



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

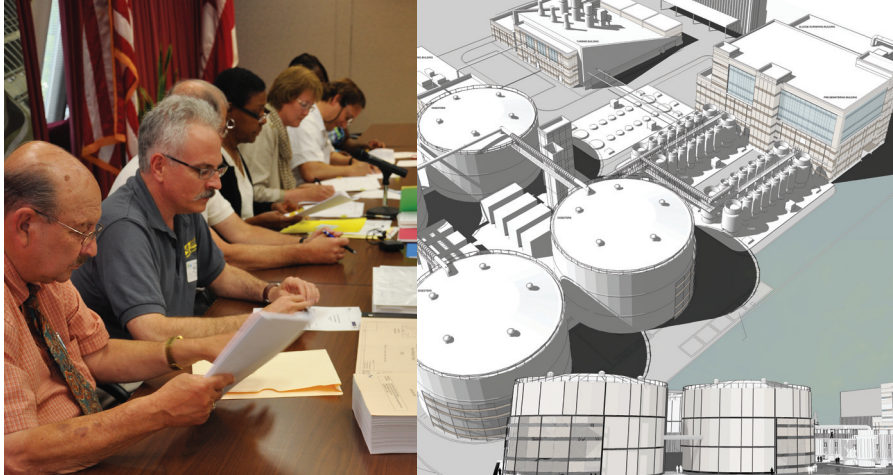
APPROVED FY **2011 – 2020**

Adopted January 5, 2012

William M. Walker, *Chairman of the Board*

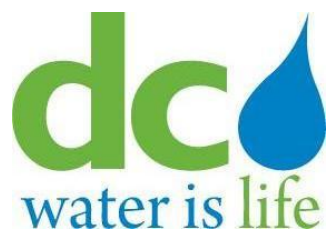
George S. Hawkins, *General Manager*

Olu Adebo, *Chief Financial Officer*



BUDGET IN SYNC:
ENVIRONMENT,
INNOVATION,
SERVICE and
ACCOUNTABILITY





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(As of January 5, 2012)

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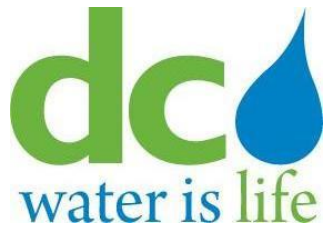
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ACKNOWLEDGEMENTS

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ACKNOWLEDGEMENTS

Finance and Budget Department

Gail Alexander-Reeves
Anil Bansal
Deborah Cole
Yvette Downs
Annie Fulton-George
Michael Goddard
Walter Goodwill
Rodea Hines
Robert Hunt
Stacey Johnson
Syed Khalil
Reginald Lipscomb
James Myers
Lola Oyeyemi
Yvonne Reid
Sylvia Riley
Suzette Stona
Pade Zuokemefa

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

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DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY **2011 – 2020**

SECTION I

CIP LETTER OF TRANSMITTAL



FY 2011 - FY 2020 CAPITAL IMPROVEMENT PROGRAM
LETTER OF TRANSMITTAL

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

January 5, 2012

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

We are pleased to transmit the District of Columbia Water and Sewer Authority's (DC Water) Capital Improvement Program (CIP) budget book as adopted by the DC Water Board of Directors at its regular meeting of January 5, 2012. These budgets are intended to meet the mandate provided for in District of Columbia Law 11-111, which specifies that "...the Board shall annually develop, adopt and submit to the Mayor, a multi-year financial plan for Capital and Operating expenses ..."

This book serves as a supplement to data contained in Section V of the Operating Book and provides more specific detail regarding each Service Area, including the specific projects that comprise each Program Area. We also provide Lifetime Budgets and annual disbursement estimates for the current planning period.

As shown in the table on the next page, this approved budget includes: \$3.8 billion for our FY 2011 – FY 2020 CIP (10-year disbursement budget); \$8 billion for lifetime budget; and \$606.1 million for new Capital Authority request. This CIP reflects the continuation of major capital asset investment in programs and projects that will improve the condition of our local waterways, create clean energy and reduce operating costs in future years. This CIP includes all mandated projects as well as rehabilitation of assets required to meet permit and other regulatory requirements and all service needs. Further, the plan implements most of the water and sanitary sewer investments adopted by the Board to replace the District's aging infrastructure. These replacements are scheduled to ramp up to the full approved plan by FY 2015 and additional projects will continue to be incorporated in future years as designated in the 2009 Facility Plans.

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

Program Area	10-Year Disbursements	Lifetime Budget	Capital Authority Request
Wastewater Treatment	1,363,882	2,676,308	277,007
Sanitary Sewer	457,223	855,199	88,795
Combined Sewer Overflow	1,184,694	2,675,295	124,734
Stormwater	16,284	58,511	2,683
Water System	596,282	1,452,615	91,894
Washington Aqueduct (DC Water Share)	107,144	203,138	10,848
Capital Equipment	98,662	98,307	10,129
Total	3,824,170	8,019,373	606,090

There are currently several process improvements in progress related to the in-sourcing of previously contracted work that could favorably impact future CIP programs including: Valve operations, small diameter watermain design, and repair and replacement of all fire hydrant work. Additionally, an evaluation is underway with a recommendation forthcoming for the development and implementation of an Asset Management Program. The implementation of such a program by other Utilities has been proven to reduce Capital as well as Operating costs after successful implementation. Currently, an additional \$1 billion in potential projects has been identified for consideration in future CIPs. It is anticipated that successful adoption of an Asset Management Program will enhance (I liked "better informed"-lb) our understanding of those future investment decisions.

