 | Biosolids Loadout Crane Rehabilitation | III - 73 |
| 13 | Biosolids Blending Development Center | III - 74 |
| I6 | Combined Heat & Power as Backup Power | III - 75 |
| IC | Electrical Monitoring Systems | III - 48 |
| IV | Blue Plains IT Backbone FOC Tubes | III - 49 |
| IX | Headworks HVAC Rehab | III - 16 |
| ΙΥ | Effluent Filter Upgrade | III - 17 |
| ΙZ | Replace/Upgrade Influent Screens | III - 18 |
| J2 | Replace/Upgrade Primary Treatment Mechanisms | III - 19 |
| J6 | Deammonification Project | III - 20 |
| JF | Construction of Flood Seawall | III - 50 |
| JY | IT - Data Center | III - 51 |
| LC | Effluent Disinfection Upgrades | III - 21 |
| LD | Pre-Dewatering Additional Centrifuges | III - 76 |
| LE | High Strength Waste Receiving Facility (Includes FOG) | III - 77 |
| LM | ENR Program Management | III - 91 |
| LP | Wastewater Asset Management Tech Support | III - 52 |
| LS | Misc. Facilities Projects FY2013 | III - 53 |
| LX | Process Control System Upgrade | III - 54 |
| OD | Plantwide Paving | III - 55 |
| OE | Plantwide Drainage & Runoff | III - 56 |
| OF | Process & Service Water Rehabilitation | III - 57 |
| OG | City Water & Sewer Upgrades at WWTP | III - 58 |
| ОН | Plantwide Demolition | III - 59 |
| OI | Plantwide Painting & Signage | III - 60 |

Capital Projects

| Project ID | Project Name | Page # |
|------------|--|----------|
| OK | Plantwide H2S Mitigation | III - 61 |
| ON | Plantwide Grounding Upgrades | III - 62 |
| OP | Plantwide Sump Pump Rehabilitation | III - 63 |
| OQ | Plantwide Roofing Upgrades | III - 64 |
| OY | Blue Plains Safety | III - 65 |
| OZ | Grit Chambers 1 & 2 Upgrades | III - 22 |
| PD | Secondary East & West Upgrades | III - 23 |
| PE | Nitrification Reactor/Sedimentation Upgrades | III - 24 |
| PF | Chemical System/Building Upgrades | III - 66 |
| TA | Process Computer Control System | III - 67 |
| TF | 504C5 - Grit Chamber Bldg 1&2 | III - 25 |
| TK | 504G3 - Biological Nutrient Removal | III - 26 |
| TO | 504H1 - Secondary Treatment Fac | III - 27 |
| TQ | 504H3 - Nitrification Facility | III - 28 |
| TZ | 50416 - Elec Power Sys - Switch Gear | III - 68 |
| UC | 504J1 - Filtration/Disinfection Faci | III - 29 |
| UD | 504J2 - Raw Water Pump Stations 1&2 | III - 30 |
| XA | New Digestion Facilities | III - 78 |
| XB | Centrifuge Thickener Facility | III - 79 |
| XZ | Solids Processing Building / DSLF | III - 80 |
| YD | 700D5 - Miscellaneous Projects | III - 69 |
| YZ | Digestion Facilities Site Preparation | III - 81 |



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 Advance Wastewater Treatment Plant. 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.

A draft 2014 Sewer System Facilities Plan (update to the 2009 Sewer System Facilities Plan) is completed and under review. The update will outline recommendations for sewer system infrastructure renewal needs and suggestions for operation and maintenance improvements through FY 2035 and include:

- Review of current and proposed sewer inspection rates
- Determination of investment need based on the findings of inspection and assessment of linear assets
- Evaluation results of and recommendations for the storm and sanitary pumping stations
- Evaluation results of and recommendations for sewer structures including inflatable dams and the swirl facility
- Recommendations for optimizing the operation of the sewer system

Sanitary Collection Sewers – \$216.5 million

(project pages IV-6 to IV-22)

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.

- Local Sewer Rehab 4 (Project GA) \$8.6 million This was developed using a new contracting method (Concept-to-Construction), which saved \$800,000 in design costs. This project was bid in FY 2014 and will commence construction in the spring of 2015.
- Sewer Upgrade City Wide (Project J3) \$16.2 million National Arboretum Sewer Rehab (Job J306) This job will complete
 the rehabilitation of all sewers within the National Arboretum, including a portion of the East Side Interceptor. Close
 coordination with the National Arboretum staff to avoid detrimental vegetative impacts will lead to a proposed construction
 start in FY 2016.

Sanitary On-Going Projects – \$202.5 million

(project pages IV-23 to IV-40)

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.

• FY 2003 – DSS Sanitary Sewer Project (Project Q3) \$13.9 million – Pope Branch 12-inch Sewer Replacement (Job Q302) – 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. Rehabilitation of this sanitary sewer began in late FY 2013 with the related stream restoration planned to start in FY 2015.

Sanitary Pumping Facilities – \$44.1 million

(project pages IV-41 to IV-50)

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.

- Sewer Instrumentation & Control (Project GZ) \$4.3 million This one-year monitoring program is scheduled to commence in FY 2015 to monitor the sanitary and combined sewer flows throughout the District to provide more definition needed to support these systems' rehabilitation.
- 3rd Street & Constitution Ave NW Pumping Station (Project MB) \$3.7 million This mothballed pumping station will commence design and equipment purchase during FY 2015 for reactivation to carry the upper Low Area Trunk Sewer flows downstream of the I-395 tunnel under the National Mall due to partial failure of the existing siphons.

Sanitary Sewer Projects Program Management - \$112.6 million

(project pages IV-51 to IV-53)

During FY 2014, 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) \$78.0 million – 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) \$29.6 million – This ongoing project began in FY 2009 and provides valuable planning, design and management information for the Department of Engineering's evaluation of the wastewater collection system to Blue Plains Advanced Wastewater Treatment Plant.

Sanitary Interceptor/Trunk Force Sewers – \$717.0 million

(project pages IV-54 to IV-95)

This program includes the replacement or rehabilitation of large diameter sewers that have reached their useful life or are in need of major repair.

- Low Area Trunk Sewer Rehabilitation (Project DR) \$17.7 million This project provides for the rehabilitation of the sewer trunk main along Pennsylvania Avenue through the heart of the District to the Main Pumping Station. Design is scheduled to be completed in FY 2015 with construction slated for FY 2016.
- Sewer Rehab Near Creek Beds (Project G5) \$50.9 million The Sewer Facilities Plan identified several areas within the City's stream valleys where sewer systems have become exposed due to creek bed erosion. Three identified locations (Glover Archbold Park, Soapstone Park and Foundry Branch Park) started design in FY 2011 and are presently within the Environmental Assessment (EA) phase. Another three locations (Klingle Valley, Normanstone Park and Shelia's Tributary) commenced the design and EAs in FY 2014. It is anticipated that environmental permitting will push construction into FY 2016, FY 2017 and FY 2019, respectively, for these creekbed sewers' rehabilitation.
- Creekbed Sewer Rehabilitation 2 and 3 (Projects IL and IM) \$46.4 million and \$19.4 million Additional creekbed sewer rehabilitation jobs within these projects commenced the design and Environmental Assessment phases during FY 2014 after a "walk" of all creekbed sewers was performed during Winter 2014 that identified additional critical assets that needed protection and rehabilitation. Many of these locations are projected to commence rehabilitation in FY 2018.
- Sanitary Sewers Under Buildings (Project G6) \$8.5 million 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. Phase 1 of this project is complete with Phase 2 and 4 construction scheduled to start in FY 2015 and 2016, respectively, and Phase 3 (Abandoned SUBs) is currently within the inspection phase.
- B Street/New Jersey Ave Trunk Sewer (Project J0) \$5.9 million This was fully inspected in FY 2014 using manned entry to
 perform CCTV and non-destructive testing to fully understand the necessary rehabilitation of this 23-foot arch, unreinforced
 concrete and brick sewer. Rehabilitation design will commence in FY 2015 with construction starting in FY 2017.
- Rehabilitation of Anacostia Force Main (Project HT) \$10.8 million 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

Anacostia Force Main 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 (Projects LZ and N7) \$9.8 million and \$66.9 million 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. These projects have 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:
 - OPotomac Interceptor Rehabilitation in Fairfax and Loudon Counties One job includes funding to design using slip-lining to reconstruct the two separate portions of the interceptor in Fairfax and Loudoun Counties. Other segments of the Potomac Interceptor have been identified after assessment to show signs of deterioration and will be rehabilitated over the coming years.
 - Additional Inspections These projects further assess the Potomac Interceptor and provide re-inspection when needed, as well as evaluate soil erosion along the pipeline at stream crossings and along the banks of the C&O Canal.
 - PI Repair near Waxpool Rd This project involves the relining of 4,720 feet of the 48-inch Potomac Interceptor in Loudoun County near Waxpool Road and will be complete in FY 2015.
 - 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 substantially complete for four sites in Maryland and the District. Both Virginia sites are under construction and the operations' start is anticipated for winter FY 2015.
- Upper Potomac Interceptor Rehabilitation (Project G4) \$4.0 million This project involves the repair and reinstatement 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 the National Park Service (NPS). The design was completed in FY 2009, but construction procurement is underway for reinstatement of this asset in FY 2015.

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/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

| Pro | iect | Descri | ption: |
|-----|------|--------|--------|
| | | | |

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% | |



| FY2015 Approved Life Budget | 28,099,411 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 28,113,344 |
| Life Budget Increase/Decrease | 13,933 |
| Allocated Labor as of FY 2014 | 57,441 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,415 | 2,406 | 4,269 | 4,812 | 176 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 2,053 | 19,315 | 6,745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2011

Feb 2015

Mar 2018

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/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

Project Description:

This project is for the rehabilitate and repair of local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 10,000 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 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% |



| FY2015 Approved Life Budget | 2,750,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 2,830,169 |
| Life Budget Increase/Decrease | 80,169 |
| Allocated Labor as of FY 2014 | 22,371 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 240 | 844 | 141 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 597 | 2,233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2013

Oct 2014

Dec 2015

Service Area Title: Sanitary Sewer Service Area

Sanitary Collection Sewers **Program Title:**

G9 - Small Local Sewer Rehab 3 Project ID/Project Title:

Managing Department: Engineering and Technical Services

EPMC:

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

Project Description:

EPMC3C - Sewer Program Manager **Project** Completion: Nov 2020

Phase

Design:

Construction:

Start Date

Jan 2014

Jun 2019

This project to rehabilitate and repair local sewers throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 20,000 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 possible failure of the infrastructure in the future with undesirable environmental and social consequences.

| Effective Fund | ing by User (perc | <u>ent):</u> | | | 7 | | | | | | | |
|--------------------|----------------------|---------------|---------|-----------|---------|-----------|---------|------------|------------|-----------|---------|-----------------|
| DC - | 100.00% | | | | | | F | /2015 Apr | proved Lif | e Budget | | 5,650,000 |
| EPA/Fed - | 0.00% | | | | | EV2015 E | | | | e Budget | | 5,650,000 |
| WSSC - | 0.00% | | | 1:0 | | 1 12013 1 | | | | • | | 3,030,000 |
| Fairfax - | 0.00% | | wate | er is lif | e | | Li | te Budget | Increase | /Decrease | · | 0 |
| Loudoun/PI - | 0.00% | | | | | | Α | llocated L | abor as o | f FY 2014 | | 28,240 |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 200 | 198 | 12 | 0 | 0 | 461 | 2,001 | 18 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 368 | 0 | 0 | 0 | 0 | 5,282 | 0 | 0 | 0 | 0 | 0 | 0 |
| (projected disburs | ements do not includ | e contingenci | ies) | | | | | | | | (dollar | s in thousands) |

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/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

Project Description:

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



| FY2015 Approved Life Budget | 8,700,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,557,261 |
| Life Budget Increase/Decrease | -142,739 |
| Allocated Labor as of FY 2014 | 2,539 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 4 | 1,595 | 1,902 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 522 | 7,930 | 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2014

Apr 2015

Jul 2016

CLOSED

Start Date

Sep 2014

Phase

Design:

Project Completion:

Construction:

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/Project Title: GB - Small Local Sewer Rehab 5

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

| Effective Fundin | g by User (perce | ent): | _ | | | | | | | | | | |
|----------------------|----------------------|-------------|---------|----------|---------|----------|---------|-----------|-----------|-----------|---------|-----------------|--|
| DC - | 0.00% | | | | | | F | /2015 App | roved Lif | e Budget | | 12,000,000 | |
| EPA/Fed - | 0.00% | | | | | FY2015 R | | /2016 App | | • | | | |
| WSSC - Fairfax - | 0.00% 0.00% | | wate | r ic lif | 0 | | | tal DC Wa | | • | | 0 | |
| Loudoun/PI - | 0.00% | | wate | 1 15 111 | | | | | | ject Cost | | 0 | |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 | |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 | |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| (projected disburser | ments do not include | contingenci | es) | | | | | | | | (dollar | s in thousands) | |

DEFERRED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/Project Title: GC - Small Local Sewer Rehab 6

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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



| FY2015 Approved Life Budget | 12,400,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 12,400,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

DEFERRED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/Project Title: GD - Small Local Sewer Rehab 7

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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



| FY2015 Approved Life Budget | 12,700,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 12,700,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|--------------------|----------------|------------------|------------------|------------------|------------------|----------------|----------------|----------------|----------------|------------------|--------------|
| Commitments Budget | Pre FY 2015 | FY 2015 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 | Post FY 2024 |

(projected disbursements do not include contingencies)

DEFERRED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/Project Title: GE - Small Local Sewer Rehab 8

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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



| FY2015 Approved Life Budget | 13,100,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,100,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

DEFERRED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/Project Title: GF - Small Local Sewer Rehab 9

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

Impact on Operations:

This project is to rehabilitate local sanitary sewers throughout the District 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 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.

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%



| FY2015 Approved Life Budget | 13,495,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,495,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

CLOSED

Start Date

Oct 2007

Aug 2012

Sep 2014

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/Project Title: 19 - 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

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:

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% | |



| FY2015 Approved Life Budget | 1,150,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 572,815 |
| Total DC Water Allocated Labor | 88,930 |
| Total Project Cost | 661,745 |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Commitments | 662 Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 573 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 16,188,926 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 16,228,508 |
| Life Budget Increase/Decrease | 39,582 |
| Allocated Labor as of FY 2014 | 640,631 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 4,387 | 889 | 1,665 | 2,081 | 690 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 5,053 | 7,363 | 3,813 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2000

Nov 2002

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/Project Title: JS - Small Local Sewer Rehabilitation 10

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is to rehabilitate and/or replace laterals and collector sewers throughout the District 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%



| FY2015 Approved Life Budget | 13,910,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,910,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 87 | 629 | 5,679 | 1,533 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 927 | 1.400 | 11.583 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2020

Jan 2022

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/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

Project Description:

This project is to rehabilitate local sanitary sewers throughout the District 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 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 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%



| FY2015 Approved Life Budget | 16,055,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 16,055,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 88 | 613 | 6,446 | 1,804 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,040 | 1,820 | 13,195 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2021

Jan 2023

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/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

Project Description:

This project is to rehabilitate and/or replace laterals and collector sewers throughout the District 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% | |



| FY2015 Approved Life Budget | 15,000,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 15,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 126 | 821 | 6,691 | 2,686 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,200 | 1,800 | 12,000 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2022

Jan 2024

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/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

Project Description:

This project is to assess and rehabilitate and/or replace laterals and collector sewers throughout the District 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%



| · | |
|--|------------|
| FY2015 Approved Life Budget | 18,475,000 |
| FY2015 Revised/FY2016 Approved Life Budget | 18,475,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 784 | 1,103 | 899 | 13,785 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,025 | 1,236 | 1,854 | 12,360 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2023

Jan 2025

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/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

Project Description:

This project is to assess and rehabilitate and/or replace laterals and collector sewers throughout the District 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% | |



| FY2015 Approved Life Budget | 19,029,250 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 19,239,654 |
| Life Budget Increase/Decrease | 210,404 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 833 | 1,211 | 15,679 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,116 | 1,273 | 14,851 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2024

Jan 2026

NEW

Start Date

Jun 2025

Nov 2026

Feb 2028

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Collection Sewers

Project ID/Project Title: NX - Small Local Sewer Rehabilitation 15

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is to assess and rehabilitate and/or replace laterals and collector sewers throughout the District 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%



| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 20,219,500 |
| Life Budget Increase/Decrease | 20,219,500 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 453 | 18,876 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,568 | 18,651 |

(projected disbursements do not include contingencies)

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: Q3 - FY2003 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 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 - | 86.51% | |
|--------------|--------|--|
| EPA/Fed - | 13.49% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 13,844,539 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,851,229 |
| Life Budget Increase/Decrease | 6,690 |
| Allocated Labor as of FY 2014 | 634,535 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 4,688 | 229 | 1,396 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 4,903 | 8,948 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2003

Jul 2016

CLOSED

Start Date

Jun 2008

Sep 2014

(dollars in thousands)

Phase

Design:
Construction:

Project Completion:

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: Q8 - FY2008 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

(projected disbursements do not include contingencies)

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in 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% **FY2015 Approved Life Budget** 4,640,000 EPA/Fed -0.00% FY2015 Revised/FY2016 Approved Life Budget 4,596,753 WSSC -0.00% water is life **Total DC Water Allocated Labor** 962.387 Fairfax -0.00% 0.00% 5,559,140 Loudoun/PI -**Total Project Cost Disbursements** Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 0 0 5,559 0 0 0 0 0 0 0 0 0 Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 **Post FY 2024** FY 2023 FY 2024 **Budget** 0 4,597 0 0 0 0 0 0 0 0 0 0

CLOSED

Start Date

Jun 2010

Sep 2014

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: A9 - FY2010 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project provides for the 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% | |



| FY2015 Approved Life Budget | 7,924,251 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,707,722 |
| Total DC Water Allocated Labor | 24,960 |
| Total Project Cost | 6,732,682 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 6,733 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 I | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 6,708 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: BF - FY2011 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project provides for the 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%



| FY2015 Approved Life Budget | 8,165,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,165,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 21,893 |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Duaget | 4,574 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2012

Jul 2016

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: CE - FY2012 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project provides for the 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% | |



| FY2015 Approved Life Budget | 9,385,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,385,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 31,175 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|--------------|---------|----------|---------|----------|----------|---------------|
| Budget | 8,052 | 262 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| | | | <u></u> | <u></u> | <u></u> | <u> zo.o</u> | <u></u> | <u> </u> | | <u> </u> | <u> </u> | 1 0001 1 2021 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2011

Feb 2015

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: CQ - FY2013 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project provides for the 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% | |



| FY2015 Approved Life Budget | 10,205,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 10,205,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 27,536 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 7,242 | 998 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 10,205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2013

Aug 2015

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: D6 - FY2014 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project provides for the 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% | |



| FY2015 Approved Life Budget | 10,575,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 10,575,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 56,522 |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 1,126 | FY 2015 4,443 | FY 2016 718 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 | FY 2024 0 | Post FY 2024 |
|-------------------------|----------------------|------------------|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------|------------------|--------------|
| Commitments Budget | Pre FY 2015 6,355 | FY 2015 4,220 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 0 | FY 2022 | FY 2023 | FY 2024 0 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2013

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: DI - FY2015 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project provides for the 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%



| FY2015 Approved Life Budget | 10,846,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 10,846,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 2,324 | 2,623 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2015

Jun 2016

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: DW - FY2016 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the 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% | |



| FY2015 Approved Life Budget | 11,215,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,215,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 2,395 | 3,082 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 11.215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2016

Jun 2017

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: FP - FY2017 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the 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%

water is life

| FY2015 Approved Life Budget | 11,500,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,500,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 3,433 | 2,233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | FY 2015 I | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2017

Jun 2018

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: H6 - FY2018 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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



| FY2015 Approved Life Budget | 11,845,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,845,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 3,654 | 2,364 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 11,845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2018

May 2019

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: HN - FY2019 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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



| FY2015 Approved Life Budget | 12,200,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 12,200,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|-----------------|---------|---------|---------|----------|----------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 4,452 | 2,178 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| | | | | <u> </u> | <u></u> | <u></u> | <u></u> | <u> </u> | <u> </u> | <u></u> | | |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2019

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: JI - FY2020 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2020 for sanitary sewer mains and lateral infrastructure improvements. Job numbers will be issued to identify different jobs within the project.

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 12,568,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 12,568,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 3,277 | 3,943 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 12,568 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2020

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: LN - FY2021 - DSS Sanitary Sewer Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2021 for sanitary sewer mains and lateral infrastructure improvements. Job numbers will be issued to identify different jobs within the project.

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%



| FY2015 Approved Life Budget | 12,945,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 12,945,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,519 | 4,273 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,945 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2021

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: M9 - FY2022 - DSS Sanitary Sewer Projects

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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



| FY2015 Approved Life Budget | 13,335,350 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,335,350 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,836 | 6,388 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13,335 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2022

May 2023

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: MF - FY2023 - DSS Sanitary Sewer Projects

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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



| FY2015 Approved Life Budget | 13,735,411 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,735,411 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,855 | 2,881 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13,735 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2023

Jan 2024

NEW

Start Date

Jan 2024

Jan 2025

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: NW - FY2024 - DSS Sanitary Sewer Projects

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2024 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%



| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 14,224,914 |
| Life Budget Increase/Decrease | 14,224,914 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,499 | 3,974 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14,225 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary On-Going

Project ID/Project Title: EU - Sewer Lateral Rehab and Main Lining

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project 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. 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% |



| FY2015 Approved Life Budget | 14,600,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 14,600,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 1,073,958 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 12,337 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 14,100 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2008

Jul 2016

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

Project ID/Project Title: CX - Sewer Facilities Security Upgrades

Managing Department: Facilities and Security

EPMC: EPMC3C - Sewer Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

This project will provide for a security assessment, placement of exterior and interior cameras throughout Sewer Services Facilities, installation of traffic control devices (i.e. bollards & speed bumps), and installation of 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% |



| FY2015 Approved Life Budget | 1,135,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 1,335,076 |
| Life Budget Increase/Decrease | 200,076 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 162 | 71 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 228 | 1,108 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2015

Oct 2016

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

Project ID/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

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 - 99.17%
EPA/Fed - 0.00%
WSSC - 0.65%
Fairfax - 0.12%
Loudoun/PI - 0.06%



| FY2015 Approved Life Budget | 2,400,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 4,285,000 |
| Life Budget Increase/Decrease | 1,885,000 |
| Allocated Labor as of FY 2014 | 5,888 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 221 | 229 | 492 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 500 | 2,855 | 930 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2016

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

Project ID/Project Title: HB - DSS Sewer Pumping Project

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

Impact on Operations:

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% | |



| FY2015 Approved Life Budget | 4,560,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 4,560,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 7,326 |

Phase

Design:
Construction:

Project Completion:

| Disbursements Budget | Pre FY 2015 1,121 | FY 2015 363 | FY 2016 9 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 | Post FY 2024 |
|-------------------------|----------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------|------------------|--------------|
| Commitments Budget | Pre FY 2015 2,890 | FY 2015 1,670 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 | FY 2024 0 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2010

Oct 2015

NEW

Start Date

Nov 2015

Sep 2020

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

Project ID/Project Title: JV - DSS Sewer Pumping Project

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project will support the Department of Distribution and Conveyance Pumping and Maintenance. 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 sewer pump stations as needed.

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%



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 2,513,954 |
| Life Budget Increase/Decrease | 2,513,954 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 213 | 216 | 234 | 252 | 268 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 760 | 760 | 760 | 234 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

CLOSED

Start Date

Nov 2003

Apr 2007

Sep 2014

Service Area Title: Sanitary Sewer Service Area

Sanitary Pumping Facilities **Program Title:**

L3 - Rock Creek Sewage Pumping Station **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC3C - Sewer Program Manager EPMC:

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

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 -25.18% EPA/Fed -0.00% WSSC -58.00% 11.88% Fairfax -4.95% Loudoun/PI -



| FY2015 Approved Life Budget | 11,131,290 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,580,302 |
| Total DC Water Allocated Labor | 635,052 |
| Total Project Cost | 9,215,354 |

Phase

Design: Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|--|-------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------------|---------|---------------------|
| Budget | 9,215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 8,580 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (projected disbursements do not include contingencies) (dollars in thousands | | | | | | | | | | s in thousands) | | |

(projected disbursements do not include contingencies)

1 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted was derived in accordance with the Blue Plains IMA of 1985.

CLOSED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

Project ID/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

Project Description:

ping Facilities

Design: Nov 2003

Construction: May 2008

Ind Technical Services

Project

Phase

Completion: Sep 2014

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 Fund | ing by User (perc | ent): | _ | | 1 | | | | | | | |
|--|-------------------|---------|---------|----------|---------|----------|-----------|--------------|------------|-----------------|---------|--------------|
| DC - | 100.00% | | | | | | FY | /2015 App | roved Lif | e Budget | | 9,134,559 |
| EPA/Fed - WSSC - | 0.00% 0.00% | | | | | FY2015 R | Revised/F | 2016 App | proved Lif | e Budget | | 7,494,630 |
| Fairfax - | 0.00% | | wate | r is lif | e | | Tot | al DC Wa | ter Alloca | ted Labor | , | 400,075 |
| Loudoun/PI - | 0.00% | | | | | | | | Total Pro | ject Cost | | 7,894,705 |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 7,895 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 7,495 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (projected disbursements do not include contingencies) (dollar | | | | | | | | | | s in thousands) | | |

CLOSED

Start Date

Feb 2002

Aug 2005

Sep 2014

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

Project ID/Project Title: L5 - Earl Place Sewage Pumping Station

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

Project 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% |



| <u>.</u> | |
|--|-----------|
| FY2015 Approved Life Budget | 2,097,568 |
| FY2015 Revised/FY2016 Approved Life Budget | 1,592,160 |
| Total DC Water Allocated Labor | 290,273 |
| Total Project Cost | 1,882,433 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,882 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,592 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

Project ID/Project Title: LY - Sewer Facilities Security Upgrades

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project

Phase

Design:
Construction:

Completion: Sep 2018

Start Date

Oct 2016

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% | |



| FY2015 Approved Life Budget | 2,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 2,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | _ |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 2,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

Project ID/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

| Project [| Description: |
|-----------|--------------|
|-----------|--------------|

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

Impact on Operations:

This project will have no material impact on operating budgets.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 3,735,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,735,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 26,075 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 212 | 612 | 121 | 219 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 293 | 2,157 | 1,285 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2014

Feb 2014

Dec 2017

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Pumping Facilities

Project ID/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

| D! | (D! | |
|--------|----------|--------|
| Proiec | t Descri | ption: |
| | | |

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% |



| FY2015 Approved Life Budget | 8,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,000,000 |
| Life Budget Increase/Decrease | 0 |
| · · · · · · · · · · · · · · · · · · · | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 102 | 47 | 133 | 40 | 221 | 2,161 | 70 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 400 | 0 | 600 | 0 | 7,000 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2015

Jun 2018

Oct 2020

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Sewer Program Mgmt

Project ID/Project Title: AU - Sanitary Sewer Program Management

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project provides engineering program management services for the Sanitary Sewer service area in the District. This project that provides funding for sequential five-year contracts 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%



| FY2015 Approved Life Budget | 77,799,783 |
|--|------------|
| | , , |
| FY2015 Revised/FY2016 Approved Life Budget | 78,004,957 |
| Life Budget Increase/Decrease | 205,173 |
| Allocated Labor as of FY 2014 | 283,587 |

Phase

Design:
Construction:

Project Completion:

Start Date

Aug 2026

(dollars in thousands)

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 29,613 | 5,609 | 3,159 | 4,569 | 4,695 | 3,222 | 2,172 | 918 | 2,774 | 4,069 | 4,611 | 6,748 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 34,133 | 23,072 | 0 | 0 | 0 | 0 | 0 | 20,800 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

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

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Sewer Program Mgmt

Project ID/Project Title: DN - Sewer Inspection Program

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

The program will provide an ongoing effort to further inspect the Authority's existing sewer system.

Impact on Operations:

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

| Phase | Start Date |
|---------------|------------|
| Design: | Mar 2010 |
| Construction: | May 2011 |

Project

Completion: Jun 2023

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



| FY2015 Approved Life Budget | 28,414,194 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 29,571,513 |
| Life Budget Increase/Decrease | 1,157,319 |
| Allocated Labor as of FY 2014 | 117,891 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 5,703 | 3,980 | 2,681 | 533 | 1,885 | 2,116 | 1,871 | 1,789 | 1,803 | 1,268 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 8,671 | 6,364 | 400 | 400 | 2,460 | 4,707 | 2,251 | 2,319 | 2,000 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Sewer Program Mgmt

Project ID/Project Title: LR - Sanitary Sewer Asset Management

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

Phase

Design:
Construction:

Project Completion:

Start Date

Dec 2019

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 -90.36% **FY2015 Approved Life Budget** 5,000,000 EPA/Fed -0.00% FY2015 Revised/FY2016 Approved Life Budget 5,000,000 WSSC -7.39% water is life Life Budget Increase/Decrease 0 Fairfax -1.47% 0.78% 10.583 Allocated Labor as of FY 2014 Loudoun/PI -**Disbursements** Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 628 515 645 465 464 192 25 0 0 0 0 0 Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 0 0 2,697 2,303 0 0 0 0 0 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

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

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: A4 - Future Sewer System Upgrades

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

21,565

(projected disbursements do not include contingencies)

14,046

2.249

3,606

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Completion:

Phase

Design:
Construction:

Sep 2023

0

(dollars in thousands)

0

Start Date

Oct 2003

Project Description:

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

Impact on Operations:

Budget

Effective Funding by User (percent):

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.

86.31% DC -**FY2015 Approved Life Budget** 45.087.524 EPA/Fed -3.90% FY2015 Revised/FY2016 Approved Life Budget 45,465,998 WSSC -9.18% water is life 378,474 Life Budget Increase/Decrease Fairfax -0.45% 0.15% Allocated Labor as of FY 2014 2.246.808 Loudoun/PI -Disbursements Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 0 20.539 1.474 332 1.428 799 0 0 0 0 0 0 Commitments FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 Pre FY 2015 **Post FY 2024**

3 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013.

2,000

0

0

0

0

2.000

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 14,367,674 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 14,406,632 |
| Life Budget Increase/Decrease | 38,959 |
| Allocated Labor as of FY 2014 | 36,779 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 419 | 279 | 290 | 0 | 17 | 2,654 | 3,305 | 28 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 468 | 1,340 | 0 | 0 | 199 | 12.400 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2010

Oct 2018

Jan 2021

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: DR - Low Area Trunk Sewer Rehabilitation

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 11,934,316 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 17,714,687 |
| Life Budget Increase/Decrease | 5,780,371 |
| Allocated Labor as of FY 2014 | 182,787 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 2,047 | 285 | 3,612 | 2,805 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 2,291 | 2,001 | 13,422 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2007

Jun 2009

Jul 2017

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/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

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% | |



| FY2015 Approved Life Budget | 15,138,872 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 15,142,656 |
| Life Budget Increase/Decrease | 3,784 |
| Allocated Labor as of FY 2014 | 109,894 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 F | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 2,767 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 F | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 5,642 | 9,501 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2011

Mar 2012

Dec 2016

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: FW - Rehab Piney Branch Trunk Sewer

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project 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% | |



| FY2015 Approved Life Budget | 25,000,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 37,781,267 |
| Life Budget Increase/Decrease | 12,781,267 |
| Allocated Labor as of FY 2014 | 55,162 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 360 | 628 | 443 | 2,499 | 2,737 | 1,876 | 7,440 | 1,931 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,032 | 0 | 12,296 | 0 | 1,499 | 22,954 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2014

May 2016

May 2021

Service Area Title: Sanitary Sewer Service Area

Sanitary Interceptor/Trunk/Force Sewers **Program Title:**

FY - Rehab Upstream Rock Creek Main Interceptor **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

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 - | 49.94% | |
|--------------|--------|--|
| EPA/Fed - | 0.00% | |
| WSSC - | 50.06% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 16,000,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 29,560,000 |
| Life Budget Increase/Decrease | 13,560,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

Start Date

Dec 2014

May 2016

Aug 2020

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 777 | 2,092 | 4,695 | 0 | 1,194 | 3,914 | 0 | 0 | 0 | 0 | 0 |
| Commitments | <u>Pre FY 2015</u> | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 3,150 | 15,210 | 0 | 0 | 11,200 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

² Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: G2 - Sewer Structure Rehabilitation (1)

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

| Project Completion: | Sep 2017 |
|------------------------|----------|

Start Date

Nov 2013

Mar 2016

Phase

Design:

Construction:

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 details improvements to various sewer structures throughout the District. Project includes job G201, Rehabilitation of Structure 35B, to abandon the existing sewer structure inside the Kennedy Center and reinstate the structure at the intersection of 27th & G Street, NW. Project includes job G202, Sewer Structure 24 and 34 Improvements, to install access to the inflatable dams and rehabilitate Structures 24 and 34. Project includes job G203, Access Improvements to CSO 061, to provide maintenance accessibility to NPDES Outfall 061. Project includes job G204, Rehabilitation of Gates at Structures 5A, 5B and 5C, to replace the sluice gates for the sewer structures located outside of the Poplar Point Pumping Station.

Impact on Operations:

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

Effective Funding by User (percent): DC -90.29% **FY2015 Approved Life Budget** 9.082.430 EPA/Fed -0.00% FY2015 Revised/FY2016 Approved Life Budget 9,160,492 WSSC -9.71% water is life Life Budget Increase/Decrease 78.062 Fairfax -0.00% 0.00% 17.387 Allocated Labor as of FY 2014 Loudoun/PI -Disbursements Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 0 259 125 571 1.406 0 0 0 0 0 0 0 Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 0 339 4.400 4,422 0 0 0 0 0 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

² Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: G4 - Upper Potomac Intercept Sewer Rehab.

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

Repair and return to service approximately 2,000 feet of the 48-inch diameter Upper Potomac Interceptor Sewer, which has been out of service since a failure occurred during Hurricane Agnes in June 1972. This project will divert future flow from the Upper Potomac Interceptor Relief Sewer, which will be at capacity in future years.

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 - 31.60%
EPA/Fed - 0.00%
WSSC - 53.00%
Fairfax - 10.85%
Loudoun/PI - 4.55%



| FY2015 Approved Life Budget | 3,992,384 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,999,282 |
| Life Budget Increase/Decrease | 6,899 |
| Allocated Labor as of FY 2014 | 122,795 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 562 | 109 | 835 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 584 | 3,415 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2009

May 2015

Sep 2016

³ Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013.

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: G5 - Sewer Rehab Near Creek Beds

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Health Safety

Project Description:

This project consists of multiple jobs to protect infrastructure in the vicinity of streams and creeks located throughout the District. The project intends to relocate and rehabilitate manholes and sewer pipes vulnerable to flooding or erosion, infrastructure exposed to or adjacent to surface waters. Project also includes rehabilitation for outfalls and other tasks required to protect exposed sewers due to stream bank erosion.

Impact on Operations:

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% |



| FY2015 Approved Life Budget | 37,782,080 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 50,893,153 |
| Life Budget Increase/Decrease | 13,111,074 |
| Allocated Labor as of FY 2014 | 82,109 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 624 | 1,117 | 1,292 | 7,508 | 3,307 | 710 | 5,335 | 1,985 | 39 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 3,019 | 4,374 | 17,021 | 5,192 | 0 | 21,288 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2011

Jun 2016

Nov 2021

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: G6 - Sanitary Sewers Under Buildings 1

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project rehabilitates sanitary sewers located under buildings Citywide. Other activities included in this project are cleaning, pre and post CCTV, sealing joints and repairing offset pipe.

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 8,473,525 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,473,692 |
| Life Budget Increase/Decrease | 168 |
| Allocated Labor as of FY 2014 | 88,991 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,398 | 349 | 1,247 | 770 | 657 | 76 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,842 | 824 | 3,656 | 2,152 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2009

Jan 2010

Jun 2019

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: GG - Large Sewer Rehab 2

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project to rehabilitate and repair major sewers throughout the District 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% | |



| FY2015 Approved Life Budget | 3,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 1,700 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 81 | 95 | 35 | 0 | 0 | 205 | 1,010 | 3 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 452 | 0 | 0 | 0 | 0 | 2,548 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2014

Jun 2019

Nov 2020

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: GH - Large Sewer Rehab 3

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project to rehabilitate and repair major sewers throughout the District 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% | |



| FY2015 Approved Life Budget | 6,150,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,150,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 11,752 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 205 | 255 | 21 | 0 | 0 | 488 | 2,076 | 20 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 530 | 0 | 0 | 0 | 0 | 5,620 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2014

Jun 2019

Nov 2020

DEFERRED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: GI - Large Sewer Rehab 4

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project to rehabilitate and repair major sewers throughout the District 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%



| FY2015 Approved Life Budget | 9,530,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,530,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|-------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

DEFERRED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/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

Project Description:

This project to rehabilitate and repair major sewers throughout the District 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%



| FY2015 Approved Life Budget | 13,100,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,100,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

DEFERRED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: GK - Large Sewer Rehab 6

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project to rehabilitate and repair major sewers throughout the District 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%



| FY2015 Approved Life Budget | 13,500,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,500,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | _ |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

DEFERRED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/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

Project Description:

This project to rehabilitate and repair major sewers throughout the District 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% | |



| FY2015 Approved Life Budget | 13,900,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,900,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 0 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 | Post FY 2024 |
|-------------------------|-------------|----------------|------------------|------------------|------------------|------------------|----------------|----------------|----------------|----------------|---------------------|--------------|
| Commitments Budget | Pre FY 2015 | FY 2015 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 | Post FY 2024 |

(projected disbursements do not include contingencies)

DEFERRED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: GM - Large Sewer Rehab 8

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project to rehabilitate and repair major sewers throughout the District 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% |



| FY2015 Approved Life Budget | 14,300,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 14,300,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | _ |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

DEFERRED

Start Date

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: GN - Large Sewer Rehab 9

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



| FY2015 Approved Life Budget | 15,705,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 15,705,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|-------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

Dec 2014

Nov 2015

May 2016

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: HH - New Fleet Management Facility

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

Impact on Operations:

No significant operating cost impact.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 16,500,000 |
| Life Budget Increase/Decrease | 16,500,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 891 | 5,877 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 3,100 | 13,400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Sanitary Sewer Service Area

Sanitary Interceptor/Trunk/Force Sewers **Program Title:**

HS - Rehabilitation of Influent Sewers **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

Construction: **Proiect**

This project addresses the need to conduct detailed assessments of several major sewers within the District prior to proceeding with implementation of corrective actions. The relevant sewers include three of the major influent sewers to Blue Plains WWTP: the East Outfall Relief Sewer, the West Outfall Sewer and the West Outfall Relief Sewer. Activities would include cleaning, and inspection as necessary of 32,000 linear feet to fully ascertain the pipe condition, prior to future (as yet unfunded) rehabilitation.

Impact on Operations:

Not implementing this project may result in the possible failure of the infrastructure in the future with undesirable environmental and social consequences. Due to the size of the sewer and volume of flow, the negative effects on public health and safety in the event of a collapse would be substantial.

Effective Funding by User (percent): DC -39.40%

EPA/Fed -0.00% WSSC -44.76% Fairfax -11.95%

3.89% Loudoun/PI -

| wat | er is life |
|-----|------------|

| FY2015 Approved Life Budget | 3,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Completion:

Start Date

Apr 2018

Oct 2019

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 388 | 0 | 0 | 80 | 1,245 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | <u>Pre FY 2015</u> | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 3,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

² Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: HT - Rehabilitation of Anacostia Force Main

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was developed to evaluate, rehabilitate and protect the Anacostia Force Main (AFM). The 108-inch diameter AFM extends 32,700 linear feet 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 - 42.15%
EPA/Fed - 0.00%
WSSC - 57.85%
Fairfax - 0.00%
Loudoun/PI - 0.00%



| FY2015 Approved Life Budget | 10,557,406 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 10,777,017 |
| Life Budget Increase/Decrease | 219,611 |
| Allocated Labor as of FY 2014 | 112 |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 | | | | | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|--------------------|-----------------------|-----------------------|-------------------------|-------------------------|---------|---------|---------|---------|---------|---------|--------------|
| Commitments | 707 Pre FY 2015 | 138 FY 2015 | 109 FY 2016 | 1,215 FY 2017 | 1,384 FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 257 | 3,770 | 2,450 | 4,300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2011

Nov 2015

Sep 2019

³ Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013.

Service Area Title: Sanitary Sewer Service Area

Sanitary Interceptor/Trunk/Force Sewers **Program Title:**

IF - Sanitary Sewer Rehabilitation 2 Project ID/Project Title:

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority:

Project Description:

Project Completion: Nov 2020 Good Engineering, High pay back, Mission / Function

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:

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% |



| FY2015 Approved Life Budget | 16,000,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 16,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 2,284 |

Phase

Design:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 2 | 866 | 190 | 2,444 | 1,803 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 1,540 | 410 | 10,150 | 260 | 3,640 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2014

Jan 2017

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/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

| P | roi | iect | Des | crir | tion: | |
|---|-----|------|-----|-------|---|--|
| | . • | | | 91 IN | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |

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 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% |



| FY2015 Approved Life Budget | 20,995,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 20,995,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 89 | 292 | 1,585 | 2,483 | 3,042 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 717 | 4,233 | 4,290 | 11,755 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2017

Jul 2018

Jun 2021

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: IK - Potomac Force Main Rehabilitation

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

The project will provide for the rehabilitation of the Potomac Force Main. This is necessary in order to continue to gather information for the prioritization of rehabilitation projects established for both mainline sewers and sewer lateral repair work.

Impact on Operations:

This project will 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 - 47.40%
EPA/Fed - 0.00%
WSSC - 28.30%
Fairfax - 18.30%
Loudoun/PI - 6.00%



| FY2015 Approved Life Budget | 1,527,724 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,030,520 |
| Life Budget Increase/Decrease | 4,502,796 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 31 | 404 | 273 | 347 | 1,491 | 229 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 F | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 31 | 1,500 | 350 | 500 | 3,650 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2016

Nov 2017

Feb 2019

Service Area Title: Sanitary Sewer Service Area

Sanitary Interceptor/Trunk/Force Sewers **Program Title:**

IL - Creekbed Sewer Rehabilitation 2 **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Health Safety **Priority:**

Project Description:

This project consists of multiple jobs to protect infrastructure in the vicinity of streams and creeks located throughout the District. The project intends to relocate and rehabilitate manholes and sewer pipes vulnerable to flooding or erosion and infrastructure exposed to or adjacent to surface waters. The project also includes the rehabilitation of outfalls and other tasks required to protect exposed sewers due to stream bank erosion.

Impact on Operations:

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

Effective Funding by User (percent): DC -91.55%

EPA/Fed -0.00% WSSC -8.45% Fairfax -0.00%

0.00% Loudoun/PI -

| FY2015 Approved Life Budget | 29,010,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 46,371,600 |
| Life Budget Increase/Decrease | 17,361,600 |
| Allocated Labor as of FY 2014 | 37,339 |

Phase

Design:

Project Completion:

Construction:

Start Date

Sep 2013

Jun 2016

Dec 2020

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 37 | 591 | 1,162 | 4,962 | 7,908 | 1,817 | 2,264 | 103 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,658 | 4,896 | 1,398 | 26,066 | 1,148 | 11,205 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

² Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Sanitary Sewer Service Area

Sanitary Interceptor/Trunk/Force Sewers **Program Title:**

IM - Creekbed Sewer Rehabilitation 3 **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Health Safety Priority:

Project Description:

This project consists of multiple jobs to protect infrastructure in the vicinity of streams and creeks located throughout the District. The project intends to relocate and rehabilitate manholes and sewer pipes vulnerable to flooding or erosion and infrastructure exposed to or adjacent to surface waters. The project also includes the rehabilitation of outfalls and other tasks required to protect exposed sewers due to stream bank erosion.

Impact on Operations:

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

Effective Funding by User (percent): DC -76.94%

EPA/Fed -0.00% WSSC -23.06% Fairfax -0.00% 0.00% Loudoun/PI -

| FY2015 Approved Life Budget |
|--|
| FY2015 Revised/FY2016 Approved Life Budget |
| Life Budget Increase/Decrease |

19,435,000 3.328.000

16,107,000

Start Date

Mar 2015

Sep 2017

Jan 2022

Allocated Labor as of FY 2014

Phase

Design:

Proiect Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 76 | 198 | 423 | 1,060 | 410 | 600 | 6,223 | 690 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 271 | 4,138 | 1,550 | 0 | 0 | 1,458 | 12,018 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

² Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Sanitary Sewer Service Area

Sanitary Interceptor/Trunk/Force Sewers **Program Title:**

IN - Upper East Side Trunk Sewer Rehabilitation Project ID/Project Title:

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

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:

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% 0.00% Loudoun/PI -



| FY2015 Approved Life Budget | 18,250,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 18,250,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 37,633 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|--------------|---------|----------------|----------------|----------|---------|---------|----------------|----------------|----------|----------------|--------------|
| Budget | 38 | 1,319 | 65 | 203 | 876 | 4,950 | 314 | 0 | 0 | 0 | 0 | 0 |
| 0 | D = 51/ 00/5 | ->//- | EV 0040 | E\/ 004E | E\/ 0040 | | ->/ | EV 0004 | E\/ 0000 | E\/ 0000 | =>4 0004 | D (EV 0004 |
| Commitments | Pre FY 2015 | FY 2015 | <u>FY 2016</u> | <u>FY 2017</u> | FY 2018 | FY 2019 | FY 2020 | <u>FY 2021</u> | <u>FY 2022</u> | FY 2023 | <u>FY 2024</u> | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2012

Oct 2018

Dec 2019

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: J0 - B St/New Jersey Ave Trunk Sewer Reha

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

432

(projected disbursements do not include contingencies)

245

407

4,863

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

Project Description:

This project involves a condition assessment and conceptual design for repair of the B Street / New Jersey Avenue trunk sewer. This project identifies the structural integrity of the sewer system, and develops adequate and cost effective repair approaches. This project increases the reliability, restores the integrity, and maintains the capacity of the sewer.

Phase

Design:

Project Completion:

Construction:

Start Date

Mar 2009

Jul 2017

Nov 2019

0

(dollars in thousands)

0

Impact on Operations:

Budget

Effective Funding by User (percent):

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

DC -86.01% **FY2015 Approved Life Budget** 5,937,930 EPA/Fed -0.00% FY2015 Revised/FY2016 Approved Life Budget 5,947,133 WSSC -13.99% water is life Life Budget Increase/Decrease 9.203 Fairfax -0.00% 0.00% 13.703 Allocated Labor as of FY 2014 Loudoun/PI -Disbursements Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 0 433 6 78 129 1,475 921 6 0 0 0 0 Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 **Post FY 2024**

3 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013.

0

0

0

0

0

0

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: J1 - Oxon Run Sewer Rehabilitation

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

This project assesses the condition and develops needed repairs for a segment of sewer that crosses Oxon Run. This project will increase the reliability, restore the integrity, stop leakage from the pipe, and maintain the capacity of the sewer.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 26.88%

EPA/Fed - 0.00%

WSSC - 73.12%

Fairfax - 0.00%

Loudoun/PI - 0.00%



| FY2015 Approved Life Budget | 14,189,011 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 21,457,381 |
| Life Budget Increase/Decrease | 7,268,370 |
| Allocated Labor as of FY 2014 | 56,060 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 605 | 163 | 139 | 111 | 396 | 885 | 842 | 469 | 3,907 | 3,853 | 334 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,402 | 300 | 4,241 | 0 | 0 | 14,871 | 0 | 643 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2013

Sep 2021

May 2024

³ Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013.

DEFERRED

Start Date

Phase

Design:
Construction:

Project Completion:

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: JQ - Hydraulic Protection Project

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

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 | ng by User (perc | <u>ent):</u> | - | | 1 | | | | | | | |
|---------------------|-----------------------|--------------|---------|----------|---------|----------|---------|-----------|------------|----------|---------|------------------|
| DC - | 54.14% | | | | | | ΕY | /2015 Apr | proved Lif | e Budaet | | 1,723,000 |
| EPA/Fed - | 0.00% | | | | | FY2015 R | | | | • | | 1,723,000 |
| WSSC - Fairfax - | 45.86% 0.00% | | wate | r ic lif | 0 | | | | Increase | _ | | 0 |
| Loudoun/PI - | 0.00% | | watt | 1 15 111 | | | | J | abor as o | | | |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (projected disburse | ements do not include | e contingenc | ies) | | | | | | | | (dollar | rs in thousands) |

² Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: JR - Large Sewer Rehabilitation 10

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

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% | |



| FY2015 Approved Life Budget | 16,175,500 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 16,175,500 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 232 | 591 | 6,604 | 727 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 1,010 | 1,519 | 13,647 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2020

Nov 2021

Jan 2023

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: JU - Sanitary Sewer Rehabilitation 4

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is to rehabilitate and/or replace active and abandoned sanitary sewers under buildings (SUBs) throughout the District 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 and abondoned sanitary sewers under buildings 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% | |



| FY2015 Approved Life Budget | 4,565,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 4,565,000 |
| Life Budget Increase/Decrease | 0 |
| | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 121 | 237 | 1,484 | 756 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 765 | 3,800 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2020

Jul 2021

Sep 2022

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/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

Project Description:

This project is to rehabilitate and/or replace major sewers through the District of Colombia 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% | |



| _ | |
|--|------------|
| FY2015 Approved Life Budget | 16,055,000 |
| FY2015 Revised/FY2016 Approved Life Budget | 16,055,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 633 | 7,171 | 812 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,040 | 1,820 | 13,195 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2021 Nov 2022

Jan 2024

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: LZ - Potomac Interceptor Projects - Rehab Phase 2

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

| Design: | Jan 2016 |
|---------------|----------|
| Construction: | Jul 2017 |
| | |

Start Date

Project

Phase

Completion: Jun 2019

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 - 7.96%
EPA/Fed - 0.00%
WSSC - 33.08%
Fairfax - 33.08%
Loudoun/PI - 25.88%

water is life

| FY2015 Approved Life Budget | 9,800,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,800,000 |
| Life Budget Increase/Decrease | 0 |
| | |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 325 | 530 | 306 | 1,975 | 1,578 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 1,560 | 385 | 1,185 | 6,670 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

² Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/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

Project Description:

This project is to assess and rehabilitate and/or replace major sewers throughout the District 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% | |



| FY2015 Approved Life Budget | 20,100,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 20,100,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 662 | 633 | 587 | 16,923 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,560 | 1,483 | 2,225 | 14,832 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2023

Nov 2024

Jan 2026

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: N7 - Potomac Sewer System Rehab.

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: High Profile, Good Neighbor Policy

(projected disbursements do not include contingencies)

PhaseStart DateDesign:Mar 2003Construction:Dec 2001

Project

Completion: Mar 2020

(dollars in thousands)

Project Description:

This project provides odor control, sewer modifications, and rehabilitation of the Potomac Interceptor (PI) system. This project consists of eight jobs to control odors, and rehabilitate and modify manholes, sewer pipe, sewer vents, and other related components of the PI system. Implementation of this project will reduce odor complaints, maintain and restore structural integrity, and maintain the design hydraulic capacity of the sewer.

Impact on Operations:

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

Effective Funding by User (percent): DC -8.45% **FY2015 Approved Life Budget** 66,655,479 0.00% EPA/Fed -FY2015 Revised/FY2016 Approved Life Budget 66,928,455 WSSC -29.89% water is life Life Budget Increase/Decrease 272.976 Fairfax -36.10% 25.57% 1.427.624 Allocated Labor as of FY 2014 Loudoun/PI -Disbursements Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 30.618 3,925 206 148 2.620 5,591 935 0 0 0 0 0 Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 **Post FY 2024** Budget 0 40,816 5,991 275 3,025 16,822 0 0 0 0 0 0

³ Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013.

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/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

Project Description:

This project is to assess and rehabilitate and/or replace major sewers throughout the District 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% | |



| FY2015 Approved Life Budget | 20,703,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 20,703,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 702 | 697 | 18,395 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,607 | 1,528 | 17,569 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2024 Nov 2025

Jan 2027

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/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

Project Description:

This project is to rehabilitate and/or replace major sewers throughout the District 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% | |



| FY2015 Approved Life Budget | 18,000,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 18,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 376 | 535 | 9,345 | 1,667 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,440 | 2,160 | 14,400 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2022 Nov 2023

Jan 2025

NEW

Start Date

Aug 2025

Jan 2027

Apr 2028

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: NY - Large Local Sewer Rehabilitation 15

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is to assess and rehabilitate and/or replace major sewers throughout the District 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%

water is life

| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 21,324,000 |
| Life Budget Increase/Decrease | 21,324,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 492 | 20,538 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,706 | 19,618 |

(projected disbursements do not include contingencies)

NEW

Start Date

May 2021

Oct 2022

Apr 2024

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: O4 - Southwest Interceptor Inspection & Rehab

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

The Southwest Interceptor Rehabilitation project includes the cleaning and localized repair of approximately 5,600 linear feet of the Southwest Interceptor. There are about fifteen known localized defects including broken pipes, holes, various forms of infiltration, and deposits. Investigation of sources of leakage before repairs are implemented will be mandatory and other activities will include repairing service connections and manholes and pre- and post-remediation closed-circuit television (CCTV) inspection. It is noted that the lower portion of this sewer is located under Nationals Stadium.

Impact on Operations:

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

Effective Funding by User (percent):

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



| EV204E Approved Life Dudget | 0 |
|--|-----------|
| FY2015 Approved Life Budget | Ü |
| FY2015 Revised/FY2016 Approved Life Budget | 4,530,000 |
| Life Budget Increase/Decrease | 4,530,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 70 | 158 | 1,904 | 505 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 350 | 420 | 3,650 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

May 2023

Oct 2024

Apr 2026

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: O7 - East Rock Creek Diversion Inspection & Rehab

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

The East Rock Creek Diversion Sewer provides relief to the Potomac Interceptor and the Rock Creek Main Interceptor. This project includes the inspection and rehabilitation of approximately 18,000 linear feet. Investigation of sources of leakage before repairs are implemented will be mandatory and other activities will include repairing service connections and manholes and pre- and post-remediation closed-circuit television (CCTV) inspection.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,600,000 |
| Life Budget Increase/Decrease | 6,600,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 82 | 115 | 253 | 5,854 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200 | 500 | 700 | 5,200 |

(projected disbursements do not include contingencies)

NEW

Start Date

May 2025

Oct 2026

Apr 2028

Service Area Title: Sanitary Sewer Service Area

Program Title: Sanitary Interceptor/Trunk/Force Sewers

Project ID/Project Title: OA - West Rock Creek Diversion Inspection & Rehab

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

The West Rock Creek Diversion Sewer provides relief to the Rock Creek Main Interceptor. This project includes the inspection and rehabilitation of approximately 9,000 linear feet. Investigation of sources of leakage before repairs are implemented will be mandatory and other activities will include repairing service connections and manholes and pre- and post-remediation closed-circuit television (CCTV) inspection.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 94.36%
EPA/Fed - 5.64%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,900,000 |
| Life Budget Increase/Decrease | 3,900,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 3,835 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 3,810 |

(projected disbursements do not include contingencies)

Capital Projects

| Project ID | Project Name | Page # |
|------------|--|---------|
| A4 | Future Sewer System Upgrades | IV - 54 |
| A9 | FY2010 - DSS Sanitary Sewer Projects | IV - 25 |
| AU | Sanitary Sewer Program Management | IV - 51 |
| BF | FY2011 - DSS Sanitary Sewer Projects | IV - 26 |
| CE | FY2012 - DSS Sanitary Sewer Projects | IV - 27 |
| CQ | FY2013 - DSS Sanitary Sewer Projects | IV - 28 |
| CX | Sewer Facilities Security Upgrades | IV - 41 |
| D6 | FY2014 - DSS Sanitary Sewer Projects | IV - 29 |
| DI | FY2015 - DSS Sanitary Sewer Projects | IV - 30 |
| DM | UAMI Relief Sewer | IV - 55 |
| DN | Sewer Inspection Program | IV - 52 |
| DR | Low Area Trunk Sewer Rehabilitation | IV - 56 |
| DW | FY2016 - DSS Sanitary Sewer Projects | IV - 31 |
| EU | Sewer Lateral Rehab and Main Lining | IV - 40 |
| FP | FY2017 - DSS Sanitary Sewer Projects | IV - 32 |
| FV | Rehabilitation of East Side Interceptor | IV - 57 |
| FW | Rehab Piney Branch Trunk Sewer | IV - 58 |
| FY | Rehab Upstream Rock Creek Main Interceptor | IV - 59 |
| G1 | Small Local Sewer Rehab 1 | IV - 6 |
| G2 | Sewer Structure Rehabilitation (1) | IV - 60 |
| G4 | Upper Potomac Intercept Sewer Rehab. | IV - 61 |
| G5 | Sewer Rehab Near Creek Beds | IV - 62 |
| G6 | Sanitary Sewers Under Buildings 1 | IV - 63 |
| G8 | Small Local Sewer Rehab 2 | IV - 7 |
| G9 | Small Local Sewer Rehab 3 | IV - 8 |
| GA | Small Local Sewer Rehab 4 | IV - 9 |
| GB | Small Local Sewer Rehab 5 | IV - 10 |
| GC | Small Local Sewer Rehab 6 | IV - 11 |
| GD | Small Local Sewer Rehab 7 | IV - 12 |
| GE | Small Local Sewer Rehab 8 | IV - 13 |
| GF | Small Local Sewer Rehab 9 | IV - 14 |

Capital Projects

| Project ID | Project Name | Page # |
|------------|--|---------|
| GG | Large Sewer Rehab 2 | IV - 64 |
| GH | Large Sewer Rehab 3 | IV - 65 |
| GI | Large Sewer Rehab 4 | IV - 66 |
| GJ | Large Sewer Rehab 5 | IV - 67 |
| GK | Large Sewer Rehab 6 | IV - 68 |
| GL | Large Sewer Rehab 7 | IV - 69 |
| GM | Large Sewer Rehab 8 | IV - 70 |
| GN | Large Sewer Rehab 9 | IV - 71 |
| GZ | Sewer Instrumentation & Control | IV - 42 |
| H6 | FY2018 - DSS Sanitary Sewer Projects | IV - 33 |
| HB | DSS Sewer Pumping Project | IV - 43 |
| HH | New Fleet Management Facility | IV - 72 |
| HN | FY2019 - DSS Sanitary Sewer Projects | IV - 34 |
| HS | Rehabilitation of Influent Sewers | IV - 73 |
| HT | Rehabilitation of Anacostia Force Main | IV - 74 |
| 19 | Sewer Rehab.10th-12th St, Bet. Penn | IV - 15 |
| 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 - 16 |
| JI | FY2020 - DSS Sanitary Sewer Projects | IV - 35 |
| JQ | Hydraulic Protection Project | IV - 83 |
| JR | Large Sewer Rehabilitation 10 | IV - 84 |
| JS | Small Local Sewer Rehabilitation 10 | IV - 17 |
| JU | Sanitary Sewer Rehabilitation 4 | IV - 85 |
| JV | DSS Sewer Pumping Project | IV - 44 |

Capital Projects

| Project ID | Project Name | Page # |
|------------|--|---------|
| L3 | Rock Creek Sewage Pumping Station | IV - 45 |
| L4 | Upper Anacostia Sew. Pump. Station | IV - 46 |
| L5 | Earl Place Sewage Pumping Station | IV - 47 |
| LK | Large Sewer Rehabilitation 11 | IV - 86 |
| LL | Small Local Sewer Rehabilitation 11 | IV - 18 |
| LN | FY2021 - DSS Sanitary Sewer Projects | IV - 36 |
| LR | Sanitary Sewer Asset Management | IV - 53 |
| LY | Sewer Facilities Security Upgrades | IV - 48 |
| LZ | Potomac Interceptor Projects - Rehab Phase 2 | IV - 87 |
| M9 | FY2022 - DSS Sanitary Sewer Projects | IV - 37 |
| MB | 3rd Street & Constitution Ave NW - Pumping Station | IV - 49 |
| MC | Additional Sewer SCADA System Sites | IV - 50 |
| MF | FY2023 - DSS Sanitary Sewer Projects | IV - 38 |
| MO | Small Local Sewer Rehabilitation 12 | IV - 19 |
| MP | Small Local Sewer Rehabilitation 13 | IV - 20 |
| MZ | Small Local Sewer Rehabilitation 14 | IV - 21 |
| 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 |
| NW | FY2024 - DSS Sanitary Sewer Projects | IV - 39 |
| NX | Small Local Sewer Rehabilitation 15 | IV - 22 |
| NY | Large Local Sewer Rehabilitation 15 | IV - 92 |
| 04 | Southwest Interceptor Inspection & Rehab | IV - 93 |
| 07 | East Rock Creek Diversion Inspection & Rehab | IV - 94 |
| OA | West Rock Creek Diversion Inspection & Rehab | IV - 95 |
| Q3 | FY2003 - DSS Sanitary Sewer Projects | IV - 23 |
| Q8 | FY2008 - DSS Sanitary Sewer Projects | IV - 24 |



COMBINED SEWER OVERFLOW

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 47 active CSO outfalls in DC Water's NPDES permit. 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 Clean Rivers Project - \$2,391.8 million

(project pages V-31 to V-34)

DC Water is currently engaged in implementing its DC Clean Rivers Project (DCCR) 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 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 DC Clean Rivers Project includes a variety of improvements throughout the District:

- Anacostia Tunnel Projects (Project CY) \$1,902.7 million 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.
- Potomac Tunnel Projects (Project CZ) \$410.4 million To construct a three-mile tunnel system to control Potomac River overflows and a lift station, with facility planning to begin in FY 2015 and project completion in FY 2025.