During FY 2011, a number of major construction projects were begun at the Blue Plains Advance Waste Water Treatment Plant. In particular two major projects commenced for the Enhanced Nitrogen Removal Facilities (formerly BTN), as well as the start of construction for the Blue Plains Tunnel (which is a project within the DC Clean Rivers program), both of which are


mandated projects. Construction started on the New Digestion Facilities (Project XA) with the award of the Main Process Train (MPT) contract. During FY 2012 there will continue to be an escalation in activity at the Blue Plains site location. Also, many new technology investments were initiated to enhance service delivery such as an enhanced call center recording system and full utilization of field service management to deploy mobile computing in each service vehicle. Of the \$3.8 billion referenced above, it is estimated that forty three percent or \$1.7 billion will be disbursed in FY 2012, 2013 & 2014.

Also, with regards to the Sanitary Sewer Service Area, there are approximately \$180 million in sanitary collection sewer projects identified in the 10-year Capital Improvement Plan that transmit some flow from our wholesale customers. These are projects in planning or design exclusive of projects already under construction. D.C. Water has implemented a new hydrodynamic model to determine its wholesale customer's share of these projects. Accordingly, we have reached a preliminary agreement that the wholesale share of these projects totals approximately \$60 million; pending this agreement this portion was previously identified in the CIP as assigned to the District of Columbia ratepayers as a placeholder. The suburban share of these projects is consistent with the 1985 Inter Municipal Agreement (IMA) as well as the proposed new 2012 IMA.

Acknowledgements

Finally, we want to thank our General Manager, George S. Hawkins and the Chairman of the Board, William H. Walker, for their vision and leadership as we worked on the development and ultimate adoption of a new ten-year capital plan. Our CIP represents a large investment for the Washington Metropolitan Region and we appreciate the diligence and support given by these leaders and the full Board of Directors as DC Water takes the steps necessary to address its aging infrastructure. We also want to acknowledge all of the support from the hard working and dedicated professionals of DC Water for the thoroughness, hard work and long hours required to develop this capital plan for Board presentation, review and adoption. With this blueprint going forward, we will continue to support the delivery of clean water and sanitation through strategic capital investments while continuing our mantra of customer service excellence.

Sincerely,



Olu Adebo
Chief Financial Officer



Leonard Benson
Chief Engineer



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

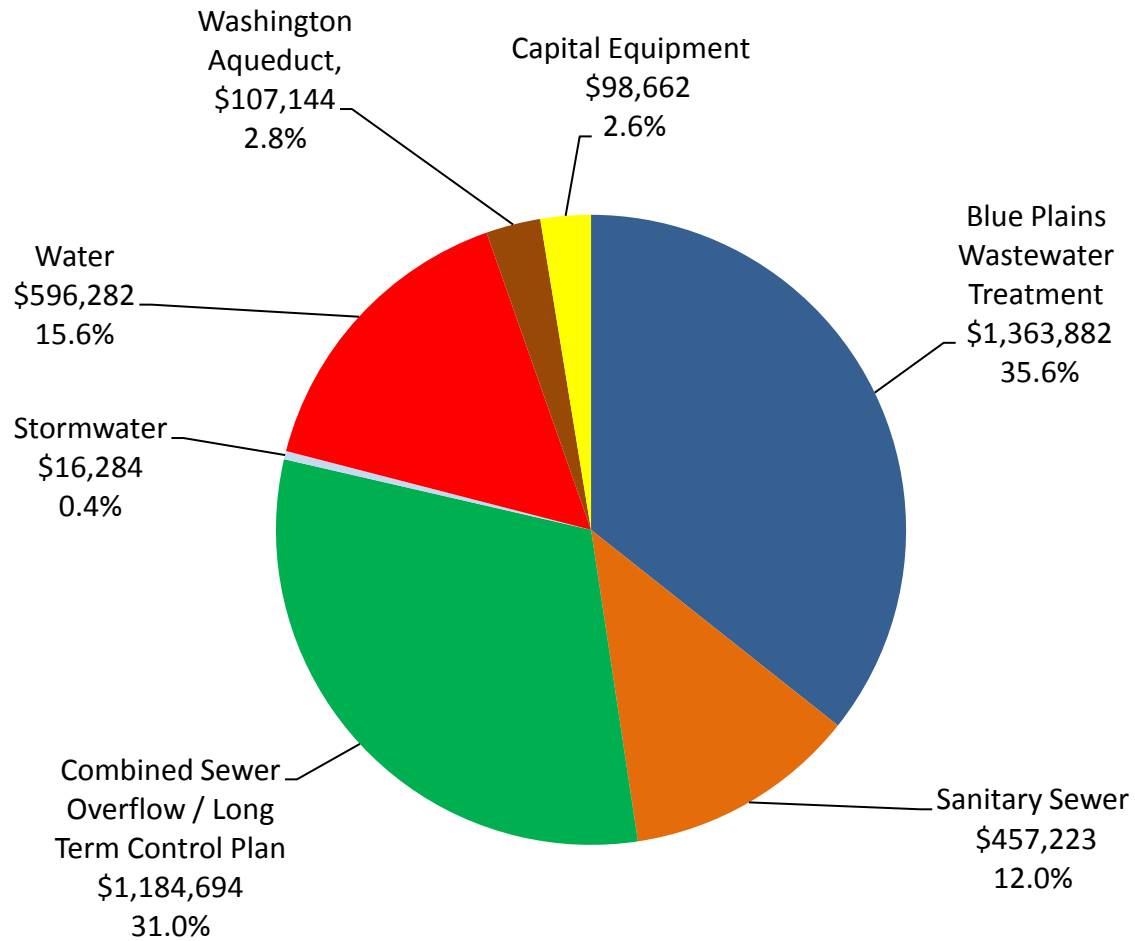
CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2011 – 2020