- Rock Creek Tunnel Project (Project DZ) \$76.4 million 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.
- DC Clean Rivers Green Infrastructures (Project LJ) \$2.2 million This project was initiated to construct green infrastructure demonstration projects to allow for downsizing or eliminating tunnels at Potomac and Rock Creek. This project will be closed this year and the remaining budget transferred to projects CZ - Potomac Tunnel Projects and DZ - Rock Creek Tunnel Project.

DC Water has completed the sewer separation of five neighborhoods and starting construction in three additional sewer-sheds 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 complete on projects worth approximately \$170 million that were included in the settlement of a lawsuit against DC Water, regarding implementation of the federal CSO Nine Minimum Controls program. These projects were previously budgeted and planned by DC Water prior to the lawsuit. Construction of all identified projects has been completed. Work completed on the 'nine minimum controls' program has already successfully reduced overflows from combined sewers by nearly 40 percent.

Combined Sewer Projects - \$514.0 million

(project pages V-7 to V-30)

On-going and Upcoming FY 2015 projects in this area include:

- DC Water Low Impact Development Projects (Project BA) \$3.0 million Project BA is designed to control wet weather related pollution from DC Water owned facilities. LID technology will be evaluated for effectiveness in controlling stormwater 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 was completed in FY 2014, by the consent decree date.
- Main & 'O' Street Pump Station Intermediate Upgrade (Project FQ) \$34.2 million This project, 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 stormwater pumps and various sluice gates and gate valves is incorporated in this project. Construction is expected to start in FY 2017.
- Combined Sewers Under Buildings (Project G7) \$25.0 million Project G7 is to rehabilitate and/or relocate combined sewers located under or adjacent to buildings citywide. Other activities included in this project are cleaning, pre- and post-CCTV, sealing joints and repairs of offset pipe.

- Tiber Creek Trunk Sewer Rehabilitation (Projects FZ & IP) \$16.5 million and \$8.2 million These projects are to rehabilitate
 the Tiber Creek combined sewers. Design is expected to start in FY 2017 after complete inspection and assessment of this
 major asset.
- Combined Sewer Rehabilitation (Project IH) \$27.6 million This project is to rehabilitate combined sewers under the Service
 Life Restoration Program. Part of this project's budget includes emergency work to help alleviate flooding in the
 Bloomingdale neighborhood utilizing existing storage space in the McMillan sand filters, which is now substantially completed.
- New Headquarters Building (Project DS) \$71.1 million This program is to provide a 135,000 square feet headquarters building with sufficient space for current and future administrative needs. A new administrative headquarters off-site from Blue Plains addresses the overcrowded existing administrative building and will assist in alleviating the increased traffic and parking problems now occurring due to additional staffing, visitors and construction projects at Blue Plains. In addition, placing the building away from Blue Plains frees up space for plant operations. The design-build portion of this project started in FY 2014.

Combined Sewer Program Management – \$74.1 million

(project pages V-5 to V-6)

The Combined Sewer Program Manager provides program management services for Clean Rivers activities both at Blue Plains and in all areas the District. The program manager is responsible for evaluation of combined sewer systems, as well as design management for sewer pumping station rehabilitations and sewer infrastructure projects, as described in more detail below.

• Combined Sewer Program Management (Project AV) \$64.5 million – 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. The project manager is also responsible for assisting with DC Water's public outreach efforts, assisting with insurance to consent decree mandates, and providing services to obtain rights of way and other permits.

Service Area Title: Combined Sewer Overflow Service Area

Program Title: CSO Program Management

Project ID/Project Title: AV - CSO Program Management

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Phase Start Date

Design:

Construction:

Project

Completion: May 2025

Project Description:

OProject AV provides engineering project management services for planning, design and rehabilitation projects for DC Water's Combined Sewer System (CSS) for the purpose of reducing adverse impact of CSO to the receiving waters. Examples of the projects to be managed are: CSO Plan Development Project, CSO Nine Minimum Control Projects, Fabri-Dam Rehabilitation Project, Pump Stations Rehabilitation and the CSO control projects recommended under the CSO 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 - | 98.86% |
|--------------|--------|
| EPA/Fed - | 1.14% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |

dc water is life

| FY2015 Approved Life Budget | 53,945,378 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 64,569,332 |
| Life Budget Increase/Decrease | 10,623,953 |
| Allocated Labor as of FY 2014 | 722,893 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 12,562 | 4,423 | 2,104 | 3,219 | 3,456 | 2,446 | 2,264 | 1,772 | 2,799 | 3,060 | 2,195 | 1,554 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 21,857 | 23,347 | 0 | 0 | 0 | 0 | 19,365 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

⁴ Note: Under the terms of the IMA, the capital costs associated with this joint use project 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.

CLOSED

Service Area Title: Combined Sewer Overflow Service Area

Program Title: CSO Program Management

Project ID/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.

Phase Start Date

Design:

Construction:

Project

Completion:

Sep 2014

Project Description:

The project is to develop the Combined Sewer System (CSS). Development of the plan involves extensive field work collecting data on 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 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 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 - | 42.03% |
|--------------|--------|
| EPA/Fed - | 56.50% |
| WSSC - | 1.15% |
| Fairfax - | 0.21% |
| Loudoun/PI - | 0.12% |



| FY2015 Approved Life Budget | 14,518,848 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,525,033 |
| Total DC Water Allocated Labor | 883,488 |
| Total Project Cost | 10,408,521 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 10,409 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 9,525 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: A7 - Supplemental Environmental Projects / Nine Minimium Controls

Managing Department: Engineering and Technical Services

EPMC: DETS - Engineering & Tech Services

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

This project was created to respond to requirements negotiated under the 3-Party Consent Decree to settle a lawsuit alleging violation of the CSO 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% |



| FY2015 Approved Life Budget | 1,900,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 1,900,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 69,456 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,701 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,672 | 228 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2005

Feb 2007

Jan 2015

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/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.

Project Description:

This project was developed in accordance with DC Water's commitment to promote Low Impact Development (LID) to control wet weather related pollution, DC Water has or will under take projects to implement LID technology at its own facilities, when and where possible. In addition to reduce stormwater runoff and thereby contribute to the water quality of the receiving waters, this also provides DC Water the opportunity to examine effectiveness of various LID techniques.

Impact on Operations:

There will be some increase in O&M activities when these projects are implemented.

Effective Funding by User (percent):

| DC - | 96.93% |
|--------------|--------|
| EPA/Fed - | 3.08% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| FY2015 Approved Life Budget | 3,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 42,729 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,683 | 318 | 53 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 2,820 | 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2002

Jun 2004

Mar 2017

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: BB - Potomac Pumping Station Rehab

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Design: Jul 2002 Construction: Apr 2005

Project Completion:

Phase

Dec 2013

Start Date

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 Fundi | ng by User (perc | <u>ent):</u> | | | 7 | | | | | | | |
|---------------------|-----------------------|--------------|---------|-----------|---------|----------|-----------|------------|-------------|-----------|---------|-----------------|
| DC - | 24.89% | | | | | | F۱ | /2015 Ann | roved Life | a Rudaet | | 20,058,099 |
| EPA/Fed - | 24.86% | | | | | EV0045 B | | | | • | | , , |
| WSSC - | 27.41% | | | | | FY2015 R | evised/F1 | 72016 App | proved Life | e Buaget | | 20,058,321 |
| Fairfax - | 14.48% | | wate | er is lif | e | | Lif | e Budget | Increase/ | Decrease | | 222 |
| Loudoun/PI - | 8.36% | | | | | | A | llocated L | abor as o | f FY 2014 | | 631,078 |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 20,316 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 20,058 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (projected disburse | ements do not include | e contingenc | ies) | | | | | | | | (dollar | s in thousands) |

¹ Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted was derived in accordance with the Blue Plains IMA of 1985.

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: BH - Rock Creek CSO Projects

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

These are Combined Sewer System (CSS) 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 - | 51.88% | |
|--------------|--------|--|
| EPA/Fed - | 48.12% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 16,647,220 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 16,669,891 |
| Life Budget Increase/Decrease | 22,671 |
| Allocated Labor as of FY 2014 | 641,442 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 15,165 | 380 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 16,670 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2007

Mar 2009

Jun 2015

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: DD - O Street Development Effort

Managing Department: Chief Financial Officer

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for preliminary efforts needed to address the new stadium projects in the vicinity of Main and "O" and the renovations attendant thereto.

Impact on Operations:

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%



| FY2015 Approved Life Budget | 790,570 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 790,570 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 86,674 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 838 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 764 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2006

Oct 2015

Service Area Title: Combined Sewer Overflow Service Area

Combined Sewer Projects Program Title:

DS - New Headquarters Building **Project ID/Project Title:**

Managing Department: Office of General Manager

EPMC3C - Sewer Program Manager EPMC:

Good Engineering, Low pay back, Mission / Function over long term **Priority:**

Project Description: This project 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

Impact on Operations:

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

build portion of this project is expected to start in FY 2014.

Effective Funding by User (percent):

DC -73.64% EPA/Fed -0.00% WSSC -20.56% 3.76% Fairfax -2.04% Loudoun/PI -



| FY2015 Approved Life Budget | 63,000,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 71,100,000 |
| Life Budget Increase/Decrease | 8,100,000 |
| Allocated Labor as of FY 2014 | 3,837 |

Phase

Design:

Proiect Completion:

Construction:

Start Date

Apr 2014

Aug 2015

Apr 2018

(dollars in thousands)

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 890 | 2,802 | 22,956 | 20,610 | 5,219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 2,340 | 64,360 | 0 | 4,400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

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

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/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

Manager
Project
Completion: Dec 2017

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.

DC - 49.94%

(projected disbursements do not include contingencies)

Effective Funding by User (percent):

EPA/Fed - 2.02% WSSC - 27.80% Fairfax - 14.03% Loudoun/PI - 6.21% water is life

| FY2015 Approved Life Budget | 21,446,028 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 21,478,130 |
| Life Budget Increase/Decrease | 32,101 |
| Allocated Labor as of FY 2014 | 186,594 |

Phase

Design:

Construction:

Start Date

Oct 2009

Feb 2012

(dollars in thousands)

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 4,082 | 1,849 | 4,399 | 3,086 | 95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 20,956 | 132 | 60 | 330 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

3 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013.

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: EK - Long Term Rehab-Main & O Pump Sta

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> | Start Date |
|---------------|------------|
| Design: | Dec 2020 |
| Construction: | Mar 2024 |
| | |

Project Completion:

Nov 2026

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 | ng by User (perce | <u>ent):</u> | _ | | | | | | | | | |
|---------------------|----------------------|---------------|---------|----------|---------|----------|---------|------------|------------|-----------|---------|-----------------|
| DC - | 89.70% | | | | | | FΥ | /2015 Apr | proved Lif | e Budget | | 72,444,000 |
| EPA/Fed - WSSC - | 0.00% 10.30% | | U | | | FY2015 R | | | | • | | 55,644,000 |
| Fairfax - | 0.00% | | wate | r is lif | e | | Lif | e Budget | Increase/ | Decrease | | -16,800,000 |
| Loudoun/PI - | 0.00% | | | | | | A | llocated L | abor as o | f FY 2014 | | |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,385 | 2,456 | 2,443 | 4,381 | 38,482 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,533 | 0 | 0 | 44,591 | 520 |
| (projected disburse | ments do not include | e contingenci | ies) | | | | | | | | (dollar | s in thousands) |

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/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

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 - | 97.78% |
|--------------|--------|
| EPA/Fed - | 2.22% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| FY2015 Approved Life Budget | 4,515,770 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 4,569,327 |
| Life Budget Increase/Decrease | 53,557 |
| Allocated Labor as of FY 2014 | 49,188 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,277 | 963 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,590 | 2,894 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2008

Aug 2014

Jun 2017

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/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

Project Description:

This project will provide a general upgrade to this station that was placed in service in 1963. It will provide for architectural improvements, painting throughout the station, new men's and women's ADA compliant restrooms, an odor control system, and VFD's for the two large pumps.

Impact on Operations:

This project will have no material impact on the operating budget, but will provide protection for the large pumps by installing variable frequency drives to more efficiently handle start ups.

Effective Funding by User (percent):

DC - 49.80%
EPA/Fed - 0.00%
WSSC - 29.40%
Fairfax - 14.70%
Loudoun/PI - 6.10%



| FY2015 Approved Life Budget | 7,515,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,515,000 |
| Life Budget Increase/Decrease | 1,000,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 320 | 0 | 0 | 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | <u>Pre FY 2015</u> | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 325 | 0 | 0 | 1,000 | 760 | 6,055 | 375 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Feb 2019

Jul 2020

Nov 2021

² Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: FQ - Main & O St. PS Intermediate Upgrade

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

| <u>Phase</u> | Start Date |
|---------------|------------|
| Design: | Sep 2011 |
| Construction: | Dec 2013 |
| | |

Project Completion:

Oct 2019

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.

DC - 89.97% EPA/Fed - 0.00%

Effective Funding by User (percent):

WSSC - 10.03% Fairfax - 0.00%

Loudoun/PI - 0.00%

| wat | er is life |
|-----|------------|

| FY2015 Approved Life Budget |
|--|
| FY2015 Revised/FY2016 Approved Life Budget |
| Life Budget Increase/Decrease |

Allocated Labor as of FY 2014

| et | 17,375,242 |
|----|------------|
| et | 34,178,862 |
| se | 16,803,620 |
| 14 | 16,301 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------|
| Budget | 767 | 1,206 | 1,743 | 4,252 | 9,538 | 6,816 | 226 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 834 | 4,000 | 255 | 28,790 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

² Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: FX - Rehab Northeast Boundary Sewer-PH 1

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project 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% | |



| FY2015 Approved Life Budget | 18,500,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 18,500,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 215 | 0 | 203 | 802 | 468 | 5,393 | 4,478 | 57 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 1,714 | 231 | 16,555 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2017

Aug 2019

Jan 2022

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: FZ - Tiber Creek Sewer Lining -Ph 1

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project 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% | |



| FY2015 Approved Life Budget | 16,500,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 16,500,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 152 | 213 | 734 | 775 | 5,100 | 3,742 | 1 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 387 | 1,245 | 14,868 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2017

Aug 2018

Oct 2020

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

pre and post CCTV, sealing joints and repair of offset pipe.

G7 - Combined Sewers Under Buildings **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

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,

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):

(projected disbursements do not include contingencies)

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



| FY2015 Approved Life Budget | 25,119,857 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 25,120,804 |
| Life Budget Increase/Decrease | 947 |
| Allocated Labor as of FY 2014 | 334,579 |

Phase

Design:

Proiect Completion:

Construction:

Start Date

Mar 2009

Jan 2010

Nov 2020

(dollars in thousands)

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 5,917 | 641 | 970 | 308 | 3,306 | 1,717 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | <u>Pre FY 2015</u> | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 6,422 | 244 | 1,159 | 1,954 | 11,081 | 4,261 | 0 | 0 | 0 | 0 | 0 | 0 |

2 Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is based on the Blue Plains IMA of 2012 and the adopted June 20, 2013 Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation'.

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: IH - Combined Sewer Rehabilitation 2

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

reering and Technical Services

C3C - Sewer Program Manager

d Policy, DC Water's commitment to outside agencies

Apr 2019

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 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% |



| FY2015 Approved Life Budget | 27,600,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 27,600,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 198,523 |

Phase

Design:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 9,097 | 1,831 | 99 | 879 | 5,852 | 1,355 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 15,000 | 248 | 634 | 3,802 | 7,916 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2012

Dec 2012

Service Area Title: Combined Sewer Overflow Service Area

Combined Sewer Projects Program Title:

Project ID/Project Title:

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

Design: Jan 2017 Construction: Jul 2018 IJ - Combined Sewer Rehabilitation 3

Project

Phase

Completion: Sep 2021

Start Date

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 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% |



| - | |
|--|------------|
| FY2015 Approved Life Budget | 30,000,000 |
| FY2015 Revised/FY2016 Approved Life Budget | 30,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | _ |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 381 | 1,066 | 4,396 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 1,617 | 9,750 | 10,048 | 8,585 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/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

Project Description:

This project involves the rehabilitation of severely deteriorated sections found at various locations on three (3) segments of the Tiber Creek Combined Trunk Sewer between Massachusetts Avenue, NW to the north and N Street SE to the south (approximately 65 locations total) using appropriate rehabilitation techniques. The size of the trunk sewer ranges from 14'-0" by 14'-3" to 10'-5" by 24'-0". Project also includes the cleaning of the entire 6,400 LF combined sewer main, pre- and post CCTV inspections, reinstating service connections and other related activities.

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 8,250,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,250,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 396 | 766 | 3,407 | 1,130 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 1,452 | 6,798 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2018

Apr 2020

Aug 2022

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: JT - Combined Sewer Rehabilitation 4

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project 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 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% | |



| FY2015 Approved Life Budget | 27,602,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 30,087,832 |
| Life Budget Increase/Decrease | 2,485,832 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 362 | 1,587 | 7,820 | 10,335 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 1,767 | 10,610 | 14,811 | 2,900 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2020

Jul 2021

Sep 2023

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: K1 - Main & O St. Pump Stations

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project
Completion: Jan 2015

Start Date

Dec 2004

Apr 2005

Phase

Design:

Construction:

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 -55.42% **FY2015 Approved Life Budget** 79.900.723 EPA/Fed -44.58% FY2015 Revised/FY2016 Approved Life Budget 79,900,723 WSSC -0.00% water is life Life Budget Increase/Decrease 0 Fairfax -0.00% 0.00% 2.299.283 Loudoun/PI -Allocated Labor as of FY 2014 Disbursements Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 0 0 77,113 11 0 0 0 0 0 0 0 0 Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 **Post FY 2024** Budget 0 0 0 77,481 2,420 0 0 0 0 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

³ Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted is derived in accordance with both the Blue Plains IMA of 1985 and the Blue Plains IMA of 2012 and the adopted Technical Memorandum No. 1 'Multi Jurisdictional Use Facilities - Capital Cost Allocation' dated June 20, 2013.

CLOSED

Start Date

Mar 2003

Aug 2004

Sep 2014

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: K3 - East Side Pumping Station

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

Project K3 provides for the restoration of the pumping capacity of this facility to its rated flow of 45 MGD by providing a new, above grade pumping station. This is necessary to reduce CSO 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 - | 55.77% |
|--------------|--------|
| EPA/Fed - | 44.23% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |

water is life

| _ | |
|--|------------|
| FY2015 Approved Life Budget | 17,193,005 |
| FY2015 Revised/FY2016 Approved Life Budget | 17,200,878 |
| Total DC Water Allocated Labor | 530,598 |
| Total Project Cost | 17,731,476 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 17,731 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 17,201 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

CLOSED

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: K4 - Poplar Point Pumping Station

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

riority: Potential Fallure/Ability to continue

PhaseStart DateDesign:Apr 2005Construction:Jan 2010

Project

Completion: Sep 2014

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 -87.64% **FY2015 Approved Life Budget** 5,751,001 EPA/Fed -7.94% FY2015 Revised/FY2016 Approved Life Budget 5,430,728 WSSC -4.42% water is life **Total DC Water Allocated Labor** 377,822 Fairfax -0.00% 0.00% 5.808.550 Loudoun/PI -**Total Project Cost Disbursements** Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 0 0 5,809 0 0 0 0 0 0 0 0 0 Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 **Post FY 2024** FY 2024 Budget 0 0 0 0 5,431 0 0 0 0 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

¹ Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted was derived in accordance with the Blue Plains IMA of 1985.

CLOSED

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: K5 - Dry-Weather Overflow Elimination

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

| Phase | Start Date |
|---------------|------------|
| Design: | Dec 2000 |
| Construction: | Mar 2000 |
| | |

Project

Completion: Sep 2014

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 - | 64.54% | |
|--------------|--------|--|
| EPA/Fed - | 35.46% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |

water is life

| i | |
|--|------------|
| FY2015 Approved Life Budget | 12,128,271 |
| FY2015 Revised/FY2016 Approved Life Budget | 9,853,462 |
| Total DC Water Allocated Labor | 615,869 |
| Total Project Cost | 10,469,331 |

| | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|--------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 10,469 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 9,853 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

¹ Note: Facilities listed as Multi Jurisdictional Use Facilities (MJUF). The current user share depicted was derived in accordance with the Blue Plains IMA of 1985.

NEW

Start Date

Feb 2015

Oct 2016

Oct 2017

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: NZ - Floatable Debris Dock Replacement

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 995,000 |
| Life Budget Increase/Decrease | 995,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 68 | 140 | 582 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 300 | 0 | 695 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

NEW

Start Date

May 2024

Oct 2025

Apr 2027

Service Area Title: Combined Sewer Overflow Service Area

Program Title: Combined Sewer Projects

Project ID/Project Title: OB - Inflatable Dams Replacement FY24

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

This project is for the design and construction of inflatable dams, downward opening gates, or bending weirs to replace the eight existing inflatable dams in the system. Alternatives to replacing these dams with other than inflatable dams are to be addressed at time of the replacement. The dams that will be replaced with in-kind dams involve the replacement of the rubber bladder, anchors, and mechanical components associated with the dam operation. Where the dams will be replaced with downward opening gates or bending weirs the existing dam, mechanical equipment, and control vault will be demolished. Then the replacement gates or weirs will be installed within the existing sewer.

Impact on Operations:

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

Effective Funding by User (percent):

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

water is life

| FY2015 Approved Life Budget | 0 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,675,000 |
| Life Budget Increase/Decrease | 6,675,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 111 | 6,497 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 626 | 6,049 |

(projected disbursements do not include contingencies)

Service Area Title: Combined Sewer Overflow Service Area

Program Title: DC Clean Rivers Project

Project ID/Project Title: CY - Anacostia LTCP Projects

Managing Department: Engineering and Technical Services

EPMC: EPMC5 - LTCP Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

| Design: Apr 2009 |
|-------------------------|
| |
| Construction: Feb 2010 |
| |

Start Data

Project

Dhaco

Completion: Dec 2025

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 - | 90.30% |
|--------------|--------|
| EPA/Fed - | 4.76% |
| WSSC - | 3.92% |
| Fairfax - | 0.65% |
| Loudoun/PI - | 0.36% |



| - | |
|--|---------------|
| FY2015 Approved Life Budget | 1,806,541,177 |
| FY2015 Revised/FY2016 Approved Life Budget | 1,902,751,801 |
| Life Budget Increase/Decrease | 96,210,625 |
| Allocated Labor as of FY 2014 | 10,453,525 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 560,623 | 251,216 | 195,952 | 116,000 | 89,924 | 131,568 | 151,412 | 96,142 | 36,742 | 11,181 | 2,898 | 4,332 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,190,031 | 82,436 | 35,050 | 560,250 | 6,668 | 19,839 | 0 | 0 | 0 | 0 | 8,478 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Combined Sewer Overflow Service Area

Program Title: DC Clean Rivers Project

Project ID/Project Title: CZ - Potomac LTCP Projects

Managing Department: Engineering and Technical Services

EPMC: EPMC5 - LTCP Program Manager

Priority: Court Ordered, Stipulated Agreements, Etc.

Project Description:

The purpose of this project is to capture and provide storage for 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 - | 92.85% | |
|--------------|--------|--|
| EPA/Fed - | 0.09% | |
| WSSC - | 5.51% | |
| Fairfax - | 1.00% | |
| Loudoun/PI - | 0.55% | |



| FY2015 Approved Life Budget | 383,700,000 |
|--|-------------|
| FY2015 Revised/FY2016 Approved Life Budget | 410,394,435 |
| Life Budget Increase/Decrease | 26,694,435 |
| Allocated Labor as of FY 2014 | 53,008 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 3,316 | 4,105 | 5,086 | 4,493 | 7,085 | 10,477 | 10,813 | 26,537 | 58,838 | 96,290 | 65,938 | 37,487 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 25,801 | 6,677 | 150 | 0 | 54,232 | 0 | 2,864 | 304,441 | 0 | 16,229 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2018

Mar 2021

Mar 2029

Service Area Title: Combined Sewer Overflow Service Area

Program Title: DC Clean Rivers Project

Project ID/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.

Project Description:

The purpose of this project is to capture and provide storage for 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 - | 99.38% | |
|--------------|--------|--|
| EPA/Fed - | 0.62% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 65,341,600 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 76,441,600 |
| Life Budget Increase/Decrease | 11,100,000 |
| Allocated Labor as of FY 2014 | 24,526 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,074 | 588 | 4,884 | 4,657 | 1,129 | 855 | 1,591 | 1,650 | 5,359 | 16,128 | 15,919 | 6,873 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,419 | 5,966 | 8,200 | 0 | 3,517 | 7,034 | 0 | 0 | 50,306 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Mar 2019

Mar 2022

Aug 2026

Service Area Title: Combined Sewer Overflow Service Area

Program Title: DC Clean Rivers Project

Project ID/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.

Court Ordered, Stipulated Agreements, Etc.

Phase Start Date

Design: Jun 2014

Construction:

Project

Completion: Mar 2025

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.

| DC - | 92.90% | |
|----------|--------|--|
| EDA/Es d | 92.90% | |

0.55%

Effective Funding by User (percent):

EPA/Fed - 0.00% **WSSC -** 5.54% **Fairfax -** 1.01%

Loudoun/PI -



| FY2015 Approved Life Budget |
|--|
| FY2015 Revised/FY2016 Approved Life Budget |

Life Budget Increase/Decrease
Allocated Labor as of FY 2014

| t | 2,205,565 |
|---|-------------|
| е | -37,794,435 |
| 1 | 10 915 |

40.000.000

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 2,001 | 0 | 102 | 96 | 97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 2,206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Capital Projects

| Project ID | Project Name | Page # |
|------------|--|--------|
| A7 | Supplemental Environmental Projects / Nine Minimium Controls | V - 7 |
| AV | CSO Program Management | V - 5 |
| BA | DC Water Low Impact Development Projects | V - 8 |
| BB | Potomac Pumping Station Rehab | V - 9 |
| BH | Rock Creek CSO Projects | V - 10 |
| CY | Anacostia LTCP Projects | V - 31 |
| CZ | Potomac LTCP Projects | V - 32 |
| DD | O Street Development Effort | V - 11 |
| DS | New Headquarters Building | V - 12 |
| DZ | Rock Creek CSS LTCP Project | V - 33 |
| EJ | Potomac Pumping Station-Ph III Rehab | V - 13 |
| EK | Long Term Rehab-Main & O Pump Sta | V - 14 |
| EL | Swirl Facility Rehabilitation | V - 15 |
| EQ | Potomac Pumping Station-PH IV Rehab | V - 16 |
| FQ | Main & O St. PS Intermediate Upgrade | V - 17 |
| FX | Rehab Northeast Boundary Sewer-PH 1 | V - 18 |
| FZ | Tiber Creek Sewer Lining -Ph 1 | V - 19 |
| G7 | Combined Sewers Under Buildings | V - 20 |
| IH | Combined Sewer Rehabilitation 2 | V - 21 |
| IJ | Combined Sewer Rehabilitation 3 | V - 22 |
| IP | Tiber Creek Trunk Sewer Rehabilitation | V - 23 |
| JT | Combined Sewer Rehabilitation 4 | V - 24 |
| K1 | Main & O St. Pump Stations | V - 25 |
| K2 | CSO-Long Term Control Plan | V - 6 |
| K3 | East Side Pumping Station | V - 26 |
| K4 | Poplar Point Pumping Station | V - 27 |
| K5 | Dry-Weather Overflow Elimination | V - 28 |
| LJ | DC Clean Rivers Green Infrastructures | V - 34 |
| NZ | Floatable Debris Dock Replacement | V - 29 |
| OB | Inflatable Dams Replacement FY24 | V - 30 |



STORMWATER

The District's Municipal Separate Stormsewer System (MS4), not including the Combined Sewers Overflow system (CSO), has approximately 600 miles of stormsewer pipes, catch basins, inlets, special structures and related facilities. Some components of the existing stormsewer 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 and 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 EPA to reduce/eliminate water quality impact in the receiving waters due to pollutants delivered by the stormwater.

Member agencies enter into an MOU each year to establish agency responsibilities vis-a-vis the MS4 NPDES Permit. Most recently, an MOU 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 stormsewer collection and 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.

Under the latest inter-agency MOU, DC Water will assume the responsibility of cleaning all catch basins. Towards this end, the MS4 enterprise fund will provide one-time funding for a specialized vacuum truck; it is being procured. DC Water may provide technical services on several other projects if requested by the MS4 Administration and necessary funds are provided. DC Water will take steps to repair several stormwater outfalls that might be contributing to water quality problems.

EPA had inspected several District / DC Water owned facilities to ensure proper pollution prevention measures are in place and found DC Water facilities in compliance. Earlier, DC Water developed a Pollution Prevention Plan (PPP) for all its facilities and implemented a program to ensure that the facilities do not contribute pollutants to the MS4 system.

DC Water's lifetime budget for the Stormwater Service Area is \$91.8 million. Projects include rehabilitation or replacement of certain stormsewer systems that have experienced structural deterioration, studies and analysis.

The current CIP includes the following programs:

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 stormsewers located in the separate and combined sewer areas.

Stormwater On-Going Projects – \$13.2 million

(project pages VI-9 to VI-29)

These include projects carried out by DC Water's Department of Sewer Services, including stormsewer rehabilitation. These annual projects also provide funding to assist in immediate stormsewer construction to alleviate flooding.

Stormwater Pumping Facilities - \$25.0 million

(project page VI-30)

Stormwater Pump Stations Rehabilitation (Project NG) \$25.0 million - Funding for the first phase of a stormwater pumping rehabilitation project is included in next year's budget. This phase will provide health and safety upgrades necessary for safe operations and maintenance activities. Additional stormwater stations' upgrades will be necessary in future years to 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-31 to VI-44)

This program funds projects associated with DDOT road projects, which often require relocation of stormsewers, inlets or other structures.

Stormwater Program Management - \$12.0 million

(project page VI-45)

Stormwater Program Management (Project AT) \$12.0 million - This area provides for necessary technical assessments and hydraulic studies required to assess problems in the stormwater system. 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 - \$15.6 million

(project page VI-46)

This program includes funds for major maintenance of the stormwater piping system as well as funding for certain capital projects that were previously undertaken.

Future Stormwater Projects (Project BO) \$15.6 million - 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. The following specific jobs are underway or about to begin: Storm Sewer Broad Branch Rd and Linnean Park, Storm Sewer Rehab at Park Drive and Spring Place Storm Manhole Rehab.