SECTION II

CAPITAL IMPROVEMENT PROJECTS OVERVIEW

**FY 2011 - FY 2020 Capital Improvement Program
(\$ in 000's)**



Total \$3.8 Billion (Cash Disbursements)

FY 2011 – FY 2020 CAPITAL IMPROVEMENT PROGRAM OVERVIEW

District of Columbia Water and Sewer Authority's ("DC Water") ten-year capital improvement program (CIP) totals \$3.8 billion (on a cash disbursements basis), approximately the same amount as the last two years, while the lifetime budget has increased modestly in this proposal by \$78.9 million to a total of \$8 billion. The Congressional capital authority request is \$606.1 million. As discussed in more detail later throughout this document, the total disbursements have remained relatively constant; there has been a shift in disbursements among the Service Areas. The Wastewater Treatment Area disbursements decreased by \$36.4 million over the ten year period primarily as a result of favorable construction bids for the Enhanced Nitrogen Removal Facilities Project (ENRF), (specifically Project E9), offset by an increase in the New Digestion Facilities (Project XA) related to the final dewatering aspect of this project. This decrease along with some nominal decreases in the Water, Stormwater, Capital Equipment and Washington Aqueduct areas were offset by increases in the Sanitary Sewer and CSO/Clean Rivers Project (aka CSO/LTCP) areas. These latter increases are mainly the result of the replacement of FY 2010 actual with FY 2020 projected disbursements. As mentioned in the Letter of Transmittal, there is approximately \$1 billion in projects which have been identified as prudent asset re-investments for DC Water, but have been deferred outside of the current 10-year planning period. Some of these projects may be introduced in the out years during future planning periods.

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

WASTEWATER TREATMENT

Although the lifetime budget for the Wastewater Treatment Service Area remains relatively the same at \$2.7 billion, there were some notable changes in both the Solids Processing Projects as well as the Enhanced Nitrogen Removal Facilities. With regards to the former, as indicated above, the New Digestion Facilities experienced an increase in the Lifetime Budget of \$34.1 million related to the final dewatering portion of this project. Also, as referenced above, we experienced some favorable bids for two construction contracts for Project E9 (Nitrogen Removal Facilities) allowing for a decrease in the Lifetime Budget of \$54 million.

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

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

Other long-term upgrade projects now under construction include:

- Nitrification-Denitrification Facilities Upgrade - to upgrade the process and/or replace equipment that is at the end of its useful life.
- Raw Wastewater Pump Station 1 - Upgrade to the Raw Wastewater Pump Station to replace equipment that is at the end of its useful life, and improve reliability.
- Process Control System – will provide automated monitoring and control for the nitrification-denitrification process that will improve treatment, control and optimize chemical and power costs, and increase reliability of the facilities.
- Biological Sludge Thickening Facilities- will upgrade the existing dissolved air floatation thickening units to restore integrity to this system and reduce sludge processing and chemical costs through improved efficiency.
- *Dual Purpose Rehabilitation (Project BG)* – 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 design, which is currently underway, will revise the operating conditions to dedicate four (4) basins to service the secondary treatment process and dedicate four (4) basins to service the enhanced nitrogen removal process. The design and construction will be combined with Project BI, Secondary Treatment Facilities Upgrade, ENR-N.

COMBINED SEWER OVERFLOW

The lifetime budget for the Combined Sewer Service Overflow (CSO) Service Area is \$2.6 billion, which includes the twenty-year DC Clean Rivers Project (CSO Long Term Control Plan). The current ten-year budget has an increase of approximately \$60 million over last year's budget due to additional projects added to the CSO program. The benefits of this plan are significant. When fully implemented, combined sewer overflows will be reduced by a projected 96 percent (98 percent on the Anacostia River), resulting in improved water quality. To date, overflows have already been reduced by nearly 40 percent due to various minimum control activities.

During Fiscal Year 2011 one of the largest contracts since the Authority was created was awarded under the DC Clean Rivers Project for construction of the Blue Plains Tunnel. This first major contract will support the reduction of sewer overflows as well as the enhanced nitrogen removal processes required by the recent permit limitations for the Blue Plains Wastewater Treatment plant. The contract is underway and the program is currently within budget. As has been noted over the past few years there are additional risks and contingencies associated with the 20-year DC Clean Rivers Project that exist and need to be evaluated over time. Given the long time frame of this project and the uncertainties associated with tunneling projects, we are continually monitoring the costs and risks with the expectation of updating the budget projections when certain milestones have been reached.

STORMWATER

The lifetime budget for the Stormwater Service Area is \$59 million, a decrease of \$3 million from last year primarily due to the cancellation of certain projects in this area. Over the past few years, extensive dialogue among stormwater task force members resulted in a better definition of roles, responsibilities and funding sources for the activities required to enhance DC stormwater management. The DC Department of the Environment (DDOE) entered into agreements with various offices to provide services in support of the District's MS4 permit in accordance with funding availability from the Enterprise Fund. DC Water provides for the maintenance and replacement of certain public facilities that convey stormwater runoff to the Anacostia and Potomac Rivers, Rock Creek, and other receiving streams within certain areas of the District of Columbia, specifically the areas of the District served by combined sewers. Various other agencies have responsibility for a variety of other stormwater activities. Discussion of other matters, such as the turnover of stormwater pumping facility maintenance and planned capital replacement of infrastructure in areas managed by the District under the MS4 permit continues. DDOE maintains the central responsibility for managing stormwater activities under the MS4 permit and has worked to coordinate with all agencies, the activities and funding mechanisms necessary to ensure full compliance.

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

SANITARY SEWER

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

materials such as brick and concrete, vitrified clay, reinforced concrete, ductile iron, plastic, steel, brick, cast iron, cast in place concrete, and even fiberglass.

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

Key Findings of the 2009 Sewer Facilities Plan:

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

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

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

The lifetime budget in this area has increased by \$20 million from last years estimate and the proposed 10-year CIP has also been increased by just over \$22 million as a result of the adding of FY 2020 and the dropping of FY 2010. Both of these amounts are expected to continue to increase in future years to reflect the ramping-up of this program through FY 2015 as recommended in the

facility plan. There is approximately \$232 million related to above referenced - - and already identified - - projects in the lifetime budget for this service area. The remaining amounts (about \$300 million) will be included in future requests as they are analyzed and prioritized with all other funding needed for all service areas.

Also, there are approximately \$180 million in sanitary collection sewer projects identified in the 10-year Capital Improvement Plan that transmit some flow from our wholesale customers. These are projects in planning or design exclusive of projects already under construction. D.C. Water has implemented a new hydrodynamic model to determine our wholesale customer's share of these projects. Accordingly, we have reached a preliminary agreement that their share of these projects totals approximately \$60 million; pending this agreement this portion was previously identified in the CIP as assigned to the District of Columbia ratepayers as a placeholder. The suburban share of these projects is consistent with the 1985 Inter Municipal Agreement (IMA) as well as the proposed new 2012 IMA.

WATER

The lifetime budget for the Water Service Area (including Meter Replacement / AMR installation) is \$1.5 billion, an increase of \$52.4 million from last year's CIP, even though the spending within the 10-year CIP timeframe show a slight decrease. This is primarily driven by the continuing ramping-up through FY 2015 of the Water Facility Plan that was completed in FY 2009 to achieve the replacement of one percent of the small diameter water main infrastructure per year.

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

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

WASHINGTON AQUEDUCT

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

The proposed lifetime budget for DC Water's share of Washington Aqueduct projects remains at \$203.1 million. The budget reflects the prioritized need for infrastructure improvements over the next ten years.

CAPITAL EQUIPMENT

DC Water's Capital Equipment budget totals approximately \$98.3 million for the FY 2011 – FY 2020 plan, a decrease of approximately \$5.6 million compared to the last ten-year plan. Approximately fifty-five percent of spending in the capital equipment area is on major information technology projects, including the document management system (\$3.2 million) and the asset management system (\$6.2 million). DC Water continues its commitment to scheduled replacement of its vehicle fleet with a ten year budget of \$12.2 million, representing more than twelve percent of the ten-year plan. Finally, maintenance of large equipment totals \$9.8 million or about ten percent of the ten-year plan. Other equipment including pumps, valves, meters and hydrants necessary for maintenance (including that of the District's public fire system) totals \$11.6 million.

The revised FY 2012 budget at \$15.3 million is \$1.2 million more than the currently approved budget. This variance is primarily attributable to increases in budgets for Fleet Management and Maintenance Services.

CIP DEVELOPMENT AND APPROVAL PROCESS

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

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

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

the District of Columbia's budget submission to Congress. DC Water's request for capital authority is ultimately made to and approved by the U.S. Congress.

DISBURSEMENTS AND PROJECT LIFETIME BUDGETS

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

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

CAPITAL AUTHORITY

As part of DC Water's enabling legislation, Congressional appropriation authority is required before any capital design or construction contract can be entered into. The FY 2013 request totals \$606.1 million, and reflects the following:

- Remaining authority from prior years' appropriations;
- Projected commitments in FY 2012 and FY 2013;
- Planned FY 2014 and FY 2015 commitments, to ensure adequate authority exists, in the event that any projects are accelerated.
- Risk allowance associated with the start of construction for the Blue Plains Tunnel

Due to the timing of the Congressional appropriations process, authority requests must be made well in advance of commitment execution. Including projected FY 2014 and FY 2015 commitments (a 24-month 'look ahead') allows us adequate flexibility to continue with contract commitments in the event that the U.S Congress delays budget approval and allows us to quickly accelerate or reprioritize projects into earlier years as approved by the Board. While this gives us flexibility to reprioritize projects, it should be

noted that such changes and execution of any contract still require General Manager's approval, with major projects and contracts requiring Board approval.

MAJOR ASSUMPTIONS

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

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

PROJECT PAGES

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

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

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

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

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

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

1A. Court Ordered, Stipulated Agreements, Etc.

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

2A. Health Safety

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

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

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

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

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

2D. High Profile, Good Neighbor Policy

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

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

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

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

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

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

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

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

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.