Service Area Title: Stormwater Service Area

Program Title: Stormwater Local Drainage

Project ID/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

Project Description:

This project is for the investigation, design and repair of the existing 8'-3 diameter Northwest Boundary Interceptor Sewer which has shown signs of structural defects during prior inspections. The project will decrease further deterioration of the asset.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



| _ | |
|--|-----------|
| FY2015 Approved Life Budget | 3,032,178 |
| FY2015 Revised/FY2016 Approved Life Budget | 3,035,179 |
| Life Budget Increase/Decrease | 3,001 |
| Allocated Labor as of FY 2014 | 160,332 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,321 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 3,035 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2004

Nov 2013

May 2015

Service Area Title: Stormwater Service Area

Program Title: Stormwater Local Drainage

Project ID/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

Project Description:

This multi-job project rehabilitates storm sewers located throughout the District. Storm sewer infrastructure to be rehabilitated is prioritized based on the criticality given to inspected sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as the repair of any offset pipe. Multiple jobs provide the annualized program to rehabilitate the storm sewer inventory which exhibits deteriorated conditions and is located under buildings.

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 6,580,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,580,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 7,849 |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 34 | FY 2015 21 | FY 2016 75 | FY 2017 182 | FY 2018 92 | FY 2019 27 | FY 2020 75 | FY 2021 | FY 2022 0 | FY 2023 | FY 2024 0 | Post FY 2024 |
|-------------------------|--------------------|--------------------|----------------------|----------------------|-------------------|--------------------|-------------------|------------------|------------------|------------------|---------------------|--------------|
| Commitments Budget | Pre FY 2015 143 | FY 2015 305 | FY 2016 3,253 | FY 2017 1,989 | FY 2018 58 | FY 2019 832 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2013

Oct 2015

Nov 2020

DEFERRED

Start Date

Service Area Title: Stormwater Service Area

Program Title: Stormwater Local Drainage

Project ID/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

Project Completion:

Phase

Design:
Construction:

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% **FY2015 Approved Life Budget** 6,200,000 EPA/Fed -0.00% FY2015 Revised/FY2016 Approved Life Budget 6,200,000 WSSC -0.00% water is life Life Budget Increase/Decrease Fairfax -0.00% 0.00% Loudoun/PI -Allocated Labor as of FY 2014 **Disbursements** Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 0 0 0 0 0 0 0 0 0 0 0 0 Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 **Post FY 2024** FY 2024 Budget 0 0 0 0 0 0 0 0 0 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

Service Area Title: Stormwater Service Area

Program Title: Stormwater Local Drainage

Project ID/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

Project Description:

orm Sewer Rehabilitation 3

ering and Technical Services

3C - Sewer Program Manager

Project

Completion: Mar 2026

Start Date

Jul 2020

Phase

Design:

This project rehabilitates storm sewers located throughout the District. Storm sewer infrastructure to be rehabilitated is prioritized based on the criticality given to inspected sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as the repair of any offset pipe. Multiple jobs provide the annualized program to rehabilitate the storm sewer inventory which exhibits deteriorated conditions and is located under buildings.

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 7,016,500 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 7,016,500 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 26 | 261 | 111 | 382 | 2,514 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 144 | 202 | 2,013 | 413 | 2,287 | 1,957 |

(projected disbursements do not include contingencies)

CLOSED

Start Date

Sep 2002

Aug 2012

Phase

Design:

Project Completion:

Construction:

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: C1 - FY2001 - DSS Stormwater Project

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2001 for stormwater 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 Fund | ing by User (perce | <u>ent):</u> | | | y . | | | | | | | |
|---|--------------------|--------------|---------|-----------|---------|-----------|---------|-----------|------------------|-----------|---------|--------------|
| DC - | 100.00% | | | | | | F۱ | ′2015 Apr | roved Life | e Budget | | 247,000 |
| EPA/Fed - | 0.00% | | | | | EV2015 D | | | | e Budget | | 168,903 |
| WSSC - | 0.00% | | | 1.6 | | 1 12013 1 | | | | • | | |
| Fairfax - | 0.00% | | wate | er is lif | e | | Tot | al DC Wat | er Alloca | ted Labor | | 5,090 |
| Loudoun/PI - | 0.00% | | | | | | | | Total Pro | ject Cost | | 173,993 |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 174 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 169 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (projected disbursements do not include contingencies) (dollars in thousands) | | | | | | | | | | | | |

CLOSED

Start Date

Jun 2004

Jul 2012

(dollars in thousands)

Phase

Design:

Project Completion:

Construction:

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: C4 - FY2004- DSS Stormwater Project

Managing Department: Sewer Services

Effective Funding by User (percent):

(projected disbursements do not include contingencies)

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2004 for storm water 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.

| DC - EPA/Fed - | 100.00% | | | | | | FY | ′2015 App | roved Lif | e Budget | | 497,000 |
|-------------------|-------------|---------|---------|-----------|---------|----------|-----------|------------------|------------|-----------|---------|--------------|
| WSSC - | 0.00% | | U | | | FY2015 R | evised/FY | ′2016 App | roved Lif | e Budget | | 415,761 |
| Fairfax - | 0.00% | | wate | er is lif | e | | Tot | al DC Wa | ter Alloca | ted Labor | | 19,989 |
| Loudoun/PI - | 0.00% | | | | | | | | Total Pro | ject Cost | | 435,750 |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 436 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 416 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: C6 - FY2006- DSS Storm Sewer Project

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2006 for storm water 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%



| FY2015 Approved Life Budget | 497,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 497,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 6,220 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 377 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 416 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2005

Dec 2014

CLOSED

Start Date

Sep 2012

Jun 2013

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: C7 - FY2007- DSS Stormwater Project

Managing Department: Sewer Services

Effective Funding by User (percent):

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

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

| FY2015 Approved Life Budget | 497,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 76,076 |
| Total DC Water Allocated Labor | 444 |
| Total Project Cost | 76,520 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

CLOSED

Start Date

Jun 2008

Nov 2012

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: C8 - FY2008 - DSS Stormwater Project

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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



| - | |
|--|---------|
| FY2015 Approved Life Budget | 497,000 |
| FY2015 Revised/FY2016 Approved Life Budget | 486,879 |
| Total DC Water Allocated Labor | 7,175 |
| Total Project Cost | 494,054 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 494 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 487 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: AO - FY2009 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the FY 2009 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormsewer 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% |



| FY2015 Approved Life Budget | 497,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 497,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 2,120 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 422 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 421 | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2009

Mar 2015

CLOSED

Start Date

Feb 2010

Sep 2014

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: AN - FY2010 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the FY 2010 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormsewer 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.

DC - 100.00% EPA/Fed - 0.00%

Effective Funding by User (percent):

WSSC - 0.00% **Fairfax -** 0.00%

Loudoun/PI - 0.00%

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|-----|-------|------|
| wat | er is | life |

FY2015 Approved Life Budget
FY2015 Revised/FY2016 Approved Life Budget

Total DC Water Allocated Labor

Total Project Cost

Phase

Design:

Project Completion:

Construction:

get 600,000
get 506,933
sbor 2,572
ost 509,505

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 510 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 507 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: BD - FY2011 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the FY 2011 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormsewer 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% | |



| FY2015 Approved Life Budget | 618,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 618,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 2,409 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | <u>Pre FY 2015</u> | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 513 | 30 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 618 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2011

Jul 2016

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: CD - FY2012 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the FY 2011 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormsewer 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%



| _ | |
|--|---------|
| FY2015 Approved Life Budget | 637,000 |
| FY2015 Revised/FY2016 Approved Life Budget | 637,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 2,579 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 243 | 37 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 630 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2011

Jul 2016

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: CN - FY2013 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the FY 2013 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormsewer 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% | |



| FY2015 Approved Life Budget | 660,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 660,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 1,543 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 535 | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 558 | 102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2013

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: D7 - FY2014 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the FY 2014 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormsewer 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%



| <u>.</u> | |
|--|---------|
| FY2015 Approved Life Budget | 680,000 |
| FY2015 Revised/FY2016 Approved Life Budget | 680,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 2,051 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 310 | 151 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 680 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2013

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: DJ - FY2015 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the FY 2015 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormsewer 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%



| FY2015 Approved Life Budget | 701,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 701,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 177 | 358 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 701 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2015

Aug 2016

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: DX - FY2016 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the 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:

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%



| FY2015 Approved Life Budget | 720,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 720,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 262 | FY 2017 191 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|-------------|----------------|----------------|--------------------|------------------|------------------|----------------|----------------|----------------|----------------|------------------|--------------|
| Commitments Budget | Pre FY 2015 | FY 2015 | _ | _ | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2016

May 2017

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: FN - FY2017 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the FY 2017 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormsewer 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% | |



| FY2015 Approved Life Budget | 745,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 745,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 258 | 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2017

May 2018

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: H5 - FY2018 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project is for the FY 2018 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormsewer system. Job numbers will be issued to identify the location of projects issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 770,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 770,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 273 | 222 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 770 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2018

May 2019

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: HM - FY2019 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2019 for stormwater 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%



| FY2015 Approved Life Budget | 795,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 794,000 |
| Life Budget Increase/Decrease | -1,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 309 | 208 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 795 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2019

Feb 2020

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: JH - FY2020 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2020 for stormwater 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%



| FY2015 Approved Life Budget | 820,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 820,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 224 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 820 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2020

Feb 2021

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: LO - FY2021 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY 2021 for stormwater 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%



| FY2015 Approved Life Budget | 845,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 845,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 360 | 242 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | Λ | 0 | 0 | 0 | 0 | 0 | 845 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2021

Feb 2022

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: M8 - FY2022 - DSS Stormwater Projects

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

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% | |



| FY2015 Approved Life Budget | 820,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 820,000 |
| · · · · · · · · · · · · · · · · · · · | |
| Life Budget Increase/Decrease | 0 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 495 | 201 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 820 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2022

Jan 2023

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: MG - FY2023 - DSS Stormwater Projects

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

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

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% | |



| FY2015 Approved Life Budget | 844,600 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 844,600 |
| Life Budget Increase/Decrease | 0 |
| | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 520 | 215 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 845 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2022

Jan 2024

NEW

Start Date

Jan 2024

Jan 2025

Service Area Title: Stormwater Service Area

Program Title: Stormwater On-Going

Project ID/Project Title: NV - FY2024 - DSS Stormwater Projects

Managing Department: Sewer Services

EPMC: EPMC3C - Sewer Program Manager

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

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2024 for stormwater infrastructure rehabilitation of the existing stormwater system. 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%



| FY2015 Approved Life Budget | 0 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 870,000 |
| Life Budget Increase/Decrease | 870,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 559 | 245 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 870 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Stormwater Service Area

Program Title: Stormwater Pumping Facilities

Project ID/Project Title: NG - Stormwater Pump Stations Rehabilatation

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

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% |



| FY2015 Approved Life Budget | 25,000,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 25,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 128 | 781 | 912 | 0 | 0 | 0 | 0 | 0 | 0 | 21,001 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 721 | 3.279 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21,000 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2015

Apr 2017

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: P5 - FY2004 - DDOT STORMWATER PROJECTS

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

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:

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% | |



| FY2015 Approved Life Budget | 20,000 |
|--|--------|
| FY2015 Revised/FY2016 Approved Life Budget | 20,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 5,405 |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 0 | FY 2017 | FY 2018 0 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 | Post FY 2024 |
|-------------------------|-------------|-------------------|------------------|------------------|------------------|------------------|----------------|------------------|------------------|----------------|---------------------|--------------|
| Commitments Budget | Pre FY 2015 | FY 2015 20 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 0 | FY 2022 0 | FY 2023 | FY 2024 0 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2004

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: P8 - FY2007 - DDOT STORMWATER PROJECTS

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

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:

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% | |



| FY2015 Approved Life Budget | 155,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 155,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 155 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2015

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: P9 - FY2008 - DDOT STORMWATER PROJECTS

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

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% |



| FY2015 Approved Life Budget | 1,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 1,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 1,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2015

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: AR - FY2009 - DDOT STORMWATER PROJECTS

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

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:

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% |



| FY2015 Approved Life Budget | 160,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 160,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-----------------------|------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------|
| Budget Commitments | 0 Pre FY 2015 | 0 FY 2015 | 0 FY 2016 | 0 FY 2017 | 0 FY 2018 | 0 FY 2019 | 0 FY 2020 | 0 FY 2021 | 0 FY 2022 | 0 FY 2023 | 0 FY 2024 | 0 Post FY 2024 |
| Budget | 0 | 160 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2015

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: B3 - FY2010 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the FY 2010 annual program of stormwater 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:

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% | |



| FY2015 Approved Life Budget | 165,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 165,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 | Post FY 2024 |
|-------------------------|----------------------|--------------------|------------------|------------------|------------------|------------------|----------------|------------------|------------------|------------------|---------------------|-------------------|
| Commitments Budget | Pre FY 2015 0 | FY 2015 165 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 | Post FY 2024 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2015

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: BM - FY2011 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

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:

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% | |



| FY2015 Approved Life Budget | 170,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 170,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2015

Oct 2016

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: CB - FY2012 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

Project 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% |



| FY2015 Approved Life Budget | 175,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 175,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2015

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: CL - FY2013 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the FY 2013 annual program of planned projects by DDOT for the rehabilitation and improvement of the stormwater system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormsewer 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% | |



| FY2015 Approved Life Budget | 180,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 180,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2016

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: D8 - FY2014 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the FY 2014 annual program of planned projects by DDOT for the rehabilitation and improvement of the stormwater 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:

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%



| FY2015 Approved Life Budget | 185,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 185,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|------------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--|--------------|--------------|-------------------|
| Budget | 0 Dro EV 2015 | 0 EV 2016 | 0 EV 2016 | 11 EV 2017 | 3 EV 2019 | 0 EV 2010 | 0 EV 2020 | 0 EV 2024 | 0 EV 2022 | 0 EV 2022 | 0 EV 2024 | 0 Boot EV 2024 |
| Commitments | Pre FY 2015 | FT 2015 | FY 2016 | FY 2017 | F 1 2018 | FY 2019 | F 1 2020 | F 1 2021 | <u>F </u> | F 1 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 185 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2017

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: DK - FY2015 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the FY 2015 annual program of planned projects by DDOT for the rehabilitation and improvement of the stormwater system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormsewer 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%



| FY2015 Approved Life Budget | 191,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 191,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---|-------------|----------|----------|----------|----------------|----------------|-----------------|----------|----------|-----------------|----------------|--------------|
| Budget | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | EV 2015 | FY 2016 | FY 2017 | FY 2018 | EV 2040 | EV 2020 | EV 2024 | FY 2022 | EV 2022 | EV 2024 | Post FY 2024 |
| • | 110112010 | 1 1 2013 | 1 1 2010 | <u> </u> | <u>F1 2010</u> | <u>F1 2019</u> | <u>F 1 2020</u> | <u> </u> | F I ZUZZ | <u>F 1 2023</u> | <u>F1 ZUZ4</u> | FUSLF1 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2015

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: DT - FY2016 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

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:

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% | |



| FY2015 Approved Life Budget | 196,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 196,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 196 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2015

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: FM - FY2017 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the FY 2017 annual program of planned projects by DDOT 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% |



| FY2015 Approved Life Budget | 205,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 205,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2016

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: H4 - FY2018 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the FY 2018 annual program of planned projects by DDOT for the rehabilitation and improvement of the stormwater 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%



| FY2015 Approved Life Budget | 215,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 215,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2017

Service Area Title: Stormwater Service Area

Program Title: DDOT Stormwater

Project ID/Project Title: HP - FY2019 - DDOT Stormwater Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project 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:

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%



| FY2015 Approved Life Budget | 220,000 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 220,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 20 | 2 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2018

Oct 2019

Service Area Title: Stormwater Service Area

Program Title: Stormwater Research & Program Mgmt

Project ID/Project Title: AT - Stormwater Program Management

Managing Department: Engineering and Technical Services

EPMC: EPMC3C - Sewer Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

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% |



| FY2015 Approved Life Budget | 12,051,406 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,979,222 |
| Life Budget Increase/Decrease | -72,185 |
| Allocated Labor as of FY 2014 | 282,922 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 7,995 | 518 | 179 | 235 | 254 | 180 | 145 | 79 | 118 | 138 | 114 | 122 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 8,103 | 2,277 | 0 | 0 | 0 | 0 | 1,600 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Service Area Title: Stormwater Service Area

Program Title: Stormwater Trunk/Force Sewers

Project ID/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

Project Description:

This project provides design and construction services for stormwater sewer interceptors, trunk sewers and force mains that require upgrades. Sewers rehabilitated by this project are defined by the major planning and condition assessment program underway for the stormwater sewer system. As the assessment of the storm sewer system progresses and specific rehabilitation needs are identified, jobs will be created under this project to remediate system problems.

Impact on Operations:

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

Effective Funding by User (percent):

| DC - | 96.49% |
|--------------|--------|
| EPA/Fed - | 3.51% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| FY2015 Approved Life Budget | 15,341,154 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 15,597,208 |
| Life Budget Increase/Decrease | 256,055 |
| Allocated Labor as of FY 2014 | 359,712 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 6,837 | 1,497 | 76 | 53 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 9,095 | 4 221 | 1.970 | 311 | 0 | 0 | 0 | 0 | 0 | 0 | Λ | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2006

Oct 2009

Jul 2018

Capital Projects

| Project ID | Project Name | Page # |
|------------|---------------------------------------|---------|
| A6 | Lining, 22nd & Psts., NW/NWBSO Repair | VI - 5 |
| AN | FY2010 - DSS Stormwater Projects | VI - 15 |
| AO | FY2009 - DSS Stormwater Projects | VI - 14 |
| AR | FY2009 - DDOT Stormwater Projects | VI - 34 |
| AT | Stormwater Program Management | VI - 45 |
| В3 | FY2010 - DDOT Stormwater Projects | VI - 35 |
| BD | FY2011 - DSS Stormwater Projects | VI - 16 |
| BM | FY2011 - DDOT Stormwater Projects | VI - 36 |
| ВО | Future Stormwater Projects | VI - 46 |
| C1 | FY2001 - DSS Stormwater Project | VI - 9 |
| C4 | FY2004 - DSS Stormwater Project | VI - 10 |
| C6 | FY2006 - DSS Storm Sewer Project | VI - 11 |
| C7 | FY2007 - DSS Stormwater Project | VI - 12 |
| C8 | FY2008 - DSS Stormwater Project | VI - 13 |
| СВ | FY2012 - DDOT Stormwater Projects | VI - 37 |
| CD | FY2012 - DSS Stormwater Projects | VI - 17 |
| CL | FY2013 - DDOT Stormwater Projects | VI - 38 |
| CN | FY2013 - DSS Stormwater Projects | VI - 18 |
| D7 | FY2014 - DSS Stormwater Projects | VI - 19 |
| D8 | FY2014 - DDOT Stormwater Projects | VI - 39 |
| DJ | FY2015 - DSS Stormwater Projects | VI - 20 |
| DK | FY2015 - DDOT Stormwater Projects | VI - 40 |
| DT | FY2016 - DDOT Stormwater Projects | VI - 41 |
| DX | FY2016 - DSS Stormwater Projects | VI - 21 |
| FM | FY2017 - DDOT Stormwater Projects | VI - 42 |
| FN | FY2017 - DSS Stormwater Projects | VI - 22 |
| GY | Storm Sewer Rehab @ Various Location | VI - 6 |
| H4 | FY2018 - DDOT Stormwater Projects | VI - 43 |
| H5 | FY2018 - DSS Stormwater Projects | VI - 23 |
| НМ | FY2019 - DSS Stormwater Projects | VI - 24 |
| HP | FY2019 - DDOT Stormwater Projects | VI - 44 |

Capital Projects

| Project ID | Project Name | Page # |
|------------|---|---------|
| ID | Storm Sewer Rehabilitation 2 | VI - 7 |
| IE | Storm Sewer Rehabilitation 3 | VI - 8 |
| JH | FY2020 - DSS Stormwater Projects | VI - 25 |
| LO | FY2021 - DSS Stormwater Projects | VI - 26 |
| M8 | FY2022 - DSS Stormwater Projects | VI - 27 |
| MG | FY2023 - DSS Stormwater Projects | VI - 28 |
| NG | Stormwater Pump Stations Rehabilatation | VI - 30 |
| NV | FY2024 - DSS Stormwater Projects | VI - 29 |
| P5 | FY2004 - DDOT Stormwater Projects | VI - 31 |
| P8 | FY2007 - DDOT Stormwater Projects | VI - 32 |
| P9 | FY2008 - DDOT Stormwater Projects | VI - 33 |



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.

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 9,400 public hydrants for water main system operational requirements and to support DC Fire and Emergency Services.

The lifetime budget for the Water Service Area is \$1.8 billion, an increase of \$147.3 million from last year's CIP. The Water Service Area CIP includes 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 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 was submitted in FY 2014. The updated Water System Facilities Plan outlines recommendations for the water service infrastructure renewal needs through FY 2035 and includes:

- 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
- recommendation of a prioritized Capital Improvement Program.

The current Capital Improvement Program includes the following programs:

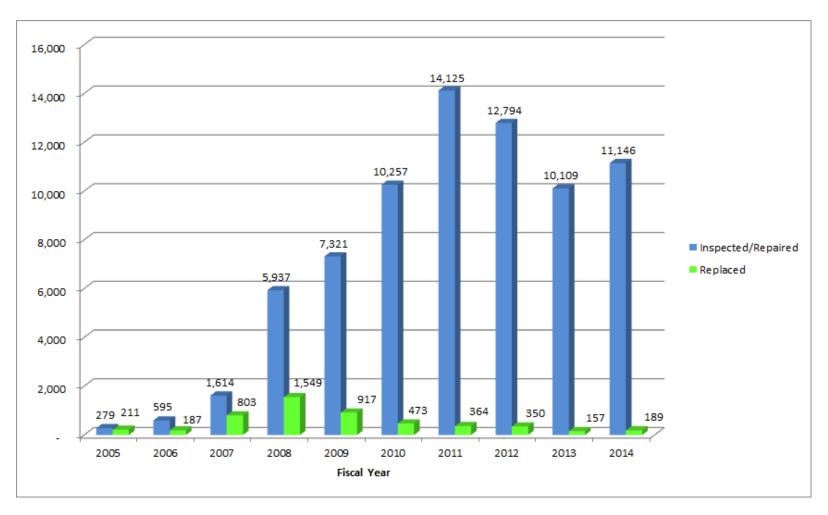
Water Distribution Systems – \$1,022.3 million

(project pages VII-7 to VII-46)

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 working to meet the 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 pipeline condition assessment program formally started in FY 2014. Starting in FY 2018 there will be limited capital funds to rehabilitate large diameter mains found to be in a critical deteriorated condition. Beginning in FY 2022, 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 support of capital projects that require valve operation to isolate portions of the system. Through FY 2014, approximately 244 valves have been replaced or selected for replacement in the Large Valve Replacement Program design or construction of some of the contracts is still ongoing, with construction scheduled to be completed by FY 2017. Beginning in FY 2020 additional contracts to replace approximately 15 large valves annually are programmed into the ten-year CIP.
- Fire Hydrant Program From FY 2005 to FY 2014, 5,200 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 Inspection/Repair and Replacement Report



^{* 2005} to date inspections and/or repairs completed on public fire hydrants = 74,177

^{* 2005} to date public fire hydrants replaced = 5,200

In addition, repairs and maintenance are ongoing. As the cost is borne by the District and not the DC Water rate payers, the new MOU will be subject to review and acceptance by DC officials and the appropriate budget process. 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 Lead Program – \$189.0 million

(project page VII-47)

The ongoing program is for the 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.

Water On-Going Projects – \$144.3 million

(project pages VII-48 to VII-62)

The ongoing program includes small projects for extension of water mains to serve new development in the District, 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 – \$177.4 million

(project pages VII-63 to VII-77)

This program includes several projects to rehabilitate or replace water-pumping stations in the system.

- Upgrades to Fort Reno Pumping Station (Project AY) \$13.4 million 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 remote pressure monitoring stations at critical locations in the Fourth High West Service Area, which will improve system operations. Construction is expected to be completed in FY 2016.
- 16th & Alaska Ave Pump Station Upgrades (Project F8) \$4.8 million A project to upgrade the 16th and Alaska Avenue Pumping Station is included in the CIP and provides for the installation of redundant suction and discharge headers; replacement of the electrical distribution equipment and controls; improvements to the ventilation system for cooling of the station and provisions for a second electric feeder. The construction started in FY 2014 and is estimated to be complete in FY 2016.

DDOT Water Projects – \$33.8 million

(project pages VII-78 to VII-81)

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 FY 2014, 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 – \$100.7 million

(project pages VII-82 to VII-86)

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 2015. In addition, planning is on-going for the following two new storage facilities: a storage reservoir in the Second High Service Area east of Rock Creek (*Project MR*) and a two million gallon elevated storage tank in the Fourth High Service Area (*Project MQ*).

In coordination with the triennial cleaning and disinfection schedule, detailed inspection of the eight 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 and disinfection schedule of each facility beginning in FY 2014 and continuing through FY 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 – Rehabilitation of Elevated Water Tanks*).

Water Projects Program Management – \$107.6 million

(project pages VII-87 to VII-90)

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 submitted a draft of the updated plan in FY 2014. The updated Water System Facilities Plan will outline recommendations for the water service infrastructure renewal needs through FY 2035.

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: AK - WSSC Interconnections

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

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% |



| FY2015 Approved Life Budget | 2,765,777 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 1,309,319 |
| Life Budget Increase/Decrease | -1,456,458 |
| Allocated Labor as of FY 2014 | 6,342 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 999 | 59 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 999 | 310 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2008

Jan 2014

Jun 2016

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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 - | 55.24% | |
|--------------|--------|--|
| EPA/Fed - | 44.76% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 12,432,713 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 12,550,088 |
| Life Budget Increase/Decrease | 117,375 |
| Allocated Labor as of FY 2014 | 1,044,737 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|----------|----------|----------|----------------|----------------|-----------------|----------|----------|----------|----------------|--------------|
| Budget | 8,942 | 668 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | EV 2015 | FY 2016 | FY 2017 | FY 2018 | EV 2040 | EV 2020 | EV 2024 | EV 2022 | FY 2023 | EV 2024 | Post FY 2024 |
| ••••• | 110112010 | 1 1 2013 | 1 1 2010 | <u> </u> | <u>F1 2010</u> | <u>F1 2019</u> | <u>F 1 2020</u> | <u> </u> | F I ZUZZ | <u> </u> | <u>FY 2024</u> | PUSLF1 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2009

Feb 2010

Dec 2016

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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 in the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%

water is life

| FY2015 Approved Life Budget | 18,400,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 18,950,000 |
| Life Budget Increase/Decrease | 550,000 |
| Allocated Labor as of FY 2014 | 936 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 79 | 153 | 42 | 387 | 592 | 1,918 | 6,933 | 3,237 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 300 | 0 | 0 | 2,030 | 0 | 16,620 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2017

Jan 2019

Jul 2021

Service Area Title: Water Service Area

Water Distribution Systems **Program Title:**

DE - Small Diameter Water Main Rehab 12 **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority:

Project Description:

Proiect Completion: Jun 2020 Good Engineering, Low pay back, Mission / Function over long term

Phase

Design:

Construction:

Start Date

Apr 2015

Sep 2016

(dollars in thousands)

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 DDOT. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

Effective Funding by User (nercent).

(projected disbursements do not include contingencies)

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.

| Lifective I dild | ing by User (perc | | | | 4 | | | | | | | |
|-------------------|-------------------|-------------|---------|-----------|---------|----------|-----------|------------------|------------|-----------|---------|--------------|
| DC - EPA/Fed - | 100.00% | | de | | | | FY | e Budget | 38,405,000 | | | |
| WSSC - | 0.00% | | u | | | FY2015 R | evised/FY | ′2016 App | roved Life | e Budget | | 39,850,000 |
| Fairfax - | 0.00% | | wate | er is lif | e | | Lif | e Budget | Increase/ | Decrease | | 1,445,000 |
| Loudoun/PI - | 0.00% | | | | | | Al | located L | abor as o | f FY 2014 | | |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 803 | 167 | 3,883 | 8,267 | 7,491 | 1,606 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 6,815 | 0 | 9,445 | 23,590 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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% |



| FY2015 Approved Life Budget | 665,692 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 691,775 |
| Life Budget Increase/Decrease | 26,083 |
| Allocated Labor as of FY 2014 | 12,087 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 331 | 0 | 0 | 138 | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 322 | 24 | 0 | 346 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2011

Oct 2016

Apr 2018

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

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

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.

cost, this project also includes water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by DDOT. The program

Effective Funding by User (percent):

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

water is life

| FY2015 Approved Life Budget | 39,560,000 |
|--|-------------|
| FY2015 Revised/FY2016 Approved Life Budget | 23,385,000 |
| Life Budget Increase/Decrease | -16,175,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 709 | 8,608 | 5,790 | 80 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 7,555 | 1,550 | 14,280 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2016

Jun 2017

Oct 2019

Service Area Title: Water Service Area

(projected disbursements do not include contingencies)

Water Distribution Systems **Program Title:**

F2 - Small Diameter Water Main Rehab 14 **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority:

Project Description:

Proiect Completion: Feb 2021 Good Engineering, High pay back, Mission / Function

Phase

Design:

Construction:

Start Date

Apr 2017

Sep 2018

(dollars in thousands)

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 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.

| DC - 100.00% FY2015 Approved Life Budget 40, | 70,000 |
|--|---------|
| | |
| EPA/Fed - 0.00% EV2015 Revised/EV2016 Approved Life Budget 36 | 23,000 |
| wssc - 0.00% | 047,000 |
| Loudoun/PI - 0.00% Allocated Labor as of FY 2014 | |
| | Y 2024 |
| Budget 0 0 0 2,998 1,998 6,532 9,899 2,741 0 0 0 | 0 |
| | Y 2024 |
| Budget 0 0 0 9,018 27,405 0 0 0 0 0 0 | 0 |

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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 - 76.35%
EPA/Fed - 23.65%
WSSC - 0.00%
Fairfax - 0.00%
Loudoun/PI - 0.00%



| FY2015 Approved Life Budget | 11,592,322 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,709,697 |
| Life Budget Increase/Decrease | 117,375 |
| Allocated Labor as of FY 2014 | 644,807 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 5,397 | 312 | 615 | 2,767 | 389 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 5,700 | 150 | 5,860 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2010

Aug 2012

Mar 2018

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: FE - 20 Low Service Main & PRV

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project includes the installation of approximately 4,700 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% |



| FY2015 Approved Life Budget | 6,009,369 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 7,837,619 |
| Life Budget Increase/Decrease | 1,828,250 |
| Allocated Labor as of FY 2014 | 34,918 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 556 | 1,708 | 1,774 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 632 | 7,205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2012

Oct 2013

May 2016

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

Project Description:

eter Mains Rehab Phase II

Pering and Technical Services

Construction: Dec 2018

Project
Completion: May 2023

Start Date

Jul 2017

Phase

Design:

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% | |



| FY2015 Approved Life Budget | 41,500,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 43,850,000 |
| Life Budget Increase/Decrease | 2,350,000 |
| Allocated Labor as of FY 2014 | |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 345 | 543 | 582 | 1,066 | 1,819 | 5,713 | 10,477 | 7,606 | 3,990 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 3,000 | 0 | 0 | 3,400 | 0 | 20,470 | 16,980 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: GQ - Fire Hydrant Replacement Program - Phase II

Managing Department: Water Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project provides funding for the replacement and upgrade of fire hydrants in the District. It is expected that approximately 2,700 broken and older model type fire hydrants will be replaced and 2,700 will be upgraded under this project if accepted by the District under the October 2007 Memorandum of Understanding. This program is expected to be totally reimbursed by the District Government and will not impact retail rate payers.

Impact on Operations:

This project will have no material impact on the DC Water operating budget, because the maintenance cost of fire hydrants is reimbursed by the District.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 28,244,481 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 28,244,481 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 547,582 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 5,976 | 1,037 | 462 | 62 | 36 | 26 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 10,581 | 2,700 | 2,777 | 2,861 | 2,948 | 3,035 | 3,125 | 217 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2009

Nov 2010

Mar 2021

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: GR - Small Diameter Water Main Rehab. 15

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

ineering and Technical Services

MC2 - Water Program Manager

Project
Completion: Feb 2022

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 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% | |



| FY2015 Approved Life Budget | 39,750,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 35,775,000 |
| Life Budget Increase/Decrease | -3,975,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 3,314 | 2,075 | 6,485 | 9,946 | 2,741 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 9,342 | 26,433 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2018

Sep 2019

CLOSED

Start Date

Dec 2009

Aug 2011

Sep 2014

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: GU - Crosstown Water Main Rehabilitation

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

This project is for the rehabilitation of a portion of the Crosstown Water Main which is currently leaking and out of service since December 19, 2008. The leak surfaced through Rock Creek Parkway and on the bank of Rock Creek in Rock Creek Park in the vicinity of 25th and N Streets NW, and was first reported to DC Water by the National Park Service on December 4, 2008.

Impact on Operations:

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

Effective Funding by User (percent):

| DC - | 55.97% |
|--------------|--------|
| EPA/Fed - | 44.03% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| _ | |
|--|------------|
| FY2015 Approved Life Budget | 12,865,508 |
| FY2015 Revised/FY2016 Approved Life Budget | 8,864,783 |
| Total DC Water Allocated Labor | 390,632 |
| Total Project Cost | 9,255,415 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 9,255 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 8,865 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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% |



| FY2015 Approved Life Budget | 20,000,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 23,180,000 |
| Life Budget Increase/Decrease | 3,180,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 446 | 19,579 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,850 | 21,330 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2023

Sep 2024

Mar 2029

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

| _ | | _ | |
|-----|-------|--------|----------|
| Pro | IACT. | I)escr | iption: |
| | COL | DCGCI | iptioii. |

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 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% |



| FY2015 Approved Life Budget | 41,500,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 37,350,000 |
| Life Budget Increase/Decrease | -4,150,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 3,534 | 2,186 | 6,985 | 10,693 | 2,914 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 9,738 | 27,612 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2019

Sep 2020

Feb 2023

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: 18 - Large Valve Replacement (Contract 11-13)

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

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 - | 83.14% | |
|--------------|--------|--|
| EPA/Fed - | 16.86% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 17,938,486 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 18,147,152 |
| Life Budget Increase/Decrease | 208,666 |
| Allocated Labor as of FY 2014 | 63,165 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 909 | 1,515 | 5,529 | 2,118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 7,862 | 10,285 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2012

Aug 2014

Aug 2017

DEFERRED

Start Date

Phase

Design:

Project Completion:

Construction:

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: IA - Large Valve Replacement (Contract 14-16)

Managing Department:

EPMC: EPMC2 - Water Program Manager

Priority:

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 Fund | ing by User (perce | ent): | - | | | | | | | | | |
|---------------------------|------------------------|-------------|---------|----------|---------|-----------|---------|-----------|------------|------------|---------|-----------------|
| DC - | 100.00% | | | | | | FY | ′2015 App | roved Life | e Budaet | | 18,390,000 |
| EPA/Fed - | 0.00% | | | | | FY2015 R | | ′2016 App | | • | | 18,390,000 |
| WSSC - | 0.00% | | ruzato | r ic lif | | 1 1201010 | | e Budget | | • | | 0 |
| Fairfax - Loudoun/PI - | 0.00% 0.00% | | wate | 1 18 111 | e | | | located L | | | | U |
| Loudoun/Pi - | | | | | | | Al | located L | abor as o | 1 F 1 2014 | | |
| Disbursement Budget | s <u>Pre FY 2015</u> | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (projected disburs | sements do not include | contingenci | es) | | | | | | | | (dollar | s in thousands) |

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: IB - Large Valve Replacement (Contract 17-19)

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types (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% |



| FY2015 Approved Life Budget | 20,130,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 20,130,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 45 | 248 | 1,618 | 3,587 | 3,692 | 2,252 | 130 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 550 | 560 | 6,550 | 6,140 | 6,330 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2018

Oct 2019

Oct 2023

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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 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% |



| FY2015 Approved Life Budget | 46,650,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 46,650,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 5,180 | 2,909 | 8,797 | 13,213 | 3,639 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 13,380 | 33,270 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2020

Sep 2021

Feb 2024

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: JZ - Large Dia Water Main Repl 3, 4, & 5

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project is part of the large diameter water main program included in the draft DC Water's Water System Facility Plan Update. Based upon the age and condition of the large mains in DC, the program serves to gradually replace/ rehabilitate large diameter (16-inch and larger) pipe based upon age, break history and condition assessment information.

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% |



| FY2015 Approved Life Budget | 63,710,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 63,710,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 1,410 | 6,452 | 13,985 | 30,178 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,720 | 20,760 | 21,350 | 19,880 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2021

Aug 2022

Feb 2027

NEW

Start Date

Apr 2024

Aug 2025

Feb 2030

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: K7 - Large Diameter Water Main Replacement 6, 7, & 8

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project is to replace/ rehabilitate large diameter (16-inch and larger) pipe based upon age, break history and condition assessment information. The project is part of the large diameter water main program included in the draft Water System Facility Plan Update.

Impact on Operations:

This project will have no material impact in the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%



| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 69,920,000 |
| Life Budget Increase/Decrease | 69,920,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 407 | 60,345 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,880 | 68,040 |

(projected disbursements do not include contingencies)

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: KA - Large Valve Repl Contracts 20, 21, & 22

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

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% | |



| FY2015 Approved Life Budget | 17,610,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 17,610,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 113 | 558 | 3,774 | 10,301 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 970 | 510 | 10,590 | 5,540 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2022

Sep 2023

Oct 2026

NEW

Start Date

May 2024

Sep 2025

Sep 2029

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: KB - Large Valve Replacement Contracts 23, 24, & 25

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types (including Pressure Reducing Valves (PRVs), Air/Vac Valves, etc.) under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

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% |



| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 19,220,000 |
| Life Budget Increase/Decrease | 19,220,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 16,641 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 520 | 18,700 |

(projected disbursements do not include contingencies)

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: KE - Small Dia Water Main Rehab18

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

Il Dia Water Main Rehab18

Ing and Technical Services

Construction: Sep 2022

Project Completion:

Phase

Design:

Feb 2025

Start Date

Apr 2021

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 DDOT. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water guality.

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.

| DC - EPA/Fed - | 100.00% 0.00% | | 0 | | | | | | | e Budget | | 46,340,000 |
|-------------------|------------------|---------|----------|-----------|---------|----------|---------|------------|-----------|-----------|---------|--------------|
| WSSC - | 0.00% | | U | | | FY2015 R | | | | e Budget | | 46,340,000 |
| Fairfax - | 0.00% | | wate | er is lif | e | | Lif | ie Budget | Increase/ | Decrease | | 0 |
| Loudoun/PI - | 0.00% | | | | | | A | llocated L | abor as o | f FY 2014 | | |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,854 | 2,989 | 9,260 | 14,147 | 4,178 |

Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024 Budget** 0 0 0 0 0 0 0 0 12,070 34,270 0

(projected disbursements do not include contingencies)

Effective Funding by User (percent):

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

Project Description:

tems

/ater Main Rehabilitation 19

Design: Apr 2022
Construction: Sep 2023

Project

Phase

Completion: Feb 2026

Start Date

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 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% |



| FY2015 Approved Life Budget | 47,730,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 47,730,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,313 | 3,178 | 9,946 | 20,547 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,440 | 35,290 | 0 | 0 |

(projected disbursements do not include contingencies)

Service Area Title: Water Service Area

(projected disbursements do not include contingencies)

Water Distribution Systems **Program Title:**

KG - Small Diameter Water Main Rehabilitation 20 **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

Design: Apr 2023 Construction: Aug 2024

> **Proiect** Completion:

Phase

Feb 2027

(dollars in thousands)

Start Date

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 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 Fund | ing by User (perc | <u>ent):</u> | | | 7 | | | | | | | |
|----------------|-------------------|--------------|---------|-----------|---------|----------|---------|-----------|-----------|-----------|---------|--------------|
| DC - | 100.00% | | | | | | FΥ | ′2015 Apr | roved Lif | e Budget | | 49,160,000 |
| EPA/Fed - | 0.00% | | | | | EVO04E D | | | | _ | | |
| WSSC - | 0.00% | | | | | F12015 R | | | | e Budget | | 49,160,000 |
| Fairfax - | 0.00% | | wate | er is lif | e | | Lif | e Budget | Increase/ | Decrease | | 0 |
| Loudoun/PI - | 0.00% | | | | | | Al | located L | abor as o | f FY 2014 | | |
| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,831 | 3,431 | 32,599 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,810 | 36,350 | 0 |

NEW

Start Date

Apr 2024

Aug 2025

Feb 2028

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: KH - Small Diameter Water Main Rehabilitation 21

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. 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 DDOT. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

This project will have no material impact in the operating budget. However, replacing the aging pipe should reduce the number of break repairs in the future.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 32,236,932 |
| Life Budget Increase/Decrease | 32,236,932 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,387 | 37,542 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13,190 | 37,437 |

(projected disbursements do not include contingencies)

Service Area Title: Water Service Area

Water Distribution Systems **Program Title:**

MU - Small Diameter Watermain Rehab. (2) **Project ID/Project Title:**

biofilms and bacteriological activity that can impair the quality of potable water.

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of

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% | |



| FY2015 Approved Life Budget | 15,043,352 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 15,043,352 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 803,611 |

Phase

Design:

Proiect Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 13,311 | 501 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 14,966 | 77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2005

Jul 2008

Jun 2015

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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 - | 49.13% |
|--------------|--------|
| EPA/Fed - | 50.87% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| FY2015 Approved Life Budget | 15,533,139 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 15,559,222 |
| Life Budget Increase/Decrease | 26,083 |
| Allocated Labor as of FY 2014 | 769,797 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 13,143 | 43 | 57 | 422 | 701 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 12,377 | 1,430 | 0 | 1,752 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2006

Mar 2009

Jul 2018

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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 - | 77.41% | |
|--------------|--------|--|
| EPA/Fed - | 22.59% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 7,713,453 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 7,713,453 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 192,562 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 6,800 | 320 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 7,114 | 599 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2007

Oct 2007

Sep 2016

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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 - | 65.99% | |
|--------------|--------|--|
| EPA/Fed - | 34.01% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 13,433,058 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,959,141 |
| Life Budget Increase/Decrease | -1,473,917 |
| Allocated Labor as of FY 2014 | 595,697 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | <u>Pre FY 2015</u> | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|--------------------|----------------|----------------|----------------|----------------|----------------|---------|---------|---------|---------|----------------|--------------|
| Budget | 9,505 | 325 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| • " . | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | <u>FY 2015</u> | <u>FY 2016</u> | <u>FY 2017</u> | <u>FY 2018</u> | <u>FY 2019</u> | FY 2020 | FY 2021 | FY 2022 | FY 2023 | <u>FY 2024</u> | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2008

Oct 2008

Mar 2018

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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.

|--|

| DC - | 26.74% | |
|--------------|--------|--|
| EPA/Fed - | 73.26% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 13,345,968 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,845,968 |
| Life Budget Increase/Decrease | -1,500,000 |
| Allocated Labor as of FY 2014 | 281,854 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 11,824 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 11,739 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2009

Jan 2010

Mar 2016

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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 - | 41.44% | |
|--------------|--------|--|
| EPA/Fed - | 58.56% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 18,710,981 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 18,880,522 |
| Life Budget Increase/Decrease | 169,541 |
| Allocated Labor as of FY 2014 | 941,399 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 17,080 | 392 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 18,881 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2010

Jan 2012

Apr 2015

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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% |



| FY2015 Approved Life Budget | 4,529,689 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 4,529,689 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 167,894 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 3,191 | 213 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 4,030 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2003

Mar 2009

Jul 2016

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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.

| | <u>Eff</u> | <u>ective</u> | <u>Funding</u> | by L | Jser (| (percent): |
|--|------------|---------------|----------------|------|--------|------------|
|--|------------|---------------|----------------|------|--------|------------|

| DC - | 44.38% | |
|--------------|--------|--|
| EPA/Fed - | 55.62% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 19,097,416 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 19,358,248 |
| Life Budget Increase/Decrease | 260,832 |
| Allocated Labor as of FY 2014 | 959,265 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 10,181 | 3,289 | 1,803 | 885 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 18,860 | 498 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2011

Apr 2013

Jun 2017

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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 - | 88.21% | |
|--------------|--------|--|
| EPA/Fed - | 11.79% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 24,097,476 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 24,397,433 |
| Life Budget Increase/Decrease | 299,957 |
| Allocated Labor as of FY 2014 | 335,040 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | <u>Pre FY 2015</u> | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 2,743 | 9,320 | 4,950 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 20,833 | 3,564 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2012

Nov 2013

Aug 2016

Service Area Title: Water Service Area

Water Distribution Systems **Program Title:**

O2 - Small Diameter Watermain Rehab. (10) **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

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% |



| FY2015 Approved Life Budget | 28,450,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 36,450,000 |
| Life Budget Increase/Decrease | 8,000,000 |
| Allocated Labor as of FY 2014 | 210,740 |

Phase

Design: Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 715 | 7,507 | 12,549 | 1,739 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 16,933 | 19,517 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2013

Aug 2014

Jan 2017

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: O3 - Small Diameter Watermain Rehab. (11)

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project 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 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% | |



| FY2015 Approved Life Budget | 37,505,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 37,505,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 222,711 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 264 | 992 | 6,852 | 10,525 | 1,204 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 17,450 | 20,055 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2015

Sep 2015

Feb 2018

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/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

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 - | 61.00% | |
|--------------|--------|--|
| EPA/Fed - | 39.00% | |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 23,031,946 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 23,058,029 |
| Life Budget Increase/Decrease | 26,083 |
| Allocated Labor as of FY 2014 | 3,257,174 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 19,526 | 823 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 22,095 | 963 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 1999

Jan 2004

Nov 2017

Service Area Title: Water Service Area

Program Title: Water Distribution Systems

Project ID/Project Title: S5 - WDSC6 - Lg.Dia.Wtrmain Int. Repairs

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project includes the installation of internal pipe joint repairs to approximately 50,000 linear feet of large diameter water mains with a high frequency of joint leakage. This project also includes the cleaning and lining of approximately 5,000 linear feet of 20-inch cast iron pipe prior to the installation of internal joint seals. This project will eliminate the costly repairs and need to temporarily shutdown these mains to undertake the repairs associated with joint leaks.

Impact on Operations:

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

Effective Funding by User (percent):

| DC - | 77.70% |
|--------------|--------|
| EPA/Fed - | 22.30% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| FY2015 Approved Life Budget | 14,626,544 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 16,770,002 |
| Life Budget Increase/Decrease | 2,143,458 |
| Allocated Labor as of FY 2014 | 834,356 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 6,421 | 2,958 | 1,824 | 280 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 16,770 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2010

Mar 2011

Nov 2016

Service Area Title: Water Service Area

Project ID/Project Title: BW - Lead Service Replacement Program

Managing Department: Engineering and Technical Services

EPMC: EPMC6 - Lead Services Program Manager

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

Water Lead Program

Project Description:

Program Title:

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% |



| FY2015 Approved Life Budget | 189,040,000 |
|--|-------------|
| FY2015 Revised/FY2016 Approved Life Budget | 189,040,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 4,141,954 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 140,248 | 2,350 | 1,304 | 955 | 1,037 | 1,796 | 2,055 | 2,314 | 1,749 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 145,713 | 9,977 | 5,130 | 4,892 | 5,277 | 5,751 | 6,012 | 6,288 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Aug 2004

Dec 2004

Sep 2026

CLOSED

Start Date

Nov 2009

Sep 2014

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: AF - FY2010 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the 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.

|--|

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



| FY2015 Approved Life Budget | 8,772,856 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,545,369 |
| Total DC Water Allocated Labor | 0 |
| Total Project Cost | 8,545,369 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 8,545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 8,545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

CLOSED

Start Date

Oct 2010

Sep 2014

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: BE - FY2011 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the 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% | |



| FY2015 Approved Life Budget | 11,238,342 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,012,219 |
| Total DC Water Allocated Labor | 0 |
| Total Project Cost | 11,012,219 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 11,012 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 11,012 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: CC - FY2012 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the 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% | (1) |
| WSSC - | 0.00% | |
| Fairfax - | 0.00% | 1 |
| Loudoun/PI - | 0.00% | |



| FY2015 Approved Life Budget | 8,281,738 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,281,738 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 58,341 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 7,571 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2012

Aug 2015

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: CP - FY2013 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the 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% |



| FY2015 Approved Life Budget | 8,673,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,764,291 |
| Life Budget Increase/Decrease | 91,291 |
| Allocated Labor as of FY 2014 | 139,591 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 6,151 | 188 | 167 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 8,764 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2012

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: D5 - FY2014 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

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% |



| FY2015 Approved Life Budget | 9,713,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 10,013,000 |
| Life Budget Increase/Decrease | 300,000 |
| Allocated Labor as of FY 2014 | 162,446 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,273 | 3,899 | 1,316 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 4,612 | 5,401 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2013

Sep 2016

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: DG - FY2015 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

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% |



| FY2015 Approved Life Budget | 9,630,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,630,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 2,942 | 2,649 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 9,630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2015

Jun 2016

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: DY - FY2016 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

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% | |



| FY2015 Approved Life Budget | 9,630,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,630,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 3,251 | 2,559 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 9,630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2016

Jun 2017

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: FK - FY2017 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

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%



| FY2015 Approved Life Budget | 9,630,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,630,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 4,234 | 1,060 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2017

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: GS - FY2018 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

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% | |



| FY2015 Approved Life Budget | 9,630,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,630,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 4,415 | 1,099 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 9,630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2018

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: HY - FY2019 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

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 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%



| FY2015 Approved Life Budget | 9,630,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,630,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 4,760 | 588 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 9,630 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2018

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: JA - FY2020 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

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% |



| FY2015 Approved Life Budget | 9,630,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,630,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 4,952 | 624 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 9,630 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2019

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: KW - FY2021 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

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% |



| FY2015 Approved Life Budget | 9,630,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,630,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,199 | 904 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,630 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2021

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: KX - FY2022 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

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% | |



| FY2015 Approved Life Budget | 9,664,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,664,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,727 | 1,852 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,664 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2022

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: KY - FY2023 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

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% |



| FY2015 Approved Life Budget | 10,150,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 10,150,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,856 | 2,026 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10.150 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jan 2023

NEW

Start Date

Jan 2024

Apr 2025

Service Area Title: Water Service Area

Program Title: Water On-Going Projects

Project ID/Project Title: KZ - FY2024 - DWS Water Projects

Managing Department: Water Services

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is for the FY2024 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 the aging infrastructure and restore system integrity and reliability of the water distribution systems. 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%



| FY2015 Approved Life Budget | 0 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 10,451,700 |
| Life Budget Increase/Decrease | 10,451,700 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,446 | 2,515 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,452 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

AY - Upgrades to Ft. Reno Pumping Station **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority:

Project Description:

Proiect Completion: Jan 2018 Potential Failure/Ability to continue meeting permit requirement

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 - | 76.66% |
|--------------|--------|
| EPA/Fed - | 23.34% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| FY2015 Approved Life Budget | 11,527,894 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,369,185 |
| Life Budget Increase/Decrease | 1,841,291 |
| Allocated Labor as of FY 2014 | 669,091 |

Phase

Design:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|--------------|
| Budget | 7,011 | 2,272 | 877 | 387 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | EV 2010 | EV 2020 | EV 2021 | FY 2022 | EA 3033 | EV 2024 | Post FY 2024 |
| | <u></u> | <u></u> | <u> </u> | 1 1 2017 | 1 1 2010 | 1 1 2013 | 1 1 2020 | 1 1 2021 | F I ZUZZ | 1 1 2023 | <u>F 1 ZUZ4</u> | FUSLI I 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2009

May 2011

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/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

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% |



| FY2015 Approved Life Budget | 646,747 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 646,747 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 22 |

Phase

Design:
Construction:

Project Completion:

| Disbursements Budget | Pre FY 2015 | FY 2015 | | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-------------------------|---------------------------|----------------------|-----------------------|----------------------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Commitments | 198 Pre FY 2015 | 54 FY 2015 | 161 FY 2016 | 36 FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 317 | 330 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Sep 2014

Aug 2015

Feb 2017

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/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

Project Description:

This project provides upgrades to the 16th Street and Alaska Avenue Pumping Station to increase reliability and serviceability. Upgrades include: installation of a second suction and discharge headers; new Variable Frequency Drive (VFD) on the existing fourth constant speed pump; replacement of existing VFDs with new solid state equipment; replacement of existing instrumentation and controls with PLC based soft logic controls; installation of redundant instrumentation; security system upgrades; improvements to ventilation system for cooling of the station; and the provision of a second electric feeder to the pumping station.

Impact on Operations:

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

Effective Funding by User (percent):

| DC - | 76.15% |
|--------------|--------|
| EPA/Fed - | 23.85% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| FY2015 Approved Life Budget | 4,698,398 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 4,763,606 |
| Life Budget Increase/Decrease | 65,208 |
| Allocated Labor as of FY 2014 | 43,950 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 1,010 | 1,264 | 256 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 4,561 | 202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2011

Sep 2013

Jun 2016

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/Project Title: FD - Water Fac Security System Upgrades

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project is to upgrade security systems at the following facilities: Bryant Street Pumping Station, Soldiers Home Reservoir, Brentwood Reservoir, Anacostia Tank No. 1 (Boulevard Tank), Anacostia Tank No. 2 (Good Hope Tank) and Fort Stanton Reservoirs Site 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% | |



| FY2015 Approved Life Budget | 1,999,433 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 2,025,516 |
| Life Budget Increase/Decrease | 26,083 |
| Allocated Labor as of FY 2014 | 451 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 386 | 39 | 104 | 100 | 57 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 2,026 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2013

Aug 2014

Nov 2018

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/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

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% | |



| FY2015 Approved Life Budget | 13,647,559 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 13,908,391 |
| Life Budget Increase/Decrease | 260,832 |
| Allocated Labor as of FY 2014 | 967,325 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 10,236 | 669 | 516 | 176 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 13,908 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2009

Sep 2012

Feb 2018

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/Project Title: HA - DWS Water Pumping Project

Managing Department: Water Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

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% |



| FY2015 Approved Life Budget | 1,560,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 1,560,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 5,984 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 560 | 347 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,003 | 557 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2010

Oct 2015

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/Project Title: HD - Anacostia Pump Station - Field Ops Facility East

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

The Anacostia site is home to a new pumping station as well as an abandoned pump station. Dating from 1912, the abandoned pump station has accumulated multiple additions since its original construction. These additions lack historical value and will be demolished, both to lessen DC Water's maintenance burden and create space for a new Water-Sewer Services satellite facility. A new structure will be built because renovated space in the abandoned pump station would not satisfy the requirements of the satellite facility. The following modifications are proposed to assist DC Water in achieving these objectives: (1) Construct a building for a Satellite Facility serving eastern DC; (2) Demolish abandoned pumping station additions; and (3) "Mothball" historically relevant abandoned pump station. Description corrected July 2015.

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% |



| FY2015 Approved Life Budget | 502,173 |
|--|---------|
| FY2015 Revised/FY2016 Approved Life Budget | 502,173 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 5,219 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|-----------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 327 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| Commitments Budget | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Mar 2011

Aug 2015

Oct 2016

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/Project Title: HE - Bryant Street Pump Station Building Modifications - Field Ops Facility Central

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

| i ilaoc | Otal t Bato | |
|---------------|-------------|--|
| Design: | Jan 2018 | |
| Construction: | Feb 2019 | |
| | | |

Start Date

Project

Phase

Completion: Aug 2020

Project Description:

Bryant Street is composed of multiple properties including the water pumping station, the warehouse, the distribution building, as well as the warehouses and pipe yard at 200 Bryant Street. The sites are variously underutilized and/or in disrepair. This fact, coupled with vast and varied spaces of the facility creates an excellent opportunity to develop a multifunctional facility located centrally in the District. However, there are two critical limitations—any modification or addition must consider the historic nature of the Bryant Street Pump Station as well as the facility's location adjacent to Howard University and the Washington Metropolitan High School. The following modifications are proposed to assist DC Water in achieving these objectives: (1) Renovate and reorganize first floor of the Pumping Station; (2) Renovate and reorganize spaces to accommodate the following functions: Lab for Water Quality division from Fort Reno, Water and Sewer Investigation and Repair satellite crews serving central DC, and Satellite warehouse facilities and meter storage; (3) Improve HVAC/Energy Design within the pump station (all floors) to include better efficiency and redundancies for emergency situations; (4) Repair roof parking ramp to Warehouse/Meter Services Building; and (5) Evaluate 200 Bryant Street for potential use(s). Description corrected July 2015.

Impact on Operations:

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

Effective Funding by User (percent):

| Disbursement | ts <u>Pre FY 2015</u> | FY 2015 FY 2016 | 6 FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|--------------|-----------------------|-----------------|-----------|---------|----------|----------|------------|------------|------------|---------|--------------|
| Loudoun/PI - | 0.00% | | | | | Α | llocated L | abor as o | of FY 2014 | | |
| Fairfax - | 0.00% | wat | er is lif | e | | Li | fe Budget | Increase | /Decrease | | 824,000 |
| WSSC - | 0.00% | | | | FY2015 R | evised/F | Y2016 App | oroved Lif | e Budget | | 14,370,000 |
| EPA/Fed - | 0.00% | | | | | F' | /2015 App | proved Lif | e Budget | | 13,546,000 |
| DC - | 100.00% | | | | | | | | | | 40.540.000 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------|
| Budget | 0 | 0 | 0 | 0 | 776 | 2,125 | 4,992 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 2,185 | 12,185 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/Project Title: HF - Fort Reno Pump Station - Field Ops Facility West

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

The Fort Reno site is a seven acre industrial campus, with a collection of buildings in various states of adaptive reuse, disrepair, and/or abandon, including the historically relevant Watchman's Tower and House. Thus, while existing conditions pose a maintenance burden, the site itself provides an opportunity to efficiently house the functions as proposed in development of a western DC satellite crew site. Establishment will consist of new construction, renovation, and strategic demolition in concert with the site's historic character. The following modifications are proposed to assist DC Water in achieving these objectives: (1) Construct a building for a Satellite Office serving western DC; (2) Demolish existing office building; (3) Demolish abandoned pump station; (4) Remove temporary trailer; and (5) "Mothball" abandoned pump house and water tower as well as any structures requiring preservation on site. Description corrected July 2015.

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% |



| FY2015 Approved Life Budget | 2,966,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 3,150,000 |
| Life Budget Increase/Decrease | 184,000 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 64 | 0 | 15 | 530 | 1,056 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 385 | 2,765 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Sep 2018

Aug 2019

Jul 2020

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/Project Title: HV - Bryant St Pump Station - Spill Header Flow Contol

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority: Good Engineering, Low pay back, Mission / Function over long term

Project Description:

This project is to install seven actuated spillover Pressure Reducing Valves (PRVs) with flowmeter capabilities to replace existing manually operated PRVs that control spillover flow into the low service area, and to replace 24 globe valves with motor operated butterfly valves to allow full automation and remote control of the spillage header. The metering capability will allow operation to control flow being spilled into the 1st High, 2nd High and/or the low zones area more effectively.

Impact on Operations:

This project will have no material impact on the operating budget. However, the new flow meters will require regular maintenance causing some increase in the operating budget.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 3,360,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,312,166 |
| Life Budget Increase/Decrease | 2,952,166 |
| Allocated Labor as of FY 2014 | 41,158 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 101 | 126 | 1,890 | 1,035 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 572 | 0 | 5,740 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2013

Oct 2015

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/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

| _ | | _ | |
|------|-----|---------|--------|
| Ura | - | LINCOPI | ntion: |
| FIUI | CLL | Descri | DUUII. |
| | | | |

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% |



| FY2015 Approved Life Budget | 7,178,990 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 11,157,240 |
| Life Budget Increase/Decrease | 3,978,250 |
| Allocated Labor as of FY 2014 | 38,147 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 505 | 373 | 1,100 | 3,306 | 558 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 833 | 675 | 9,650 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2012

Sep 2013

Jan 2018

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/Project Title: LT - Water System SCADA

Managing Department: Water Services

EPMC: EPMC2 - Water Program Manager

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

| Filolity. | Good Engineering, riigir pay back |
|----------------------|-----------------------------------|
| 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% | |



| FY2015 Approved Life Budget | 8,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

Start Date

Jan 2015

Jun 2016

Jan 2020

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 187 | 179 | 333 | 1,557 | 1,534 | 440 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 400 | 600 | 7,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/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

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%



| FY2015 Approved Life Budget | 2,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 2,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 33 | 166 | 331 | 306 | 165 | 87 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | Λ | 0 | 2.000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Feb 2017

Feb 2022

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/Project Title: M6 - WPFA1- Rehab. Bryant St. Pump Sta.