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

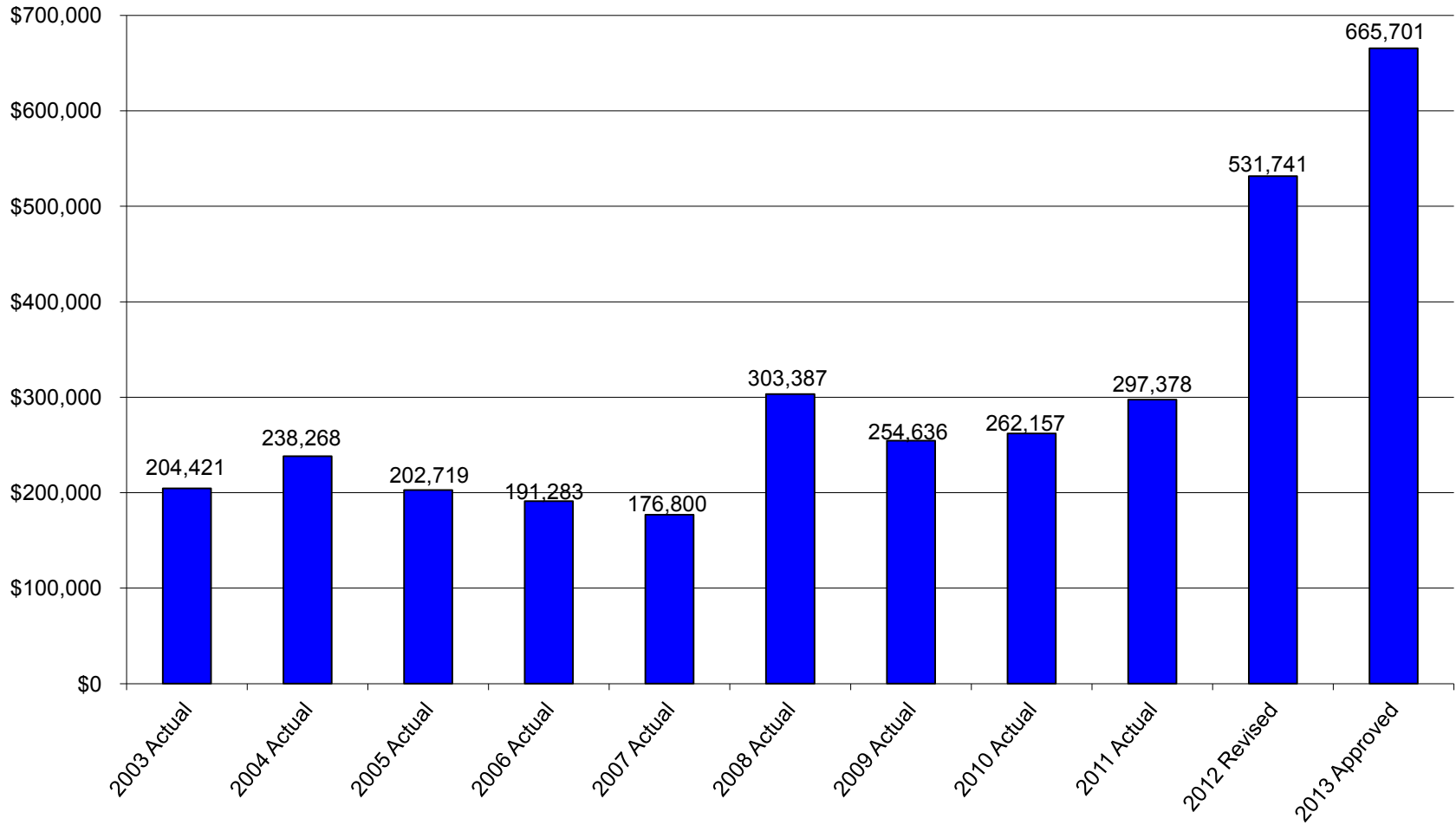
Disbursements / Commitments Budgets – projected disbursements and commitments for various projects are shown by fiscal year in which they are anticipated. Commitments budgets are based on total project budgets, which reflect the fully loaded, anticipated costs of a project, including project contingencies.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

CAPITALIZATION POLICY

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

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

Historical and Projected Capital Spending
FY 2003 - FY 2013
(\$ in 000's)



FY 2011 - FY 2020 PROJECTED CAPITAL IMPROVEMENT PLAN (CIP) - DISBURSEMENTS BASIS (\$ in 000's)

	FY 2011 Actuals	FY 2012 Revised	FY 2013 Approved	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total FY '11 -'20
Wastewater Treatment											
Liquid Processing Projects	\$11,080	\$23,263	\$35,371	\$18,756	\$7,578	\$5,010	\$12,074	\$8,300	\$7,428	\$992	\$129,851
Plantwide Projects	17,067	18,018	18,645	13,788	5,992	3,204	3,894	12,140	6,741	1,468	100,957
Solids Processing Projects	48,822	119,294	194,973	71,080	15,734	6,467	2,851	355	1	-	459,576
Enhanced Nitrogen Removal Facilities (formerly BTN - Total Nitrogen Program)	48,910	115,269	129,660	105,690	81,495	89,399	77,104	21,430	2,652	1,890	673,498
Sub-total	125,879	275,844	378,649	209,313	110,799	104,080	95,923	42,224	16,822	4,350	1,363,882
Sanitary Sewer											
Sanitary Collection Sewers	1,674	2,140	6,174	11,611	8,873	3,924	5,690	7,268	7,766	7,725	62,844
Sanitary On-Going Projects	7,171	16,081	15,694	6,795	7,075	7,659	7,865	8,138	8,590	9,229	94,298
Sanitary Pumping Facilities	424	659	636	696	37	-	-	-	-	-	2,452
Sanitary Sewer Projects Program Management	3,488	6,880	4,454	6,189	6,821	6,630	6,748	7,790	6,633	5,160	60,794
Sanitary Interceptor/Trunk Force Sewers	11,737	14,162	18,422	31,488	41,529	26,354	20,983	32,732	21,431	17,997	236,834
Sub-total	24,494	39,922	45,381	56,779	64,335	44,567	41,286	55,928	44,419	40,110	457,223
Combined Sewer Overflow / Long Term Control Plan											
CSO Program Management	1,089	1,590	1,533	2,272	1,840	1,555	1,593	2,181	2,645	2,105	18,402
Combined Sewer Projects:Nine Minimum Controls	35,368	6,971	2,021	309	12	4	-	-	-	-	44,685
Combined Sewer Projects:Others	-	7,533	8,611	17,071	16,186	18,109	12,030	9,550	9,644	12,476	111,210
D.C. Clean Rivers Project (aka Long-Term Control Plan)											
Anacostia Tunnel	39,744	114,366	138,668	91,726	143,635	132,510	122,307	36,237	53,200	83,986	956,379
Potomac Tunnel	1,086	1,270	961	309	1,533	5,132	5,233	8,412	11,639	12,028	47,603
Rock Creek Tunnel	584	286	227	71	-	232	771	800	1,417	2,026	6,414
Sub-total	77,872	132,016	152,021	111,758	163,206	157,542	141,934	57,180	78,545	112,621	1,184,694
Stormwater											
Stormwater Local Drainage	-	17	104	69	65	83	92	95	98	93	715
Stormwater On-Going Program	105	731	452	468	464	512	465	483	522	199	4,400
Stormwater Pumping Facilities	-	-	-	-	-	-	-	-	-	-	-
DDOT Stormwater Program	-	2	8	9	19	18	18	10	10	-	93
Stormwater Research and Program Management	836	499	250	238	193	163	162	222	270	214	3,047
Stormwater Trunk/Force Sewers	1,219	1,527	3,462	1,762	60	-	-	-	-	-	8,029
Sub-total	2,160	2,775	4,276	2,545	801	775	737	810	900	506	16,284
Water											
Water Distribution Systems	21,542	23,024	28,404	31,809	29,435	29,239	33,925	33,316	32,933	42,819	306,448
Water On-Going Projects	8,811	8,239	6,681	5,994	6,188	6,364	7,508	6,548	7,159	6,851	70,343
Water Pumping Facilities	1,778	5,327	6,273	7,921	3,375	1,373	3,168	7,062	-	84	36,361
DDOT Water Projects	3,740	4,002	5,613	6,583	4,616	4,906	5,126	5,730	5,808	7,857	53,982
Water Storage Facilities	1,275	2,083	4,221	7,860	5,748	6,946	4,264	4,122	3,192	1,997	41,710
Water Projects Program Management	4,357	4,109	4,081	3,242	3,870	3,672	3,669	3,726	3,748	2,175	36,649
Water Lead Program	2,611	4,801	2,372	2,077	2,246	2,414	2,528	2,627	-	-	21,676
Meter Replacement /AMR Installation	2,784	2,876	1,790	1,332	3,166	3,205	3,385	3,330	3,774	3,472	29,114
Sub-total	46,898	54,461	59,436	66,820	58,643	58,121	63,572	66,461	56,614	65,255	596,282
Washington Aqueduct	9,490	11,373	10,598	10,744	11,016	11,280	11,588	10,891	10,323	9,842	107,144
Capital Equipment	10,585	15,349	15,341	12,384	9,173	7,278	7,348	7,648	6,778	6,778	98,662
Total FY 2013 DC Water CIP	\$297,378	\$531,741	\$665,701	\$470,343	\$417,972	\$383,644	\$362,387	\$241,142	\$214,401	\$239,462	\$3,824,170

FY 2011 - FY 2020 Capital Improvement Plan

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

	FY 2012 Approved	FY 2012 Revised / FY 2013 Approved	Variance
<u>Wastewater Treatment</u>			
Liquid Processing Projects	612,749	622,106	9,357
Plantwide Projects	337,671	345,887	8,216
Solids Processing Projects	688,806	719,537	30,731
Enhanced Nitrogen Removal Facilities <i>(formerly BTN - Total Nitrogen Program)</i>	1,024,855	988,778	(36,077)
Sub-total	2,664,081	2,676,308	12,227
<u>Sanitary Sewer</u>			
Sanitary Collection Sewers	133,906	133,906	0
Sanitary On-Going Projects	142,067	159,677	17,610
Sanitary Pumping Facilities	25,898	25,898	-
Sanitary Sewer Projects Program Management	103,150	103,135	(15)
Sanitary Interceptor/Trunk Force Sewers	430,144	432,583	2,439
Sub-total	835,165	855,199	20,034
<u>Combined Sewer Overflow</u>			
CSO Program Management	55,239	55,239	-
Combined Sewer Projects: Nine Minimum Controls	215,387	213,888	(1,499)
Combined Sewer Projects: Others	240,013	244,844	4,831
Clean Rivers Project <i>(aka Long-Term Control Plan)</i>			
Anacostia Tunnel	1,672,282	1,672,282	-
Potomac Tunnel	418,700	418,700	-
Rock Creek Tunnel	70,342	70,342	-
Sub-total	2,671,963	2,675,295	3,332
<u>Stormwater</u>			
Stormwater Extensions/Local Drainage	17,999	17,999	0
Stormwater On-Going Program	9,658	9,658	0
Stormwater Pumping Facilities	0	0	-
DDOT Stormwater Program	5,066	4,720	(346)
Stormwater Projects Program Management	10,630	10,630	-
Stormwater Trunk/Force Sewers	18,605	15,504	(3,101)
Sub-total	61,958	58,511	(3,447)