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project is to 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 - | 71.45% |
|--------------|--------|
| EPA/Fed - | 28.55% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| FY2015 Approved Life Budget | 62,827,962 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 62,854,045 |
| Life Budget Increase/Decrease | 26,083 |
| Allocated Labor as of FY 2014 | 2,252,833 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 60,611 | 529 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 62,080 | 775 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date Mar 1999

Mar 2002

Dec 2015

Service Area Title: Water Service Area

Program Title: Water Pumping Facilities

Project ID/Project Title: M7 - WPFA3 - Replacement of Anacostia Pump Sta.

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority: High Profile, Good Neighbor Policy

Project Description:

This project is to replace the 85 year old Anacostia Pumping Station to meet code requirements, add pumps for the new Anacostia First High South Service Area and maintain the reliability of the Anacostia 1st and 2nd High Service Area distribution system. It includes the installation of 3,000 feet of 30-inch water main to link the Anacostia Pumping Station to the Anacostia 1st High South Service Area. The new Pumping Station will have a capacity of 60 MGD and will be constructed on the same site as the original Pumping Station, which will remain in service until the new facility is completed and operational.

Impact on Operations:

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

Effective Funding by User (percent):

| DC - | 46.31% |
|--------------|--------|
| EPA/Fed - | 53.69% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| 32,756,228 |
|------------|
| 32,782,311 |
| 26,083 |
| 1,079,243 |
| |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 32,791 | 192 | 96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 32,621 | 161 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2004

Mar 2007

May 2016

Service Area Title: Water Service Area

Program Title: DDOT Water Projects

Project ID/Project Title: B0 - FY2010 - DDOT Water Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

Project Description:

This project is the annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by DDOT. This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 17,171,132 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 17,171,132 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 224,328 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 13,659 | 469 | 51 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 16,185 | 986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2004

Jul 2017

Service Area Title: Water Service Area

Program Title: DDOT Water Projects

Project ID/Project Title: BN - FY2011 - DDOT Water Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

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 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%



| FY2015 Approved Life Budget | 8,738,342 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 8,738,342 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 584,494 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 3,825 | 692 | 746 | 353 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 7,074 | 1,664 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2010

Jun 2017

Service Area Title: Water Service Area

Program Title: DDOT Water Projects

Project ID/Project Title: CJ - FY2012 - DDOT WATER PROJECTS

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

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 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% |



| FY2015 Approved Life Budget | 6,473,738 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 6,473,738 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | 52,564 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 279 | 667 | 546 | 500 | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,322 | 5,152 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jul 2011

Nov 2017

Service Area Title: Water Service Area

Program Title: DDOT Water Projects

Project ID/Project Title: CM - FY2013 - DDOT Water Projects

Managing Department: DC Dept. of Transportation

EPMC: DETS - Engineering & Tech Services

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

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 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.

|--|

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



| FY2015 Approved Life Budget | 6,392,123 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 1,483,414 |
| Life Budget Increase/Decrease | -4,908,709 |
| Allocated Labor as of FY 2014 | 1,871 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 88 | 293 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 91 | 1,392 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Oct 2013

Feb 2016

Service Area Title: Water Service Area

Program Title: Water Storage Facilities

Project ID/Project Title: FA - Water Storage Facility Upgrades

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority: Health Safety

Project Description:

This project 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 - | 86.42% |
|--------------|--------|
| EPA/Fed - | 13.58% |
| WSSC - | 0.00% |
| Fairfax - | 0.00% |
| Loudoun/PI - | 0.00% |



| FY2015 Approved Life Budget | 23,552,645 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 31,230,895 |
| Life Budget Increase/Decrease | 7,678,250 |
| Allocated Labor as of FY 2014 | 496,243 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 5,832 | 4,788 | 4,425 | 3,644 | 3,566 | 600 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 10.677 | 8.714 | 2.820 | 6.080 | 2.940 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Dec 2008

Jan 2010

Apr 2019

Service Area Title: Water Service Area

Program Title: Water Storage Facilities

Project ID/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

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%



| FY2015 Approved Life Budget | 7,000,000 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 7,000,000 |
| Life Budget Increase/Decrease | 0 |
| Allocated Labor as of FY 2014 | |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 111 | 320 | 797 | 2,215 | 1,345 | 567 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 580 | 6,420 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2019 Sep 2020

Feb 2024

Service Area Title: Water Service Area

Program Title: Water Storage Facilities

Project ID/Project Title: MA - St. Elizabeth Water Tank

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority: High Profile, Good Neighbor Policy

Project Description:

The project includes the construction of a two 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% |



| FY2015 Approved Life Budget | 22,161,922 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 36,492,338 |
| Life Budget Increase/Decrease | 14,330,416 |
| Allocated Labor as of FY 2014 | 218,339 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 4,200 | 631 | 3,318 | 8,063 | 5,439 | 228 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 5,794 | 19,051 | 11,648 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Nov 2010

Jul 2014

Jul 2021

Service Area Title: Water Service Area

Program Title: Water Storage Facilities

Project ID/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

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% |



| FY2015 Approved Life Budget | 7,915,558 |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 9,465,558 |
| Life Budget Increase/Decrease | 1,550,000 |
| Allocated Labor as of FY 2014 | 3,659 |

Phase

Design:

Project Completion:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 192 | 519 | 559 | 0 | 145 | 493 | 1,624 | 1,891 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 191 | 3,224 | 0 | 0 | 1,060 | 0 | 4,990 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Jun 2015

Nov 2016

Sep 2021

Service Area Title: Water Service Area

Program Title: Water Storage Facilities

MR - 2nd High Water Storage **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

Priority:

Project Description:

Proiect Completion: Mar 2022 Good Engineering, Low pay back, Mission / Function over long term

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% | |



| FY2015 Approved Life Budget | 15,728,358 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 16,526,400 |
| Life Budget Increase/Decrease | 798,042 |
| Allocated Labor as of FY 2014 | 3,985 |

Phase

Design:

Construction:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 600 | 385 | 726 | 230 | 0 | 414 | 1,392 | 6,061 | 1,788 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 636 | 2,185 | 0 | 0 | 0 | 1,060 | 12,645 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2015

Mar 2017

Service Area Title: Water Service Area

Water Service Area Program Mgmt **Program Title:**

KV - Water Program Mgt. Services 2F **Project ID/Project Title:**

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project is to provide engineering program management services for the water system CIP, to develop a comprehensive water distribution system hydraulic model and run model simulations for evaluation of capital improvement alternatives; to perform pipe condition assessments of pipelines; to assess the potable water storage and pumping needs; to investigate alternatives to eliminate low water pressures; improve water quality in the distribution system; provide reliable and adequate fire protection; to perform conceptual design of proposed capital projects; and to develop a comprehensive facilities plan for incorporation into the CIP. It also includes

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.

developing scopes of work, preparing cost estimates, negotiating task orders and reviewing design submittals for the implementation of the CIP.

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 30,610,000 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 30,610,000 |
| Life Budget Increase/Decrease | 0 |
| | |

Phase

Design: Construction:

Proiect Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 1,595 | 3,800 | 6,074 | 6,329 | 4,076 | 2,319 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 30,610 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

Apr 2024

NEW

Start Date

May 2029

Service Area Title: Water Service Area

Program Title: Water Service Area Program Mgmt

Project ID/Project Title: LB - Water Program Mgt. Services 2G

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project is to provide engineering program management services for the water system CIP, to develop a comprehensive water distribution system hydraulic model and run model simulations for evaluation of capital improvement alternatives; to perform Pipe Condition Assessments of pipelines; to assess the potable water storage and pumping needs; to investigate alternatives to eliminate low water pressures; improve water quality in the distribution system; provide reliable and adequate fire protection; to perform conceptual design of proposed capital projects; and to develop a comprehensive facilities plan for incorporation into the CIP. It also includes developing scopes of work, preparing cost estimates, negotiating task orders and reviewing design submittals for the implementation of the CIP.

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | |
|--|-----------|
| FY2015 Revised/FY2016 Approved Life Budget | 35,480,00 |
| Life Budget Increase/Decrease | 35,480,00 |
| Allocated Labor as of FY 2014 | |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,931 | 30,089 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35,480 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Service Area Title: Water Service Area

Program Title: Water Service Area Program Mgmt

Project ID/Project Title: LQ - Water Service Area Asset Management

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

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

Phase

Design:
Construction:

Project Completion:

Start Date

Dec 2019

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 -90.36% **FY2015 Approved Life Budget** 5,000,000 EPA/Fed -0.00% FY2015 Revised/FY2016 Approved Life Budget 5,000,000 WSSC -7.39% water is life Life Budget Increase/Decrease 0 Fairfax -1.47% 0.78% 14.858 Loudoun/PI -Allocated Labor as of FY 2014 **Disbursements** Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024** Budget 287 3,276 135 112 88 89 23 0 0 0 0 0 Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 **Post FY 2024** FY 2023 FY 2024 **Budget** 0 0 0 4,148 852 0 0 0 0 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

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

Service Area Title: Water Service Area

Program Title: Water Service Area Program Mgmt

Project ID/Project Title: ME - Water System Program Management Services

Managing Department: Engineering and Technical Services

EPMC: EPMC2 - Water Program Manager

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

Project Description:

This project is to provide engineering program management services for the water system CIP, to develop a comprehensive water distribution system hydraulic model and run model simulations for evaluation of capital improvement alternatives; to perform pipe condition assessments of pipelines; to assess the potable water storage and pumping needs; to investigate alternatives to eliminate low water pressures; improve water quality in the distribution system; provide reliable and adequate fire protection; to perform conceptual design of proposed capital projects; and to develop a comprehensive facilities plan for incorporation into the CIP. It also includes developing scopes of work, preparing cost estimates, negotiating task orders and reviewing design submittals for the implementation of the CIP.

Impact on Operations:

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

Effective Funding by User (percent):

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



| FY2015 Approved Life Budget | 39,171,201 |
|--|------------|
| FY2015 Revised/FY2016 Approved Life Budget | 36,562,879 |
| Life Budget Increase/Decrease | -2,608,322 |
| Allocated Labor as of FY 2014 | 411,968 |

Phase

Design:
Construction:

Project Completion:

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 10,978 | 4,502 | 5,510 | 5,412 | 5,471 | 3,648 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 14,603 | 0 | 21,960 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

Start Date

May 2019

Capital Projects

| Project ID | Project Name | Page # |
|------------|---|----------|
| AF | FY2010 - DWS Water Projects | VII - 48 |
| AK | WSSC Interconnections | VII - 7 |
| AY | Upgrades to Ft. Reno Pumping Station | VII - 63 |
| В0 | FY2010 - DDOT Water Projects | VII - 78 |
| BE | FY2011 - DWS Water Projects | VII - 49 |
| BN | FY2011 - DDOT Water Projects | VII - 79 |
| BW | Lead Service Replacement Program | VII - 47 |
| BZ | Large Valve Repl. (Contracts 8, 9 & 10) | VII - 8 |
| C9 | Large Diameter Water Mains 1 | VII - 9 |
| CC | FY2012 - DWS Water Projects | VII - 50 |
| CJ | FY2012 - DDOT Water Projects | VII - 80 |
| CM | FY2013 - DDOT Water Projects | VII - 81 |
| CP | FY2013 - DWS Water Projects | VII - 51 |
| D5 | FY2014 - DWS Water Projects | VII - 52 |
| DE | Small Diameter Water Main Rehab 12 | VII - 10 |
| DF | Rehab 24 Steel Main - Rock Creek | VII - 11 |
| DG | FY2015 - DWS Water Projects | VII - 53 |
| DU | Water System Laboratory Facilities | VII - 64 |
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| FT | Water Mains Rehab Phase II | VII - 16 |
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Capital Projects

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Capital Projects

| Project ID | Project Name | Page # |
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CAPITAL EQUIPMENT and AMR/CIS

Capital Equipment, Automated Meter Reading (AMR), and Customer Information and Billing System (CIS) projects are for the capital purchases that have a life of at least three years and a cost that exceeds \$5,000. Beginning in FY 2015, the CIP was realigned to better reflect responsible program areas. AMR and CIS joined Capital Equipment within Additional Capital Programs, having previously been within the Water Service Area CIP.

Now divided into five cluster groups and two Customer Service initiatives (AMR and CIS), equipment and software solution budgets for FY 2015 - FY 2024 totals \$200 million, an increase of \$21 million compared to the previous ten-year plan. The main drivers of this increase are attributed to the on-going program to rapidly replace DC Water's AMR units plus the replacement of the current CIS.

The following summarizes major projects and changes in each cluster group. Please note that all dollar amounts are presented on a ten-year basis, except where noted otherwise.

The current CIP includes the following programs:

Blue Plains Cluster - \$56.6 million

(project pages VIII-10 to VIII-21)

The Blue Plains Cluster Group is comprised of the Departments of Maintenance Services, Operations and Process Engineering. Maintenance Services is responsible for rehabilitating and replacing large process equipment throughout Blue Plains. Beginning in FY 2016, Maintenance Services' five current capital projects will roll into one project – Blue Plains Capital Equipment. This project, totaling \$44.4 million, will be for the on-going rehabilitation and replacement of large process equipment including pumps, electric motors, critical process equipment, centrifuges, and membrane diffusers.

Operations manages and maintains the Blue Plains laboratory facility and equipment for wastewater testing.

Process Engineering maintains Blue Plains' permit compliance for treatment processes and operates and maintains the Plant's distributed control system, process instrumentation, and interfacing equipment. Planned activities in Process Engineering include replacement of actuators and flow meters, as well as the annual maintenance program for the new digester facilities.

Chief Financial Office Cluster - \$23.7 million

(project pages VIII-22 to VIII-28)

Capital equipment projects within this cluster are primarily for enhancements to DC Water's existing financial and payroll software solutions. Additional funds are for the acquisition and implementation of new systems including Dayforce Time & Attendance and an invoice submission portal. Starting in FY 2015, the Office of the CFO will hold a reserve fund of \$20.9 million to accommodate future requests for projects, Authority-wide.

Customer Care and Operations Cluster - \$11.0 million

(project pages VIII-29 to VIII-49)

The Customer Care and Operations Cluster Group is comprised of the Departments of Sewer Services, Water Services, and Distribution and Conveyance Services.

Sewer Services is responsible for repair and replacement of sewer utility equipment. Planned activities include the purchase of additional safety equipment, new sewer videoing equipment and investment in trenchless technology equipment.

Water Services replaces deteriorated or damaged water system valves and system appurtenances. This work is separate from the systematic replacement of valves within the CIP as it is for temporary replacement to meet immediate needs in the field. Activities outlined in the ten-year plan largely remain the same as those carried out by the department in previous years.

Distribution and Conveyance Services 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. Additionally, starting in FY 2015 this department will assume supervision and oversight over the Potomac Interceptor, a line which brings wastewater from Loudoun County, through Fairfax County in Virginia, under the Potomac River to connect to the DC Water wastewater delivery network. This accounts for a significant level of increase in the Department's budget.

Independent Offices Cluster - \$19.1 million

(project pages VIII-50 to VIII-62)

The Department of Information Technology and the Office of the General Manager make up the Independent Offices Cluster Group.

Technology initiatives are focused on improving both the quality of services provided to DC Water customers and organizational effectiveness. 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. Major IT initiatives during the ten-year plan include on-going replacement of servers, desktops, and cabling; upgrade of entity-wide backup solutions and storage; and implementation of a data redundancy plan.

The Office of the General Manager is implementing a dashboard solution and a centralized electronic source for storing critical DC Water documents coordinated by the Information Technology department to help departments meet defined goals.

(project pages VIII-63 to VIII-79)

Support Services Cluster - \$31.1 million

The Support Services Cluster Group is comprised of the Departments of Fleet Management, Facilities Management, Security, Procurement, Occupational Safety and Health, and Human Capital Management.

The FY 2015 Fleet Management capital budget emphasis is on replacing many of DC Water current vehicles and heavy duty vehicle equipment, such as jet-vacs and valve turners, with more fuel efficient and environmental friendly vehicles. In addition to supporting 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. Consideration has been made in the acquisition of new industrial river cleaning equipment (skimmer boats). Finally, DC Water has increased its commitment to scheduled replacement of its aging vehicle fleet.

Capital equipment activities for the Department of Facilities Management include plumbing maintenance at various locations, photocopier purchase, elevator major maintenance and repair, 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. Included in this activity is inspection, assessment and short term repair (3-10) year of roofs in the various buildings authority wide, until the roof replacement can be fit into the regular CIP program.

Of concern with the ever increasing international threats is the new increased security climate in FY 2015 and future years. The Department of Security is seeking to harden all security features within DC Water, including fencing at the Blue Plains facility.

The Department of Procurement, in conjunction with the Office of the CFO, is initiating contract management system enhancements to improve system controls and usability. The Departments of Occupational Safety and Health as well as Human Capital Management are concentrating efforts in FY 2015 and FY 2016 into IT initiatives to improve departmental coordination with and support to DC Water employees and contractors.

Automated Meter Reading - \$77.2 million lifetime, \$34.4 million ten-year

(project pages VIII-80 to VIII-81)

In March 2002, DC Water began replacing traditional water meters with automated meters. It is believed that DC Water was the first water utility to implement a fixed network Automated Meter Reading (AMR) system in the United States. The system uses both radio and cell phone technology to upload data at the meter to DC Water's database twice daily. This initiative provided more accurate data and eliminated estimated billing. Since the data no longer needed to be read manually, it also eliminated the need for meter readers, who were then re-trained to support the system in other ways such as reduction of fuel and vehicle maintenance costs, etc.

Currently, the program is funding the on-going replacement of the original automated meters with next generation technology. As compared to the previous ten-year plan, the current plan has been reallocated and concentrated within FY 2015 to FY 2017 to accelerate the AMR replacement program.

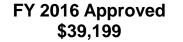
Customer Information System - \$23.7 million lifetime, \$23.6 million ten-year

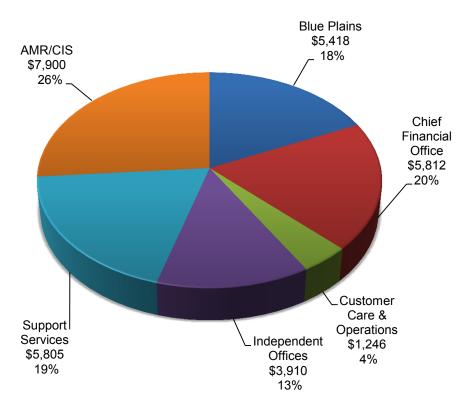
(project page VIII-82)

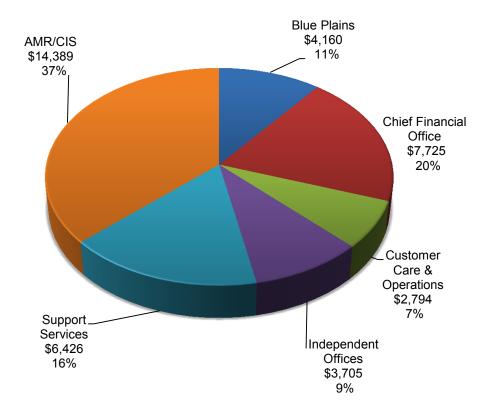
The CIS System manages DC Water's customer information including customer names, meter readings and other service requests, billing and payments. It also manages retail revenue generation through the application of DC Water's rates and charges against water consumption and other billing determinants. DC Water's existing system was installed in 2001 with only one major modification since then. From FY 2013 to FY 2014, DC Water evaluated other CIS system providers and confirmed there are newer systems that offer significant improvements to customer service, provide greater flexibility in billing and rate design, and also possibly reduce the costs of customer account management over time.

Capital Equipment and AMR/CIS Budget by Cluster Group FY 2015 Revised vs. FY 2016 Approved (\$ in 000's)









Capital Equipment and AMR/CIS Budget (\$ in 000's)

| | RE | VISED | API | PROVED | | | | | | | | | | | | | | | | | | | PROJ | |
|--|----|-------|-----|------------|----|------------|----|------------|----|------------|----|------------|----|------------|----|------------|----|------------|----|------------|----|----------------|-------------------|----------|
| | FY | 2015 | F | Y 2016 | F | Y 2017 | F | Y 2018 | F | Y 2019 | F | Y 2020 | F | FY 2021 | F | Y 2022 | F | Y 2023 | F | Y 2024 | • | TOTAL | ID | PRIORITY |
| BLUE PLAINS | \$ | 5.418 | \$ | 4,160 | \$ | 6,069 | \$ | 5,782 | \$ | 5,382 | \$ | 6,865 | \$ | 6,865 | \$ | 6,177 | \$ | 4.907 | \$ | 4,980 | \$ | 56.605 | | |
| MAINTENANCE SERVICES | Þ | 5,410 | Þ | 4,100 | Ф | 6,069 | Þ | 5,762 | Þ | 5,362 | Þ | 0,000 | Þ | 0,000 | Ф | 0,177 | Ф | 4,907 | Ф | 4,900 | Ф | 50,005 | | |
| Major Pump Rebuild/Replacement | | 2,000 | | _ | | _ | | - | | _ | | _ | | _ | | _ | | _ | | _ | | 2,000 | EC1 | 2C |
| Large Electric Motors | | 450 | | - | | - | | - | | - | | - | | - | | _ | | - | | - | | 450 | EC2 | 2C |
| High Priority Rehab Program | | 500 | | - | | - | | - | | - | | - | | - | | - | | - | | - | | 500 | EC3 | 2C |
| Centrifuge Rebuild/Replace | | 630 | | - | | - | | - | | - | | - | | - | | - | | - | | - | | 630 | EM4 | 2C |
| Blue Plains Capital Equipment | | - | | 3,366 | | 5,270 | | 5,056 | | 4,656 | | 6,139 | | 6,139 | | 5,451 | | 4,181 | | 4,181 | | 44,439 | EP6 | 2C |
| Membrane Diffuser/Mechanical & Electrical | | | | | | | | | | | | | | | | | | | | | | | | |
| Replacements | | 616 | | | | | _ | | _ | | | | _ | | | | _ | | _ | | | 616 | EW8 | 2C |
| Subtotal | \$ | 4,196 | \$ | 3,366 | \$ | 5,270 | \$ | 5,056 | \$ | 4,656 | \$ | 6,139 | \$ | 6,139 | \$ | 5,451 | \$ | 4,181 | \$ | 4,181 | \$ | 48,635 | | |
| OPERATIONS | | 450 | | 4.40 | | 4.40 | | 4.40 | | 4.40 | | 4.40 | | 4.40 | | 4.40 | | 4.40 | | 4.40 | | 4 440 | -D- | 0.0 |
| Lab Equipment | | 150 | | 140 | | 140 | | 140 | | 140 | | 140 | | 140 | | 140 | _ | 140 | | 140 | | 1,410 | EB5 | 3B |
| Subtotal | \$ | 150 | \$ | 140 | \$ | 140 | \$ | 140 | \$ | 140 | \$ | 140 | \$ | 140 | \$ | 140 | \$ | 140 | \$ | 140 | \$ | 1,410 | | |
| PROCESS ENGINEERING | | | | | | | | | | | | | | | | | | | | | | | | |
| Process Computer Control System | | 391 | | 118 | | - | | - | | - | | - | | - | | - | | - | | - | | 509 | EL1 | 2C |
| Actuators | | 372 | | 186 | | 186 | | 186 | | 186 | | 186 | | 186 | | 186 | | 186 | | 186 | | 2,046 | PE1 | 2C |
| Flow Meters | | 209 | | 100 | | 104 | | 104 | | 104 | | 104 | | 104 | | 104 | | 104 | | 104 | | 1,141 | PE2 | 2C |
| Programmable Logic Controllers Digesters Major Equipment Replacement | | 100 | | 100 150 | | 173 196 | | 100 196 | | 173 196 | | 1,146 1,718 | PE3 PE4 | 2C 2C |
| Subtotal | • | 1,072 | \$ | 654 | \$ | 659 | \$ | 586 | \$ | 586 | \$ | 586 | \$ | | \$ | 586 | \$ | 586 | \$ | 659 | \$ | 6,560 | Г L -4 | 20 |
| Subiolai | Ф | 1,072 | Ф | 034 | Ф | 039 | Ф | 300 | Ф | 659 | Ф | 0,300 | | |
| CHIEF FINANCIAL OFFICER | \$ | 5,812 | \$ | 7,725 | \$ | 7,005 | \$ | 1,005 | \$ | 1,855 | \$ | 28 | \$ | 200 | \$ | 27 | \$ | 30 | \$ | 30 | \$ | 23,717 | | |
| FINANCE ACCOUNTING AND BUDGET | | | | | | | | | | | | | | | | | | | | | | | | |
| Finance System | | 500 | | 500 | | - | | - | | - | | - | | - | | - | | - | | - | | 1,000 | EG4 | 3A |
| Time & Attendance Clocks | | 280 | | - | | - | | - | | - | | - | | - | | - | | - | | - | | 280 | EH6 | 3A |
| Additional Reserve | | 4,500 | | 6,475 | | 6,975 | | 975 | | 1,800 | | - | | 170 | | - | | - | | - | | 20,895 | EL2 | 3B |
| Invoice Portal/Submission | | - | | 75 | | - | | - | | 25 | | - | | - | | - | | - | | - | | 100 | EL3 | 3B |
| Financial Reprogramming/GL Resource | | - | | 120 | | - | | - | | - | | - | | - | | - | | - | | - | | 120 | EL4 | 3B |
| Financial Management System | | 502 | | 500 | | - | | - | | - | | - | | - | | - | | - | | - | | 1,002 | EZ1 | 3A |
| Ceridian (Software & Implementation) | | 30 | | 55 | _ | 30 | _ | 30 | _ | 30 | | 28 | _ | 30 | | 27 | _ | 30 | _ | 30 | | 320 | EZ4 | 3A |
| Subtotal | \$ | 5,812 | \$ | 7,725 | \$ | 7,005 | \$ | 1,005 | \$ | 1,855 | \$ | 28 | \$ | 200 | \$ | 27 | \$ | 30 | \$ | 30 | \$ | 23,717 | | |
| CUSTOMER CARE AND OPERATIONS | \$ | 1,246 | \$ | 2,794 | \$ | 2,011 | \$ | 1,116 | \$ | 1,387 | \$ | 493 | \$ | 493 | \$ | 493 | \$ | 504 | \$ | 493 | \$ | 11,030 | | |
| SEWER SERVICES | | , | | | | | | | | , | | | | | | | | | | | | , | | |
| Safety Service Utility Equipment | | 360 | | 315 | | 315 | | 290 | | 290 | | 85 | | 85 | | 85 | | 85 | | 85 | | 1,995 | EA4 | 3A |
| TV for Jet Machine | | 60 | | 120 | | 60 | | 60 | | 60 | | 19 | | 19 | | 19 | | 19 | | 19 | | 455 | EG5 | 3A |
| Locators | | - | | 60 | | 60 | | - | | - | | - | | - | | - | | - | | - | | 120 | EL5 | 3A |
| Camera Attached to Snake | | - | | 20 | | 20 | | - | | - | | - | | - | | - | | - | | - | | 40 | EL6 | 3A |
| Portable Camera | | - | | 30 | | 30 | | - | | - | | - | | - | | - | | - | | - | | 60 | EL7 | 3A |
| 100 W Emergency Generator & Load Center | | 50 | | - | | - | | - | | - | | - | | - | | - | | - | | - | | 50 | ES4 | 3A |
| CIPP Trenchless Equipment | | 100 | | 50 | | 50 | | 50 | | 50 | | 19 | | 19 | | 19 | | 19 | | 19 | | 395 | EW6 | 3A |
| Replace CCTV | | | | 100 | | 100 | _ | | _ | 250 | | | _ | - | | | | 11 | | | | 461 | SS1 | 3A |
| Subtotal | \$ | 570 | \$ | 695 | \$ | 635 | \$ | 400 | \$ | 650 | \$ | 123 | \$ | 123 | \$ | 123 | \$ | 134 | \$ | 123 | \$ | 3,576 | | |