FY 2011 - FY 2020 Capital Improvement Plan

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

	<u>FY 2012 Approved</u>	<u>FY 2012 Revised / FY 2013 Approved</u>	<u>Variance</u>
<u>Water</u>			
Water Distribution Systems	666,933	695,720	28,787
Water Lead Program	191,000	191,040	40
Water On-Going Projects	112,121	117,541	5,420
Water Pumping Facilities	150,149	161,372	11,223
DDOT Water Projects	95,892	91,538	(4,354)
Water Storage Facilities	71,862	74,311	2,449
Water Projects Program Management	51,107	47,559	(3,548)
Meter Replacement /AMR Installation	61,151	73,534	12,383
Sub-total	<u>1,400,215</u>	<u>1,452,615</u>	<u>52,400</u>
Washington Aqueduct	203,138	203,138	0
Capital Equipment	<u>103,906</u>	<u>98,307</u>	<u>(5,599)</u>
Total DC Water CIP Lifetime (see notes)	<u><u>7,940,426</u></u>	<u><u>8,019,373</u></u>	<u><u>78,947</u></u>

Notes:

1 Lifetime budgets shown here represent total budgets for projects that are active during the current 10-year CIP. Lifetime budgets include historical spending prior to the beginning of the current 10-year plan, spending during the 10-year plan, and projected spending beyond the current 10-year plan. Projects completed in FY 2011 will be dropped from the CIP next year.

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

**Fiscal Year 2013 Capital Authority Request
(\$ 000's)**

**Fiscal Year 2013
*Capital Authority Request**

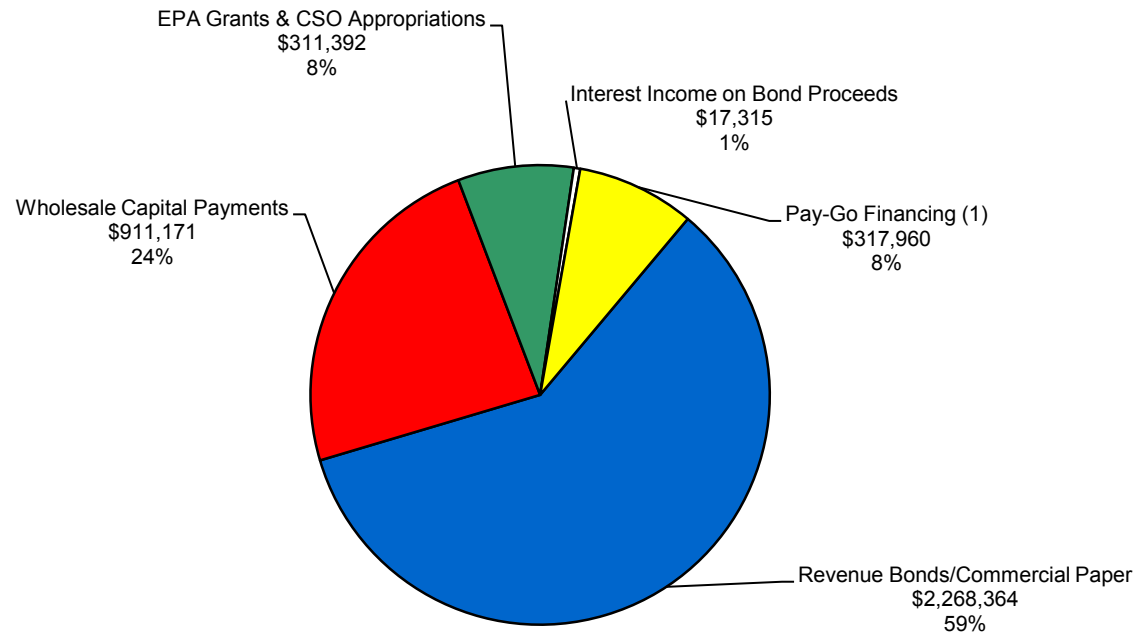
Service Areas

Blue Plains Wastewater Treatment	1	\$277,007
Sanitary Sewer System		88,795
Combined Sewer Overflow	1	124,734
Stormwater		2,683
Water System		91,894
Washington Aqueduct (DC Water share)		10,848
Capital Equipment		<u>10,129</u>
	Total	<u><u>\$606,090</u></u>

* The authority request includes a 24 month look-ahead, i.e., it also takes into account projected commitments for FY 2014 and FY 2015.

¹ Includes Special Risk Allowance of \$20 million, and \$122 million for Enhanced Nitrogen Removal (formerly Total Nitrogen - "BTN"), and Clean Rivers (aka Term Control Plan - "LTCP") Programs, respectively, although not part of their Lifetime Budgets.

FY 2011 - 2020 CAPITAL IMPROVEMENT PROGRAM
Sources of Funds
(\$000's)



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

(2) Pay-go financing is any funds available after funding the greater of 120 day or 125.5million operating and maintenance reserve, approximately \$125.5million in FY 2012. These transfers reduce the amount of new debt issuance.