Capital Equipment and AMR/CIS Budget (\$ in 000's)

| | DE | VISED | ADI | PROVED | | | | | | | | | | | | | | | | | | | PROJ | |
|---|-----|----------------------------|----------|--------------------------|----------|-----------------|----|----------|----|----------|-----|-----------------------------|----------|---------------|------|------------------------|-----------------|-------------------------------|----------|---------------|----------|-----------------------------|------|----------|
| | | vio∈D 2015 | | Y 2016 | F۱ | Y 2017 | F | Y 2018 | F۱ | Y 2019 | FY | 2020 | FY | 2021 | FY 2 | 022 | F۱ | / 2023 | FY | 2024 | | TOTAL | ID | PRIORITY |
| WATER SERVICES | • • | 2013 | | 1 2010 | • | 1 2017 | | 1 2010 | • | 1 2013 | • • | 2020 | • • | 2021 | 112 | UZZ | • | 2023 | • • | 2024 | | IOIAL | ID. | TRIORITI |
| Water Service Replacement | | 260 | | 540 | | 260 | | 260 | | 260 | | 130 | | 130 | | 130 | | 130 | | 130 | | 2,230 | EA2 | 3A |
| CS Leak Detection | | 50 | | - | | - | | - | | - | | - | | - | | - | | - | | - | | 50 | EK2 | 3A |
| Water Sample Lab Equipment | | - | | 40 | | _ | | _ | | _ | | _ | | _ | | _ | | _ | | _ | | 40 | EL8 | 3A |
| Backflow Preventer Rentals | | _ | | 13 | | _ | | _ | | _ | | _ | | _ | | _ | | - | | _ | | 13 | EP7 | 3A |
| System Valve Replacements | | 225 | | 225 | | 225 | | 225 | | 225 | | 113 | | 113 | | 113 | | 113 | | 113 | | 1,688 | EW1 | 3A |
| Subtotal | \$ | 535 | \$ | 818 | \$ | 485 | \$ | 485 | \$ | 485 | \$ | 243 | \$ | 243 | \$ | 243 | \$ | 243 | \$ | 243 | \$ | 4.021 | | |
| DISTRIBUTION & CONVEYANCE SYSTEMS | • | | * | | * | | • | | • | | • | | * | | * | | • | | • | | • | ., | | |
| Portable Pumps | | 40 | | 40 | | 40 | | 50 | | 50 | | 25 | | 25 | | 25 | | 25 | | 25 | | 345 | DC1 | 3A |
| Flow Meters/Sensor Replacements | | - | | 100 | | 100 | | 75 | | 75 | | 38 | | 38 | | 38 | | 38 | | 38 | | 538 | DC2 | 3A |
| Water Treatment System | | _ | | 100 | | - | | - | | - | | - | | - | | - | | - | | - | | 100 | DC3 | 3A |
| SCADA Hardware | | _ | | 350 | | 60 | | _ | | _ | | _ | | _ | | _ | | _ | | _ | | 410 | DC4 | 3A |
| Emergency Maintenance Custodian Locks | | | | 000 | | 00 | | | | | | | | | | | | | | | | 110 | 501 | 0/1 |
| for Hydrants | | - | | 75 | | 75 | | - | | - | | - | | - | | - | | - | | - | | 150 | DC5 | 3A |
| 100 W Emergency Generator & Load Center | | - | | 50 | | 50 | | 50 | | 50 | | 25 | | 25 | | 25 | | 25 | | 25 | | 325 | DC6 | 3A |
| Major Pump Rebuild / Replacement | | 24 | | 280 | | 280 | | 25 | | 25 | | 13 | | 13 | | 13 | | 13 | | 13 | | 697 | EI1 | 3A |
| High Priority Rehab Program | | 77 | | 286 | | 286 | | 31 | | 52 | | 28 | | 28 | | 28 | | 28 | | 28 | | 870 | EI3 | 3A |
| Subtotal | Φ. | 141 | \$ | 1,281 | \$ | 891 | \$ | 231 | \$ | 252 | \$ | 128 | \$ | 128 | \$ | 128 | \$ | 128 | \$ | 128 | \$ | 3,434 | | 0, 1 |
| Gustotai | Ψ | 171 | Ψ | 1,201 | Ψ | 031 | Ψ | 201 | Ψ | 232 | Ψ | 120 | Ψ | 120 | Ψ | 120 | Ψ | 120 | Ψ | 120 | Ψ | 0,404 | | |
| INDEPENDENT OFFICES | \$ | 3,910 | \$ | 3,705 | \$ | 2,982 | \$ | 2,895 | \$ | 1,895 | \$ | 748 | \$ | 748 | \$ | 748 | \$ | 748 | \$ | 748 | \$ | 19,127 | | |
| INFORMATIONAL TECHNOLOGY | | | | | | | | | | | | | | | | | | | | | | | | |
| Desktop Replacements | | 565 | | 500 | | 500 | | 500 | | 250 | | 125 | | 125 | | 125 | | 125 | | 125 | | 2,940 | EA6 | 3B |
| Cabling | | 175 | | 175 | | 175 | | 175 | | 175 | | 88 | | 88 | | 88 | | 88 | | 88 | | 1,313 | EA7 | 3B |
| Telephone Systems Upgrades | | 325 | | 130 | | 593 | | 360 | | - | | - | | - | | - | | - | | - | | 1,408 | EA8 | 3B |
| Radios | | 30 | | 30 | | 30 | | 30 | | 30 | | 15 | | 15 | | 15 | | 15 | | 15 | | 226 | EB4 | 3A |
| Redundant Data Center | | 210 | | 450 | | 200 | | 60 | | 60 | | 30 | | 30 | | 30 | | 30 | | 30 | | 1,130 | EB8 | 3A |
| Infrastructure Upgrade | | 1,055 | | 1,585 | | 1,149 | | 1,035 | | 605 | | 303 | | 303 | | 303 | | 303 | | 303 | | 6,942 | EC4 | 3A |
| Enterprise Archiving | | - | | 10 | | 10 | | 10 | | 150 | | 75 | | 75 | | 75 | | 75 | | 75 | | 556 | EG2 | 3B |
| Enterprise Storage Upgrades | | 375 | | 125 | | 125 | | 125 | | 125 | | 63 | | 63 | | 63 | | 63 | | 63 | | 1,188 | EG3 | 3B |
| VOIP Upgrades | | 300 | | - | | - | | - | | 300 | | - | | - | | - | | - | | - | | 600 | EH4 | 3B |
| Sharepoint | | - | | 500 | | - | | - | | - | | - | | - | | - | | - | | - | | 500 | EP8 | 3B |
| Enterprise Backup Solution | | 500 | | 100 | | 100 | | 500 | | 100 | | 50 | | 50 | | 50 | | 50 | | 50 | | 1,550 | ET7 | 3B |
| Document Imaging System | | 275 | | 100 | | 100 | | 100 | | 100 | | _ | | _ | | _ | | _ | | _ | | 675 | EZ8 | 3B |
| Subtotal | | | _ | | | | \$ | 2,895 | \$ | 1,895 | \$ | 748 | \$ | 748 | \$ | 748 | \$ | 748 | \$ | 748 | \$ | 19,027 | | |
| Cubicial | \$ | 3 810 | \$ | 3 705 | \$ | 2 982 | | | | | | 7 40 | Ψ | 740 | Ψ | 7 40 | Ψ | 7-70 | Ψ | 770 | | | | |
| GENERAL MANAGER | \$ | 3,810 | \$ | 3,705 | \$ | 2,982 | Φ | 2,000 | Ψ | .,000 | | | | | | | | | | | | -,- | | |
| GENERAL MANAGER Enterprise Performance Dashboard | \$ | • | \$ | 3,705 | \$ | 2,982 | Ф | - | Ψ | - | | _ | | _ | | _ | | _ | | _ | | , | FK4 | 2B |
| Enterprise Performance Dashboard | | 100 | _ | 3,705 | _ | 2,982 | _ | | _ | | • | | <u> </u> | | • | | <u> </u> | | <u> </u> | | <u> </u> | 100 | EK4 | 2B |
| | | • | \$ \$ | 3,705 | \$ \$ | 2,982 | \$ | - | \$ | - | \$ | <u>-</u> | \$ | - | \$ | <u>-</u> | \$ | <u>-</u> | \$ | <u>-</u> | \$ | , | EK4 | 2B |
| Enterprise Performance Dashboard Subtotal | \$ | 100 | _ | 3,705 - - 6,426 | _ | <u>-</u> | _ | - 4,885 | _ | 3,763 | · | - - 925 | \$ | - - 752 | · | - 613 | \$ \$ | - - 1,245 | | - - 767 | \$ | 100 | EK4 | 2B |
| Enterprise Performance Dashboard Subtotal | \$ | 100 100 | \$ | <u>-</u> | \$ | <u>-</u> | \$ | <u>-</u> | \$ | <u>-</u> | · | 925 | | 752 | · | 613 | · | - - 1,245 | | - - 767 | | 100 100 | EK4 | 2B |
| Enterprise Performance Dashboard Subtotal SUPPORT SERVICES | \$ | 100 100 | \$ | <u>-</u> | \$ | <u>-</u> | \$ | <u>-</u> | \$ | <u>-</u> | · | - - 925 294 | | 752 | · | - 613 239 | · | - - 1,245 579 | | - 767 | | 100 100 | EK4 | 2B 3A |
| Enterprise Performance Dashboard Subtotal SUPPORT SERVICES FLEET MANAGEMENT | \$ | 100 100 5,805 | \$ | 6,426 | \$ | - - 5,951 | \$ | 4,885 | \$ | 3,763 | · | | | | · | | · | , | | | | 100 100 31,130 | | |

Capital Equipment and AMR/CIS Budget (\$ in 000's)

| | REVISED | APPROV | | | | | | | | | | | | | | | | | | | PROJ | |
|--|-----------|----------|------------|--------|------|-------|-------|-------|------|--------|------|-------|------|-------|------|-------|----|-------|----|---------|---------|---------|
| | FY 2015 | FY 201 | 6 F | Y 2017 | FY | 2018 | FY 2 | 2019 | FY | 2020 | FY: | 2021 | FY 2 | 2022 | FY 2 | 2023 | FY | 2024 | 1 | TOTAL | ID | PRIORIT |
| FACILITIES MANAGEMENT | | | | | | | | | | | | | | | | | | | | | | |
| HVAC at Various Locations | 250 |) 3 | 00 | 400 | | 300 | | 350 | | 88 | | 80 | | 50 | | 80 | | 25 | | 1,923 | EF3 | 3B |
| Photocopier Purchase | 100 | 2 | 00 | 200 | | 500 | | 100 | | 25 | | 10 | | 10 | | 50 | | 25 | | 1,220 | EF5 | 3B |
| Authority-wide Fire Suppress/Detection | 200 | 3 | 00 | 175 | | 125 | | 150 | | 75 | | 10 | | 10 | | 10 | | 10 | | 1,065 | EF7 | 2C |
| Elevator Various Locations | 75 | j ' | ' 5 | 75 | | 75 | | 75 | | 38 | | 38 | | 38 | | 90 | | 38 | | 615 | EF8 | 3B |
| Roofing | 50 | 3 | 00 | 100 | | 50 | | 50 | | 63 | | 63 | | 38 | | 68 | | 63 | | 845 | EG7 | 3B |
| Appliances | 25 | ; - | | - | | 25 | | 25 | | - | | - | | - | | - | | - | | 75 | EW7 | 3B |
| Plumbing at Various Locations | 25 | ; | 50 | 50 | | 50 | | 25 | | 25 | | 10 | | 25 | | 30 | | 10 | | 300 | EX6 | 3B |
| Furniture and Fixtures | 200 | 2 | 00 | 600 | | 600 | | 200 | | 50 | | 10 | | 10 | | 50 | | 30 | | 1,950 | EX6 | 3B |
| Signage | 10 |) | 25 | 25 | | 10 | | 10 | | 5 | | 5 | | 5 | | 10 | | 5 | | 110 | EX6 | 3B |
| Rollup Doors | 100 | | 60 | 100 | | 100 | | 100 | | 50 | | 30 | | 25 | | 35 | | 25 | | 625 | EX6 | 3B |
| Facilities Improvements | 250 | <u> </u> | | | | 250 | | 250 | | 63 | | 53 | | 38 | | 68 | | 63 | | 1,034 | EX6 | 3B |
| Subtotal | \$ 1,285 | 5 \$ 1,5 | 0 \$ | 1,725 | \$ | 2,085 | \$ 1 | 1,335 | \$ | 481 | \$ | 308 | \$ | 249 | \$ | 491 | \$ | 293 | \$ | 9,762 | | |
| SECURITY | | | | | | | | | | | | | | | | | | | | | | |
| Security- Misc. Enhancements | 75 | 5 | 50 | 50 | | 50 | | 50 | | 25 | | 25 | | 25 | | 25 | | 25 | | 400 | EG8 | 3A |
| Authority-wide Fencing | | | <u>25</u> | 25 | | 50 | | 25 | | 25 | | 25 | | 25 | | 25 | | 25 | | 250 | EQ8 | 3B |
| Subtotal | \$ 75 | \$ | 75 \$ | 75 | \$ | 100 | \$ | 75 | \$ | 50 | \$ | 50 | \$ | 50 | \$ | 50 | \$ | 50 | \$ | 650 | | |
| PROCUREMENT | | | | | | | | | | | | | | | | | | | | | | |
| Procurement System-Phase II | - | 1 | 50 | 150 | | 150 | | 150 | | 25 | | 25 | | 25 | | 50 | | 25 | | 750 | EG4 | 3A |
| Materials Management System-Phase II | | 1 | <u> </u> | 150 | | 150 | | 150 | | 75 | | 75 | | 50 | | 75 | | 75 | | 950 | EP3 | 3A |
| Subtotal | \$ - | \$ 3 | 00 \$ | 300 | \$ | 300 | \$ | 300 | \$ | 100 | \$ | 100 | \$ | 75 | \$ | 125 | \$ | 100 | \$ | 1,700 | | |
| OCCUPATIONAL SAFETY & HEALTH | | | | | | | | | | | | | | | | | | | | | | |
| Safety Risk System | 200 | - | | - | | - | | - | | - | | - | | - | | - | | - | | 200 | EK3 | 3A |
| Environmental Health & Safety Mgmt | | | | | | | | | | | | | | | | | | | | | | |
| System | | | 00 | | | | | | | | | | | | | | | | | 100 | EQ9 | 3A |
| Subtotal | \$ 200 | \$ 1 | 00 \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 300 | | |
| HUMAN CAPITAL MANAGEMENT | | | | | | | | | | | | | | | | | | | | | | |
| Succession Planning Module | 100 | - | | - | | - | | - | | - | | - | | - | | - | | - | | 100 | EH2 | 3B |
| Compensation/Performance Mgt System | 100 | - | | - | | - | | - | | - | | - | | - | | - | | - | | 100 | HC1 | 3B |
| Recruitment/Applicant Tracking Module | 100 | <u> </u> | | | | | | | | | | | | | | - | | | | 100 | HC2 | 3B |
| Subtotal | \$ 300 |) \$ - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 300 | | |
| APITAL EQUIPMENT | \$ 22,191 | \$ 24,8 | 0 \$ | 24,018 | \$ 1 | 5,683 | \$ 14 | 4,282 | \$ | 9,058 | \$ 9 | 9,058 | \$ 8 | 3,058 | \$ 7 | 7,433 | \$ | 7,017 | \$ | 141,608 | | |
| MR/CIS | \$ 7.900 | \$ 14.3 | 39 \$ | 14,707 | \$ 1 | 1.345 | \$ 6 | 6,672 | \$ | 1,000 | \$ | 500 | \$ | 500 | \$ | 500 | \$ | 500 | \$ | 58,013 | | |
| Automated Meter Reading | 5,314 | . , | • | 6,707 | • | 6,345 | • | 5,672 | • | 1,000 | | 500 | | 500 | | 500 | • | 500 | | • | EM1/EM2 | : 3A |
| Customer Information System | 2,586 | , | | 8,000 | | 5,000 | | 1,000 | | - | | - | | - | | - | | - | | 23,591 | EM6 | 3A |
| • | \$ 7,900 | | | 14,707 | - | 1,345 | | 6,672 | \$ | 1,000 | \$ | 500 | \$ | 500 | \$ | 500 | \$ | 500 | \$ | 58,013 | | |
| APITAL EQUIPMENT and AMR/CIS | \$ 30.091 | \$ 39,1 | | | | 7,028 | \$ 20 | 0.954 | \$ ' | 10.058 | \$ 9 | 9,558 | \$ 8 | 3,558 | \$ 7 | 7.933 | \$ | 7.517 | | 199,621 | | |

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: EC1 Pump Repair and Replacement

Managing Department: Maintenance Services

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

Annual program for the repair and replacement of major pumps at Blue Plains.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -

Loudoun/PI -

WSSC -

Fairfax -



FY 2015 Approved Budget

FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

16,900,000 2,000,000 -14,900,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 2,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 2,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: EC2 Large Electric Motors

Managing Department: Maintenance Services

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

Large motors periodically need to be completely rebuilt or replaced at DC Water facilities to maintain process systems and meet permit compliance.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -

WSSC -

Fairfax -Loudoun/PI -



FY 2015 Approved Budget

FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| 5,050,000 |
|------------|
| 450,000 |
| -4,600,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: EC3 High Priority Rehab Program

Managing Department: Maintenance Services

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

Major rebuild/replacement of critical process equipment at Blue Plains 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 hanger bearing in solids processing conveyors replacement. Servicing of new equipment is included in this project.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -

WSSC -

Fairfax -Loudoun/PI -



FY 2015 Approved Budget

FY2015 Revised/FY2016 Approved Budge

Budget Increase/(Decrease)

| et | 5,600,000 |
|----|------------|
| et | 500,000 |
| e) | -5,100,000 |

| Disbursements Budget | FY 2015 500 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 | FY 2020 | FY 2021 0 | FY 2022 | FY 2023 | FY 2024 0 |
|-------------------------|--------------------|------------------|------------------|------------------|------------------|----------------|------------------|------------------|----------------|---------------------|
| Commitments Budget | FY 2015 500 | FY 2016 | FY 2017 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 | FY 2022 0 | FY 2023 | FY 2024 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: EM4 Centrifuge Repair and Replacement

Managing Department: Maintenance Services

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

Repair and replacement of Centrifuges at Blue Plains.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI -



FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| 7,056,000 |
|------------|
| 630,000 |
| -6,426,000 |

| Disbursements Budget | FY 2015 630 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 |
|-------------------------|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------------|------------------|---------------------|
| Commitments Budget | FY 2015 630 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 |

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: EP6 Blue Plains Capital Equipment

Managing Department: Maintenance Services

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

Annual program for the repair and replacement of major pumps, large motors, critical process equipment, centrifuges, and membrane diffusers at Blue Plains.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget

FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| 0 |
|------------|
| 44,439,000 |
| 44,439,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 3,366 | 5,270 | 5,056 | 4,656 | 6,139 | 6,139 | 5,451 | 4,181 | 4,181 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 3,366 | 5,270 | 5,056 | 4,656 | 6,139 | 6,139 | 5,451 | 4,181 | 4,181 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: EW8 Membrane Diffuser, Mechanical/Electrical

Managing Department: Maintenance Services

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

This project is for the annual maintenance program and planned replacements for devices required to keep the facilities operational.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2015 Approved Budget

FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

14,099,000 616,000 -13,483,000

| Disbursements Budget | FY 2015 616 | FY 2016 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 |
|-------------------------|--------------------|----------------|------------------|------------------|------------------|----------------|------------------|------------------|------------------|------------------|
| Commitments Budget | FY 2015 616 | FY 2016 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 | FY 2022 0 | FY 2023 | FY 2024 0 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: EB5 Laboratory Equipment

Managing Department: Operations

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

Project Description:

Annually occurring purchase of laboratory equipment and devices.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

t 1,410,000 t 1,410,000) 0

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 150 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 |

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: EL1 Process Computer Control System

Managing Department: Process Engineering

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

This project is to integrate Ovation Distributed Control system into all of the plant processes to facilitate control. The distributed control architecture allows the plant to be operated and controlled from anywhere within Blue Plains.

Impact on Operations:

Ongoing annual maintenance and system support.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI -



FY 2015 Approved Budget

FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| 0 |
|---------|
| 509,000 |
| 509,000 |

| Disbursements Budget | FY 2015 391 | FY 2016 118 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 |
|-------------------------|--------------------|--------------------|------------------|------------------|------------------|------------------|------------------|---------------------|------------------|---------------------|
| Commitments Budget | FY 2015 391 | FY 2016 118 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: PE1 Actuators

Managing Department: Process Engineering

Priority: Potential Failure/Ability to continue meeting permit requirement

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.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC -Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -Loudoun/PI -

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget **Budget Increase/(Decrease)**

2,046,000 -184,000

2,230,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 372 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 372 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: PE2 Flow Meters

Managing Department: Process Engineering

Priority: Potential Failure/Ability to continue meeting permit requirement

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.

Impact on Operations:

This Project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

1,253,000 1 1,141,000 1 -112,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 209 | 100 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 209 | 100 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: PE3 Programmable Logic Controllers

Managing Department: Process Engineering

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

This project is for the replacement of problematic programmable logic controllers (PLCs) 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.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| t | 2,080,000 |
|---|-----------|
| t | 1,146,000 |
|) | -934,000 |

| Disbursements Budget | | | | | | | | FY 2022 | FY 2023 | | |
|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
| Commitments | 100 FY 2015 | 100 FY 2016 | 173 FY 2017 | 100 FY 2018 | 100 FY 2019 | 100 FY 2020 | 100 FY 2021 | 100 FY 2022 | 100 FY 2023 | 173 FY 2024 | |
| Budget | 100 | 100 | 173 | 100 | 100 | 100 | 100 | 100 | 100 | 173 | |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Blue Plains

Project ID/Project Title: PE4 Digesters Major Equipment Replacement

Managing Department: Process Engineering

Priority: Potential Failure/Ability to continue meeting permit requirement

Project Description:

This project request is for annual maintenance program and planned replacement for devices required to keep the facilities operational.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| t | 1,955,000 |
|---|-----------|
| t | 1,718,000 |
|) | -237,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------------|
| Budget | 0 | 150 | 196 | 196 | 196 | 196 | 196 | 196 | 196 | 196 | |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | |
| Budget | 0 | 150 | 196 | 196 | 196 | 196 | 196 | 196 | 196 | 196 | |
| (projected disbursements do not include contingencies) (dolla | | | | | | | | | | | rs in thousands) |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Chief Financial Officer

Project ID/Project Title: EG4 Finance/Procurement System

Managing Department: Procurement - Finance, Accounting & Budget

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

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.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| 1,353,000 |
|-----------|
| 1,750,000 |
| 397,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 500 | 650 | 150 | 150 | 150 | 25 | 25 | 25 | 50 | 25 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 500 | 650 | 150 | 150 | 150 | 25 | 25 | 25 | 50 | 25 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Chief Financial Officer

Project ID/Project Title: EH6 Time & Attendance Clocks

Managing Department: Finance, Accounting & Budget

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

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 impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| et | 503,000 |
|----|----------|
| et | 280,000 |
| e) | -223,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 280 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 280 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Chief Financial Officer

Project ID/Project Title: EL2 Additional Reserve

Managing Department: Finance, Accounting & Budget

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

Project Description:

To accommodate additional project requests, Authority-wide.

Impact on Operations:

This project will 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%



FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget Budget Increase/(Decrease)

| t | 0 |
|---|------------|
| t | 20,895,000 |
|) | 20,895,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 4,500 | 6,475 | 6,975 | 975 | 1,800 | 0 | 170 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 4.500 | 6.475 | 6.975 | 975 | 1.800 | 0 | 170 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Chief Financial Officer

Project ID/Project Title: EL3 Invoice Portal/Submission

Managing Department: Finance, Accounting & Budget

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

Project Description:

This project is for the implementation of the electronic receipt of AP vendor invoices and further automation of Procure-to-Pay process.

Impact on Operations:

Ongoing annual maintenance and system support.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

100,000

FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 Disbursements Budget 75 0 25 0 0 0 0 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 Commitments Budget 0 75 0 0 25 0 0 0 0

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Chief Financial Officer

Project ID/Project Title: EL4 Financial Reprogramming /GL Resource

Managing Department: Finance, Accounting & Budget

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

Project Description:

This project involves restructuring General Ledger chart of accounts to better reflect and accommodate DC Water's existing and future business processes, while maintaining and enhancing adequate internal controls.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

et 0 et 120,000 e) 120,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Chief Financial Officer

Project ID/Project Title: EZ1 Financial Management System

Managing Department: Finance, Accounting & Budget

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

Project Description:

In 2000, DC Water implemented its financial system and in 2001 implemented its Customer Information System. When these systems were implemented DC Water made a decision based on organizational readiness and the solutions available at that time, not to go with an ERP System, but to utilize the option of selecting "best-of-breed" systems. In the last 10 years, DC Water has matured to a different level and the industry has as well, and based on current systems assessment DC Water is in the process of reviewing options for the procurement of a ERP System.

Impact on Operations:

Ongoing annual maintenance and system support.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -

WSSC -

Fairfax -Loudoun/PI -



FY 2015 Approved Budget

FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

1,002,000 1,002,000

| Disbursements Budget | FY 2015 502 | FY 2016 500 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 | FY 2024 0 |
|-------------------------|--------------------|--------------------|------------------|------------------|------------------|------------------|------------------|---------------------|------------------|---------------------|
| Commitments Budget | FY 2015 502 | FY 2016 500 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Chief Financial Officer

Project ID/Project Title: EZ4 Ceridian (Software & Implementation)

Managing Department: Finance, Accounting & Budget

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

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 impact on the operating budget, however, due to ongoing system enhancements, the capital budget will maintain budgeted dollars.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

get 478,000 get 320,000 se) -158,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 30 | 55 | 30 | 30 | 30 | 28 | 30 | 27 | 30 | 30 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 30 | 55 | 30 | 30 | 30 | 28 | 30 | 27 | 30 | 30 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EA4 Sewer Service Utility Equipment

Managing Department: Sewer Services

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

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 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%



| FY 2015 Approved Budget | |
|---------------------------------------|--|
| FY2015 Revised/FY2016 Approved Budget | |
| Budget Increase/(Decrease) | |

| get | 4,180,000 |
|-----|------------|
| get | 1,995,000 |
| se) | -2,185,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 360 | 315 | 315 | 290 | 290 | 85 | 85 | 85 | 85 | 85 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 360 | 315 | 315 | 290 | 290 | 85 | 85 | 85 | 85 | 85 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EG5 TV for Jet Machine

Managing Department: Sewer Services

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

Project Description:

This project will be used to purchase TV's for jet machines.

Impact on Operations:

This project will decrease need for separated crew, thus increasing operational productivity.

Effective Funding by User (percent):

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



| FY 2015 Approved Budget |
|---------------------------------------|
| FY2015 Revised/FY2016 Approved Budget |
| Budget Increase/(Decrease) |

| 645,000 |
|----------|
| 455,000 |
| -190,000 |
| |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 60 | 120 | 60 | 60 | 60 | 19 | 19 | 19 | 19 | 19 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 60 | 120 | 60 | 60 | 60 | 19 | 19 | 19 | 19 | 19 |

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EL5 Locators

Managing Department: Sewer Services

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

Project Description:

For the purchase of a tool/instrument to help locate sewer service connections on the mainline sewer for service line repairs.

Impact on Operations:

This project will 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%



| FY 2015 Approved Budget | |
|---------------------------------------|--|
| FY2015 Revised/FY2016 Approved Budget | |
| Budget Increase/(Decrease) | |

| et | 0 |
|----|---------|
| et | 120,000 |
| e) | 120,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 60 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 60 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EL6 Camera Attached to Snake

Managing Department: Sewer Services

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

Project Description:

For the purchase of a specialized tool used with the plumber's snake to inspect building sewers.

Impact on Operations:

This project will 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%



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| et | 0 |
|----|--------|
| et | 40,000 |
| e) | 40,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EL7 Portable Camera

Managing Department: Sewer Services

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

Project Description:

For the purchase of a lightweight, portable, video inspection system that can be operated by one person with no man entry in the sewer. This project will also permit pipeline inspection for locations with restricted vehicular access to manholes.

Impact on Operations:

This project will 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%



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| et | 0 |
|----|--------|
| et | 60,000 |
| e) | 60,000 |

| Disbursements Budget | FY 2015 | FY 2016 30 | FY 2017 30 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|-------------------------|---------|-------------------|-------------------|---------|---------|---------|---------|---------|---------|---------|
| Commitments | FY 2015 | | | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 30 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: ES4 100W Emergency Generator & Load Center

Managing Department: Sewer Services

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

Project Description:

This project will simulate conditions that the generator will encounter, therefore ensuring its availability during storm events.

Impact on Operations:

This project will 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%



| FY 2015 Approved Budget |
|---------------------------------------|
| FY2015 Revised/FY2016 Approved Budget |
| Budget Increase/(Decrease) |

| et | 500,000 |
|----|----------|
| et | 50,000 |
| e) | -450,000 |

| Disbursements Budget | FY 2015 50 | FY 2016 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 | FY 2022 0 | FY 2023 | FY 2024 0 |
|-------------------------|-------------------|----------------|------------------|------------------|------------------|----------------|----------------|------------------|----------------|------------------|
| Commitments Budget | FY 2015 50 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EW6 CIPP Trenchless Equipment

Managing Department: Sewer Services

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

Project Description:

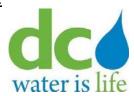
This project will allow DCWater to repair defective main line sewers with no excavation and sewer laterals with digging a hole at the property line only but avoiding street cuts. Currently it takes 2 days for a crew to install one sewer lateral; with this equipment a crew can repair 2 or 3 laterals per 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 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%



| FY 2015 Approved Budget | |
|---------------------------------------|--|
| FY2015 Revised/FY2016 Approved Budget | |
| Budget Increase/(Decrease) | |

| get | 850,000 |
|-----|----------|
| get | 395,000 |
| se) | -455,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 100 | 50 | 50 | 50 | 50 | 19 | 19 | 19 | 19 | 19 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 100 | 50 | 50 | 50 | 50 | 19 | 19 | 19 | 19 | 19 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: SS1 Replace CCTV

Managing Department: Sewer Services

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

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.

Effective Funding by User (percent):

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



| FY 2015 Approved Budget |
|---------------------------------------|
| FY2015 Revised/FY2016 Approved Budget |
| Budget Increase/(Decrease) |

| et | 750,000 |
|----|----------|
| et | 460,500 |
| e) | -289,500 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 100 | 100 | 0 | 250 | 0 | 0 | 0 | 10 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 100 | 100 | 0 | 250 | 0 | 0 | 0 | 10 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EA2 Water Service Replacement

Managing Department: Water Services

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

Project Description:

Annual maintenance of main and water service lines.

Impact on Operations:

This project will 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%



| FY 2015 Approved Budget |
|---------------------------------------|
| FY2015 Revised/FY2016 Approved Budget |
| Budget Increase/(Decrease) |

| et | 2,600,000 |
|----|-----------|
| et | 2,230,000 |
| e) | -370,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 260 | 540 | 260 | 260 | 260 | 130 | 130 | 130 | 130 | 130 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 260 | 540 | 260 | 260 | 260 | 130 | 130 | 130 | 130 | 130 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EK2 CS Leak Detection

Managing Department: Water Services

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

Project Description:

This is a pilot project to assess the feasibility of a leak detection system for correlation analysis and reporting.

Impact on Operations:

This project will have no impact on the operating budget.

50

50

Effective Funding by User (percent):

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

Disbursements

Commitments Budget

Budget



0

0

FY 2015 FY 2016 FY 2017 FY 2018

FY 2015 FY 2016 FY 2017 FY 2018

0

0

| FY 2015 Approved Budget | |
|---------------------------------------|--|
| FY2015 Revised/FY2016 Approved Budget | |
| Budget Increase/(Decrease) | |

50.000

50,000

| | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---|---------|---------|---------|---------|---------|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 |
| , | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |

0

0

0

0

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

0

0

0

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EL8 Water Sample Lab Equipment

Managing Department: Water Services

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

Project Description:

For the purchase of a Trihalomethane analyzer to support the maintenance and supplies contract for the analyzer to conduct advanced leak sample analysis in a laboratory environment.

Impact on Operations:

This project will 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%



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| et | 0 |
|----|--------|
| et | 40,000 |
| e) | 40,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EP7 Backflow Preventer Rentals

Managing Department: Water Services

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

Project Description:

For the purchase of backflow preventer assemblies or assembly parts that can be rented to customers to meet DC Department of Consumer and Regulatory Affairs (DCRA) updated DC Plumbing Code, which requires a certified backflow preventer assembly during fire hydrant use.

Impact on Operations:

This project will 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%



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| et | 0 |
|----|--------|
| et | 13,000 |
| e) | 13,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: EW1 System Valve Replacement

Managing Department: Water Services

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

Project Description:

Annual program for system valve replacement.

Impact on Operations:

This project will 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%



| FY 2015 Approved Budget |
|---------------------------------------|
| FY2015 Revised/FY2016 Approved Budget |
| Budget Increase/(Decrease) |

| et | 2,250,000 |
|----|-----------|
| et | 1,687,500 |
| e) | -562,500 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 225 | 225 | 225 | 225 | 225 | 112 | 112 | 112 | 112 | 112 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 225 | 225 | 225 | 225 | 225 | 112 | 112 | 112 | 112 | 112 |

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: DC1 Portable Pumps

Managing Department: Distribution & Conveyance Systems

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

Project Description:

Annual program for the repair and replacement of portable pumps.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -Loudoun/PI - dc water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| 0 |
|---------|
| 345,000 |
| 345,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 40 | 40 | 40 | 50 | 50 | 25 | 25 | 25 | 25 | 25 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 40 | 40 | 40 | 50 | 50 | 25 | 25 | 25 | 25 | 25 |

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: DC2 Flow Meters/Sensor Replacements

Managing Department: Distribution & Conveyance Systems

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

Project Description:

Annual program for the repair and replacement of flow meters and sensors.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

537,500 537,500

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 100 | 100 | 75 | 75 | 38 | 38 | 38 | 38 | 38 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 100 | 100 | 75 | 75 | 38 | 38 | 38 | 38 | 38 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: DC3 Water Treatment System-Emergency & Planned Events

Managing Department: Distribution & Conveyance Systems

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

Project Description:

Mobile water treatment facility to respond to emergency outages.

Impact on Operations:

This project will 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%



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| et | 0 |
|----|---------|
| et | 100,000 |
| e) | 100,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: DC4 SCADA Hardware

Managing Department: Distribution & Conveyance Systems

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

Project Description:

Supervisory control and data acquisition.

Impact on Operations:

This project will 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%



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| et | 0 |
|----|---------|
| et | 410,000 |
| e) | 410,000 |

| Disbursements Budget | FY 2015 | FY 2016 350 | FY 2017 60 | FY 2018 0 | FY 2019 0 | FY 2020 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 |
|-------------------------|----------------|--------------------|-------------------|------------------|------------------|----------------|------------------|------------------|------------------|------------------|
| Commitments Budget | FY 2015 | FY 2016 350 | FY 2017 60 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: DC5 Emergency Maintenance Custodian Locks for Hydrants

Managing Department: Distribution & Conveyance Systems

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

Project Description:

This project is for the installation of fire hydrant custodial locks on over 9,400 fire hydrants in order to prevent water loss in the distribution system and improper or unauthorized use of fire hydrants in the city.

Impact on Operations:

This project will 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%



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| get | 0 |
|-----|---------|
| get | 150,000 |
| se) | 150,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 75 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 75 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: DC6 100 W Emergency Generator & Load Center

Managing Department: Distribution & Conveyance Systems

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

Project Description:

This project will simulate conditions that the generator will encounter, therefore ensuring its availability during storm events.

Impact on Operations:

This project will 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%



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| et | 0 |
|----|---------|
| et | 325,000 |
| e) | 325,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 50 | 50 | 50 | 50 | 25 | 25 | 25 | 25 | 25 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 50 | 50 | 50 | 50 | 25 | 25 | 25 | 25 | 25 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: El1 Major Pump Rebuild/Replacement

Managing Department: Distribution & Conveyance Systems

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

Project Description:

Annual program for the repair and replacement of major pumps at water and sewer pumping facilities.

Impact on Operations:

This project will 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%



| FY 2015 Approved Budget |
|---------------------------------------|
| FY2015 Revised/FY2016 Approved Budget |
| Budget Increase/(Decrease) |

| et | 250,000 |
|----|---------|
| et | 696,500 |
| e) | 446,500 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 24 | 280 | 280 | 25 | 25 | 12 | 12 | 12 | 12 | 12 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 24 | 280 | 280 | 25 | 25 | 12 | 12 | 12 | 12 | 12 |

(projected disbursements do not include contingencies)

District of Columbia Water and Sewer Authority FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Customer Care and Operations

Project ID/Project Title: El3 High Priority Rehab Program - Water & Sewer Pumping

Managing Department: Distribution & Conveyance Systems

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

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 District. 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 hanger bearing in solids processing conveyors replacement.

Impact on Operations:

This project will 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%



| FY 2015 Approved Budget |
|---------------------------------------|
| FY2015 Revised/FY2016 Approved Budget |
| Budget Increase/(Decrease) |

| get | 509,000 |
|-----|---------|
| get | 869,500 |
| se) | 360,500 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 77 | 286 | 286 | 31 | 52 | 28 | 28 | 28 | 28 | 28 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 77 | 286 | 286 | 31 | 52 | 28 | 28 | 28 | 28 | 28 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EA6 Desktop Replacements

Managing Department: Information Technology

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

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 impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| 3,815,000 |
|-----------|
| 2,940,000 |
| -875,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| Budget | 565 | 500 | 500 | 500 | 250 | 125 | 125 | 125 | 125 | 125 | |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | |
| Budget | 565 | 500 | 500 | 500 | 250 | 125 | 125 | 125 | 125 | 125 | |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EA7 Cabling

Managing Department: Information Technology

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

Project Description:

Annual program for upgrading copper and fiber infrastructure.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

et 1,735,000
et 1,312,500
e) -422,500

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 175 | 175 | 175 | 175 | 175 | 88 | 88 | 88 | 88 | 88 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 175 | 175 | 175 | 175 | 175 | 88 | 88 | 88 | 88 | 88 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EA8 Telephone System Upgrades

Managing Department: Information Technology

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

Project Description:

Implementation of next generation telephone system and annual purchase of equipment and enhancements.

Impact on Operations:

Ongoing annual maintenance and system support.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -

water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

et 1,725,000 et 1,408,000 e) -317,000

Loudoun/PI -

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 325 | 130 | 593 | 360 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 325 | 130 | 593 | 360 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EB4 Radios

Managing Department: Information Technology

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

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 and City-wide radio fee.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -

Loudoun/PI -

water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

et 845,000 et 225,600 e) -619,400

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 30 | 30 | 30 | 30 | 30 | 15 | 15 | 15 | 15 | 15 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 30 | 30 | 30 | 30 | 30 | 15 | 15 | 15 | 15 | 15 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EB8 Redundant Data Center

Managing Department: Information Technology

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

Project Description:

Implementation of plan to ensure data redundancy for DC Water's mission critical systems.

Impact on Operations:

Ongoing annual maintenance and system support.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

ease)

1,130,100 -289,900

1,420,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 210 | 450 | 200 | 60 | 60 | 30 | 30 | 30 | 30 | 30 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 210 | 450 | 200 | 60 | 60 | 30 | 30 | 30 | 30 | 30 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EC4 Infrastructure Upgrade

Managing Department: Information Technology

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

Project Description:

Ongoing replacement of servers as they reach the end of useful life and go out of service.

Impact on Operations:

Ongoing annual maintenance and system support.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| t | 6,557,000 |
|----|-----------|
| t | 6,941,500 |
| •) | 384,500 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|--------------------------|------------------|------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 1,055 | 1,585 | 1,149 | 1,035 | 605 | 302 | 302 | 302 | 302 | 302 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 1,055 | 1,585 | 1,149 | 1,035 | 605 | 302 | 302 | 302 | 302 | 302 |
| (projected disbursements | s do not include | contingenc | ies) | | | | | | | (dolla |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EG2 Enterprise Archiving

Managing Department: Information Technology

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

Project Description:

Enterprise archival system for shared files.

Impact on Operations:

Ongoing annual maintenance and system support.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - dc water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| jet | 460,000 |
|-----|---------|
| jet | 556,200 |
| se) | 96,200 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 10 | 10 | 10 | 150 | 75 | 75 | 75 | 75 | 75 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 10 | 10 | 10 | 150 | 75 | 75 | 75 | 75 | 75 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EG3 Enterprise Storage Upgrades

Managing Department: Information Technology

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

Project Description:

Enterprise centralized storage data system.

Impact on Operations:

Ongoing annual maintenance and system support.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - dC water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

ed/FY2016 Approved Budget

Budget Increase/(Decrease)

1,187,500 -712,500

1,900,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 375 | 125 | 125 | 125 | 125 | 62 | 62 | 62 | 62 | 62 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 375 | 125 | 125 | 125 | 125 | 62 | 62 | 62 | 62 | 62 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EH4 VoIP Upgrades

Managing Department: Information Technology

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

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 impact on the operating budget but will improve operations, communications and efficiency.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -

WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

et 675,000
et 600,000
e) -75,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 300 | 0 | 0 | 0 | 300 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 300 | 0 | 0 | 0 | 300 | 0 | 0 | 0 | 0 | 0 |

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EP8 Sharepoint

Managing Department: Information Technology

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

Project Description:

This project will migrate all existing Sharepoint 10 sites to Sharepoint 13 and all non-sensitive data sites to the cloud.

Impact on Operations:

Ongoing annual maintenance and system support.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -

water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

et 0 et 500,000 e) 500,000

Loudoun/PI -

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: ET7 Enterprise Backup Solution

Managing Department: Information Technology

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

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.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| 2,000,000 |
|-----------|
| 1,550,200 |
| -449,800 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|------------------|---------|--|
| Budget | 500 | 100 | 100 | 500 | 100 | 50 | 50 | 50 | 50 | 50 | |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | |
| Budget | 500 | 100 | 100 | 500 | 100 | 50 | 50 | 50 | 50 | 50 | |
| (projected disbursements do not include contingencies) (dollars in | | | | | | | | | rs in thousands) | | |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EZ8 Document Management System

Managing Department: Information Technology

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

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.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

1,775,000

675,000

-1,100,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 275 | 100 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 275 | 100 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 0 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment

Cluster Group: Independent Offices

Project ID/Project Title: EK4 Enterprise Performance Dashboard

Managing Department: General Manager

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

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.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -

water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

475,000 1 100,000 1 -375,000

Loudoun/PI -

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EB6 Vehicle Purchases

Managing Department: Fleet Management

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

Project Description:

Annually occurring Authority-wide vehicle and equipment purchases.

Impact on Operations:

Newer vehicles should result in lower operating costs.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| et | 25,279,000 |
|----------------|------------|
| ŧ | 17,742,670 |
|)) | -7,536,330 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------------|--|
| Budget | 3,770 | 4,241 | 3,751 | 2,300 | 1,953 | 294 | 294 | 239 | 578 | 324 | |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | |
| Budget | 3,770 | 4,241 | 3,751 | 2,300 | 1,953 | 294 | 294 | 239 | 578 | 324 | |
| (projected disbursements do not include contingencies) | | | | | | | | | (dolla | rs in thousands) | |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: ET5 Field Service/Mobile Equipment

Managing Department: Fleet Management

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

Project Description:

Provides real-time information and technical control, reducing paperwork and automating basic inventory processes.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

et 1,250,000 et 675,000 e) -575,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 175 | 200 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 175 | 200 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 0 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment **Cluster Group: Support Services**

Project ID/Project Title: EF3 HVAC at Various Locations

Managing Department: Facilities Management

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

Project Description:

Annual program to repair and replace HVAC equipment.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC -Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -Loudoun/PI -

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget **Budget Increase/(Decrease)**

-1,377,500

3,300,000

1,922,500

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 250 | 300 | 400 | 300 | 350 | 88 | 80 | 50 | 80 | 25 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 250 | 300 | 400 | 300 | 350 | 88 | 80 | 50 | 80 | 25 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment **Cluster Group: Support Services**

Project ID/Project Title: EF5 Photocopier Purchase

Managing Department: Facilities Management

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

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 the operating budget.

Effective Funding by User (percent):

DC -Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -Loudoun/PI -

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget **Budget Increase/(Decrease)**

1,220,400 -579,600

1,800,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 100 | 200 | 200 | 500 | 100 | 25 | 10 | 10 | 50 | 25 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 100 | 200 | 200 | 500 | 100 | 25 | 10 | 10 | 50 | 25 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EF7 Authority-wide fire suppression/detection

Managing Department: Facilities Management

Priority: Potential Failure/Ability to continue meeting permit requirement

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 impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

ease)

1,065,000 -560,000

1,625,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 200 | 300 | 175 | 125 | 150 | 75 | 10 | 10 | 10 | 10 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 200 | 300 | 175 | 125 | 150 | 75 | 10 | 10 | 10 | 10 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EF8 Elevator Repairs

Managing Department: Facilities Management

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

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 the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| et | 950,000 |
|----|----------|
| et | 615,000 |
| e) | -335,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 75 | 75 | 75 | 75 | 75 | 38 | 38 | 38 | 90 | 38 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 75 | 75 | 75 | 75 | 75 | 38 | 38 | 38 | 90 | 38 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EG7 Roofing

Managing Department: Facilities Management

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

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.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Egirfay

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

get 700,000
get 845,000
se) 145,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------------|--|
| Budget | 50 | 300 | 100 | 50 | 50 | 63 | 63 | 38 | 68 | 63 | |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | |
| Budget | 50 | 300 | 100 | 50 | 50 | 63 | 63 | 38 | 68 | 63 | |
| (projected disbursements do not include contingencies) (dollars in thou | | | | | | | | | | rs in thousands) | |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EW7 Appliances

Managing Department: Facilities Management

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

Project Description:

This project will annually replace major appliances throughout the Authority.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI -



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

get 250,000 get 75,000 se) -175,000

| Disbursements Budget | FY 2015 25 | FY 2016 0 | FY 2017 0 | FY 2018 25 | FY 2019 25 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 0 |
|-------------------------|-------------------|------------------|------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| Commitments Budget | FY 2015 25 | FY 2016 0 | FY 2017 0 | FY 2018 25 | FY 2019 25 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EX6 Facilities Improvements - Various

Managing Department: Facilities Management

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

Project Description:

Annual program for improvements to Authority-wide facilities including HVAC replacement, elevator rehabilitation, plumbing, fencing and signage.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

et 4,019,000 e) -2,831,000

6,850,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 585 | 335 | 775 | 1,010 | 585 | 192 | 108 | 103 | 193 | 132 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 585 | 335 | 775 | 1,010 | 585 | 192 | 108 | 103 | 193 | 132 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EG8 Security Enhancements - Miscellaneous

Managing Department: Security

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

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.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| et | 500,000 |
|----|----------|
| et | 400,000 |
| e) | -100,000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 75 | 50 | 50 | 50 | 50 | 25 | 25 | 25 | 25 | 25 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 75 | 50 | 50 | 50 | 50 | 25 | 25 | 25 | 25 | 25 |

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment

Cluster Group: Support Services

Project ID/Project Title: EQ8 Authority-wide Fencing

Managing Department: Security

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

Project Description:

Perimeter protection project to provide early detection and access denial for multiple DC Water properties. This project includes fencing for 5,000 feet of fully exposed riverfront at Blue Plains. It also includes fiber optic detection, CCTV and/or thermal monitoring of the fences.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| 0 |
|---------|
| 250,000 |
| 250 000 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 25 | 25 | 50 | 25 | 25 | 25 | 25 | 25 | 25 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 25 | 25 | 50 | 25 | 25 | 25 | 25 | 25 | 25 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EP3 Materials Management System

Managing Department: Procurement

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

Project Description:

This project is to streamline the computer-based procurement sourcing and contract maintenance functionality.

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

et 400,000 et 950,000 e) 550,000

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 150 | 150 | 150 | 150 | 75 | 75 | 50 | 75 | 75 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 150 | 150 | 150 | 150 | 75 | 75 | 50 | 75 | 75 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EK3 Safety System

Managing Department: Occupational Safety & Health

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

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.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -

water is life

FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

et 300,000 et 200,000 e) -100,000

| Loudoun/Pi - | | | |
|---------------|---------|---------|-------|
| Disbursements | FY 2015 | FY 2016 | FY 20 |

17 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Budget** 0 0 0 0 0 0 0 200 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 Commitments Budget 200 0 0 0 0 0 0 0

FY 2015 - 2024 Capital Improvement Program

NEW

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EQ9 Environmental Health & Safety Mgmt Syst

Managing Department: Occupational Safety & Health

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

Project Description:

This project is for a database system that will streamline safety and risk business processes, enhance compliance, improve safety culture, and allow reporting.

Impact on Operations:

Ongoing annual maintenance and system support.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -Loudoun/PI - water is life

FY 2015 Approved Budget

FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

et _____ e)

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

(dollars in thousands)

100.000

100,000

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: EH2 Succession Planning Module

Managing Department: Human Capital Management

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

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 impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -Loudoun/PI -



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget

Budget Increase/(Decrease)

| jet | 100,000 |
|-----|---------|
| jet | 100,000 |
| se) | 0 |

| Disbursements Budget | FY 2015 100 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 | FY 2024 0 |
|-------------------------|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------------|------------------|---------------------|
| Commitments Budget | FY 2015 100 | FY 2016 0 | FY 2017 0 | FY 2018 0 | FY 2019 0 | FY 2020 0 | FY 2021 0 | FY 2022 0 | FY 2023 0 | FY 2024 0 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: HC1 Compensation - Performance Management System

Managing Department: Human Capital Management

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

Project Description:

Implementation/upgrade to the Performance Management System to promote efficiencies and streamline employee evaluations.

Impact on Operations:

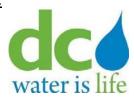
This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed -WSSC -

Fairfax -Loudoun/PI -



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

get 100,000
get 100,000
se) 0

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Capital Equipment
Cluster Group: Support Services

Project ID/Project Title: HC2 Talent Management - Recruitment/Applicant Tracking Mod

Managing Department: Human Capital Management

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

Project Description:

This project is to upgrade the Recruitment/Applicant Tracking Module.

Impact on Operations:

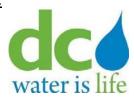
This project will have no impact on the operating budget.

Effective Funding by User (percent):

DC - Joint Use - Indirect Cost

EPA/Fed - WSSC -

Fairfax -Loudoun/PI -



FY 2015 Approved Budget
FY2015 Revised/FY2016 Approved Budget
Budget Increase/(Decrease)

| et | 100,000 |
|----|---------|
| et | 100,000 |
| e) | 0 |

| Disbursements | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Budget | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 |
| Budget | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

FY 2015 - 2024 Capital Improvement Program

AMR/CIS **Service Area Title:**

Program Title: Automated Meter Reading

Project ID/Project Title: EM1 **Future Meter Replacements**

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

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.

Effective Funding by User (percent):

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



| FY 2015 Approved Life Budget |
|--|
| FY2015 Revised/FY2016 Approved Life Budget |

| FY 2015 Approved Life Budget | 26,229,614 |
|---------------------------------|------------|
| ed/FY2016 Approved Life Budget | 36,198,154 |
| Life Budget Increase/(Decrease) | 9,968,540 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------|
| Budget | 1,776 | 5,314 | 7,384 | 6,707 | 6,345 | 5,672 | 1,000 | 500 | 500 | 500 | 500 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 1,776 | 5,314 | 7,384 | 6,707 | 6,345 | 5,672 | 1,000 | 500 | 500 | 500 | 500 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: AMR/CIS

Program Title: Automated Meter Reading

Project ID/Project Title: EM2 Automated Meter Reading Project

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

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.

Impact on Operations:

The cost of a single meter read will be reduced.

Effective Funding by User (percent):

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



| FY 2015 Approved Life Budget | I |
|--|---|
| FY2015 Revised/FY2016 Approved Life Budget | |
| Life Budget Increase/(Decrease) | Ī |

| t | 71,071,355 |
|---|-------------|
| t | 41,005,723 |
|) | -30,065,632 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|----------|----------|---------|---------|---------|---------|---------|--------------|
| Budget | 41,006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | D EV 0045 | | | | EV/ 0040 | -11.0010 | | | =\(| =>/ | | D 4 EV 0004 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

AMR/CIS **Service Area Title:**

Program Title: Customer Information System

Project ID/Project Title: EM6 AMR/Billing System

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

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.

Effective Funding by User (percent):

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



| FY 2015 Approved Life Budget | |
|--|--|
| FY2015 Revised/FY2016 Approved Life Budget | |

| FY 2015 Approved Life Budget | 13,072,822 |
|---------------------------------|------------|
| ed/FY2016 Approved Life Budget | 23,717,050 |
| Life Budget Increase/(Decrease) | 10,644,228 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------|
| Budget | 126 | 2,586 | 7,005 | 8,000 | 5,000 | 1,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 126 | 2,586 | 7,005 | 8,000 | 5,000 | 1,000 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

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| SS1 | Replace CCTV | VIII - 36 |



WASHINGTON AQUEDUCT

The Washington Aqueduct, managed by the U.S. Army Corps of Engineers, provides wholesale water treatment services to DC Water and two wholesale customers in Northern Virginia, Arlington County and Fairfax Water (supplying water to the area previously supplied by the city of Falls Church). DC Water purchases approximately 72 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan Treatment Plants, and thus is responsible for approximately 72 percent of the Aqueduct's operating and capital costs (the exact allocation varies from year to year primarily due to direct allocation of pumping costs). Under federal legislation and a memorandum of understanding enacted in 1997 and updated in 2013 when Fairfax Water replaced the City of Falls Church, DC Water and the Aqueduct's wholesale customers in Northern Virginia partners have a much greater role in oversight of the Aqueduct's operations and its capital improvement program (CIP) than prior to 1997.

The Aqueduct's CIP is broken into six primary areas, with specific projects under each area. Capital projects include: improvements to its two water treatment plants (Dalecarlia Water Treatment Plant and McMillan Water Treatment Plant), improvements to appurtenant transmission and storage facilities, Dalecarlia pumping station improvements, basin waste recovery systems, and alternative treatment methods.

Dalecarlia Pumping Station Improvements - \$4.18 million

(project pages IX-5 and IX-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: SCADA upgrades and overhead crane replacement; elevator replacements; valve and piping replacement; and, mechanical upgrades.

Cabin John Bridge Repairs - \$0.91 million

(project page IX-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 - \$20.61 million

(project page IX-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 east shaft pumping

station renovation, SCADA upgrades and clearwell maintenance and improvements. Major projects include sedimentation improvements, security improvements; chemical system improvements; boat dock/chemical storage building renovation; east shaft pump replacement and building renovations; GIS system; roof replacements; instrumentation improvements; process improvements; EASA building renovation; McMillan building renovations Phase II and Phase III; and roadway repairs.

Appurtenant Transmission and Storage Facility - \$44.14 Million

(project page IX-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 transmission main improvements, Georgetown Reservoir building improvements and reservoir maintenance and improvements - First high. Future projects include: reservoir maintenance and improvements - First, Second and third high; security improvements; city tunnel repairs; conduit repairs; cross connection structure upgrade; Great Falls intake building improvements; Little Falls Pumping Station crane overhaul and 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 and no. 8 improvements.

Dalecarlia Water Treatment Plant Improvements - \$38.05 Million

(project page IX-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 and 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 - \$1.23 Million

(project page IX-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. Future projects include sedimentation improvements at the McMillan WTP in FY 2016.

Financing of Aqueduct Capital Projects

The U.S. Army Corps of Engineers, in accordance with Federal procurement regulations, requires DC Water to remit cash in an amount equal to the total project cost in advance of advertising contracts, and these funds are transferred immediately to a Corps/U.S. Treasury account to be drawn down during the execution of the project, through completion, with no interest going to DC Water. Over the years, extensive discussions with the U.S. Office of Management and Budget (OMB) and the 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.

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Washington Aqueduct
Program Title: Washington Aqueduct

Project ID/Project Title: WAD121 Basin Waste Recovery

Priority: Potential Failure/Ability to continue meeting permit requirement

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 dewaters the residual on site and trucks them off-site for disposal. The project is now 100% complete and operational.

Impact on Operations:

We anticipate future cost increases in areas of personnel, building maintenance, chemicals, electricity and contract disposal.

Effective Funding by User (percent): DC -100.00% **FY 2015 Approved Life Budget** 98,568,991 0.00% EPA/Fed -FY2015 Revised/FY2016 Approved Life Budget 98.568.991 WSSC -0.00% water is life Life Budget Increase/(Decrease) 0.00% Fairfax -0.00% Loudoun/PI -Disbursements Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 Post FY 2024 **Budget** 98.569 0 0 0 0 0 0 0 0 0 0 0 Commitments Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 **Post FY 2024** Budget 98.569 0 0 O O 0 n 0 0 n n (projected disbursements do not include contingencies) (dollars in thousands)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Washington Aqueduct
Program Title: Washington Aqueduct

Project ID/Project Title: WAD122 Dalecarlia Pumping Station

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

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: overhead crane & elevator replacements; SCADA system upgrades; mechanical upgrades; and valve and piping replacement.

Impact on Operations:

Improvements to the Dalecarlia Pumping Station are not expected to have significant impact on operating costs.

Effective Funding by User (percent):

| DC - | 100.00% | |
|--------------|---------|--------------|
| EPA/Fed - | 0.00% | |
| WSSC - | 0.00% | uc |
| Fairfax - | 0.00% | water is lif |
| Loudoun/PI - | 0.00% | |

FY 2015 Approved Life Budget
FY2015 Revised/FY2016 Approved Life Budget
Life Budget Increase/(Decrease)

| 12,769,931 |
|------------|
| 13,344,370 |
| 574,439 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 9,166 | 666 | 1,195 | 217 | 290 | 688 | 724 | 0 | 0 | 145 | 253 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 9,166 | 666 | 1,195 | 217 | 290 | 688 | 724 | 0 | 0 | 145 | 253 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Washington Aqueduct
Program Title: Washington Aqueduct

Project ID/Project Title: WAD123 Cabin John Bridge

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

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.

Effective Funding by User (percent):

DC - 100.00%

EPA/Fed - 0.00%

WSSC - 0.00%

Fairfax - 0.00%

Loudoun/PI - 0.00%

FY 2015 Approved Life Budget
FY2015 Revised/FY2016 Approved Life Budget
Life Budget Increase/(Decrease)

| | 908,609 |
|---|---------|
| | 905,358 |
| , | -3,251 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 0 | 0 | 0 | 579 | 181 | 145 | 0 | 0 | 0 | 0 | 0 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 0 | 0 | 0 | 579 | 181 | 145 | 0 | 0 | 0 | 0 | 0 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Washington Aqueduct **Program Title:** Washington Aqueduct

WAD126 McMillian Water Treatment Plant Improvements **Project ID/Project Title:**

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

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: clearwell maintenance and improvements north; east shaft pump replacement; and SCADA system upgrades. Major future projects include: clearwell maintenance and improvements south; security improvements; chemical system improvements; boat dock/chemical storage building renovation; east shaft building renovations; GIS system; roof replacements; instrumentation improvements; process improvements; EASA building renovation; McMillan building renovations Phase 2 & Phase 3; and roadway repairs.

Impact on Operations:

Improvements to the McMillan WTP are not expected to have a significant impact on operating costs.

Effective Funding by User (percent):

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



FY 2015 Approved Life Budget FY2015 Revised/FY2016 Approved Life Budget

37,396,399 45,704,216 Life Budget Increase/(Decrease) 8,307,817

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 25,096 | 1,531 | 4,056 | 435 | 2,752 | 2,187 | 1,702 | 1,919 | 2,680 | 1,811 | 1,535 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 25,096 | 1,531 | 4,056 | 435 | 2,752 | 2,187 | 1,702 | 1,919 | 2,680 | 1,811 | 1,535 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Washington Aqueduct
Program Title: Washington Aqueduct

Project ID/Project Title: WAD127 Appurtenant Transmission and Storage Facilities

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

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: cross connection structure upgrade; Georgetown Reservoir building improvements; Little Falls Pumping Station crane overhaul; SCADA system improvements; transmission main improvements; and reservoir maintenance & improvements - third high. Future projects include: reservoir maintenance & improvements - first and second high; security improvements; city tunnel repairs; conduit repairs; Great Falls intake building improvements; Little Falls Pumping Station 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.

Impact on Operations:

Improvements to the appurtenant transmission and storage facility are not expected to have a significant 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% |



| FY 2015 Approved Life Budget |
|--|
| FY2015 Revised/FY2016 Approved Life Budget |
| Life Budget Increase/(Decrease) |

| et | 67,080,410 |
|----|------------|
| et | 67,930,115 |
| e) | 849,705 |
| | |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 23,786 | 2,064 | 2,028 | 4,020 | 2,788 | 4,527 | 3,766 | 4,961 | 4,853 | 7,025 | 8,112 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 23,786 | 2,064 | 2,028 | 4,020 | 2,788 | 4,527 | 3,766 | 4,961 | 4,853 | 7,025 | 8,112 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Washington Aqueduct **Program Title:** Washington Aqueduct

WAD128 Dalecarlia Water Treatment Plant Improvements **Project ID/Project Title:**

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

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: clearwell maintenance & improvements - 15 MG; chemical building electrical upgrades; east filter building renovation - phase 2; maintenance building renovation; intake building renovation; SCADA system upgrades; and west filter valve replacements. Future projects include: chemical system improvements; security improvements; visitors center exhibits; administration building improvements; backwash recovery facility improvements; basin number 3 and number 4; flocculation/sedimentation improvements; carbon facility tank renovations; GIS System; process improvements; roof replacements; south connection building renovation; wash water tank renovations; west filter building improvements; fuel line replacements; and roadway improvements.

Impact on Operations:

Improvements to the Dalecarlia WTP are not expected to have a significant impact on operating costs.

Effective Funding by User (percent):

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



FY 2015 Approved Life Budge FY2015 Revised/FY2016 Approved Life Budge

| FY 2015 Approved Life Budget | 65,913,420 |
|---------------------------------|------------|
| ed/FY2016 Approved Life Budget | 66,803,135 |
| Life Budget Increase/(Decrease) | 889,715 |

| Disbursements | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
|---------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|
| Budget | 28,754 | 5,739 | 3,585 | 5,599 | 4,780 | 3,042 | 4,599 | 3,983 | 3,679 | 2,100 | 942 | 0 |
| Commitments | Pre FY 2015 | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | Post FY 2024 |
| Budget | 28,754 | 5,739 | 3,585 | 5,599 | 4,780 | 3,042 | 4,599 | 3,983 | 3,679 | 2,100 | 942 | 0 |

(projected disbursements do not include contingencies)

FY 2015 - 2024 Capital Improvement Program

Service Area Title: Washington Aqueduct
Program Title: Washington Aqueduct

Project ID/Project Title: WAD130 Alternate Treatment Methods

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

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.

Effective Funding by User (percent): DC -100.00% **FY 2015 Approved Life Budget** 3,720,394 EPA/Fed -0.00% FY2015 Revised/FY2016 Approved Life Budget 3,715,946 WSSC -0.00% water is life Life Budget Increase/(Decrease) -4.448Fairfax -0.00% 0.00% Loudoun/PI -Disbursements Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 Post FY 2024 **Budget** 2.485 0 0 0 145 471 253 362 0 0 0 0 Commitments Pre FY 2015 FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 FY 2024 **Post FY 2024 Budget** 2.485 0 0 0 145 471 253 362 0 0 0 (projected disbursements do not include contingencies) (dollars in thousands)

| Project ID | Project Name | Page # |
|------------|---|---------|
| WAD121 | Basin Waste Recovery | IX - 5 |
| WAD122 | Dalecarlia Pumping Station | IX - 6 |
| WAD123 | Cabin John Bridge | IX - 7 |
| WAD126 | McMillian Water Treatment Plant Improvements | IX - 8 |
| WAD127 | Appurtenant Transmission and Storage Facilities | IX - 9 |
| WAD128 | Dalecarlia Water Treatment Plant Improvements | IX - 10 |
| WAD130 | Alternate Treatment Methods | IX - 11 |