List of New Projects

Project I.D.	Project Title	Service Area	Budgeted Cost
HS	Rehabilitation of Influent Sewers	Sanitary Sewer	\$3,000,000
JI	FY2020 - DSS Sanitary Sewer Projects	Sanitary Sewer	12,568,000
JQ	Hydraulic Protection Project	Sanitary Sewer	1,723,000
IX	Headworks HVAC Rehab	Wastewater	366,000
JY	IT - Data Center	Wastewater	3,335,175
J7	Small Diameter Water Main Rehabilitation 17	Water	36,250,000
J8	FY2020 - DDOT Water Projects	Water	10,400,000
JA	FY2020 - DWS Water Projects	Water	9,955,000
JB	Bryant Street PS Improvements - Phase II	Water	2,800,000
JJ	Bryant Street PS Improvements - Phase III	Water	6,100,000
			\$86,497,175

List of Closed / Dropped Projects

Project I.D.	Project Title	Service Area	Cost at Completion
Closed Projects			
P1	FY2000 - DDOT STORMWATER PROJECTS	Stormwater	\$409,709
P2	FY2001 - DDOT STORMWATER PROJECTS	Stormwater	607,789
P3	FY2002 - DDOT STORMWATER PROJECTS	Stormwater	119,639
P4	FY2003 - DDOT STORMWATER PROJECTS	Stormwater	-
H1	MWCOG Budget Items	Wastewater	39,499
AS	FY2009 - DDOT Water Projects	Water	92,152
MT	Small Diameter Watermain Rehab. (1)	Water	11,653,488
MY	Elim. Dead Ends (Contract 3 & 4)	Water	7,693,453
			\$20,615,729
Dropped Projects			
A3	16 inch Tie-in to McMilliam Plant	Water	\$2,745,275
E3	FY 2003 - DWS Water Projects	Water	7,637,639
R1	FY2000 - DDOT Water Projects	Water	1,259,221
R2	FY2001 - DDOT Water Projects	Water	1,078,874
R3	FY2002 - DDOT Water Projects	Water	2,550,092
R4	FY2003 - DDOT Water Projects	Water	4,241,277
R5	FY2004 - DDOT Water Projects	Water	653,266
R6	FY2005 - DDOT Water Projects	Water	452,844
R7	FY2006 - DDOT Water Projects	Water	38,532
R8	FY2007 - DDOT Water Projects	Water	4,214,954
R9	FY2008 - DDOT Water Projects	Water	265,061
DB	Sewer Services Field Facility & Relocation	Sanitary Sewer	446,197
			\$25,583,232



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2011 – 2020

SECTION III

**WASTEWATER TREATMENT
SERVICE AREA**

WASTEWATER TREATMENT

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

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

Overview of the Wastewater Treatment Process

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

The lifetime budget for the Wastewater Treatment Service Area is \$2.7 billion dollars, an increase of \$12.2 million from last year's budget. As described in more detail below, capital projects in the Wastewater Treatment Service Area are required to rehabilitate, upgrade or provide new facilities at Blue Plains to ensure that it can reliably meet its NPDES permit requirements and produce a consistent, high-quality dewatered solids product for land application. A significant portion of the lifetime budget is comprised of projects in the Blue Plains Enhanced Nitrogen Removal Facilities (formerly BTN – Total Nitrogen Program), which provides for projects necessary to meet the stringent total nitrogen discharge limit in the NPDES permit. The permit stipulates that improvements to the existing nitrogen removal facilities be placed in operation no later than July 14, 2014.

Five liquid treatment processes (preliminary, primary, secondary, nitrification-denitrification, and filtration) comprise the liquid treatment processes at Blue Plains. The first phases of upgrades to four (of the five) liquid treatment processes are now in service. In tandem with the placing of these facilities in service, the process control system has also been implemented to enable monitoring and control of the upgraded equipment and systems, thus allowing DC Water to achieve greater process control and treatment efficiency and also yielding operating cost control.

Projects Currently Under Construction

- Nitrification-Denitrification Facilities Electrical Upgrade (BR) – This project entails upgrading the existing electrical infrastructure that serves the nitrification-denitrification facilities. Construction began in FY2011.
- Area Substation No. 6 and Miscellaneous Switchgear Upgrades (Projects EV) - This project involves construction of a new electrical substation, Area Substation No. 6, for the Enhanced Nitrogen Removal Facilities and the Digester Project as well as upgrades to existing electrical switchgear which are past their useful life. The construction contract is underway.
- Biological Sludge Thickening Facilities (XB) - Construction is underway to upgrade the existing dissolved air floatation thickening units to restore integrity to this system, and reduce sludge processing and chemical costs through improved efficiency.
- Filtration and Disinfection Facilities Upgrade Phase II (BT) – This project provides upgraded electrical infrastructure that serves the Filtration and Disinfection Facilities. This project includes construction of a new building to house the electrical switchgear. Construction began in FY2011.
- Laboratory Rehabilitation (CV) – Construction is currently underway to rehabilitate the laboratory on the Blue Plains site, which provides analyses for permit compliance, process optimization and long-range planning.
- Enhanced Nitrogen Removal Facilities (E9) – The Enhanced Nitrogen Removal Facilities will expand the existing nitrification and denitrification process to remove additional nitrogen from the wastewater prior to discharge to the Potomac River in compliance with permit requirements. Two construction contracts are underway for this project and both are scheduled to be complete prior to FY2015.

Liquid Processing Program – \$622.1 million

(project pages III-9 to III-26)

Projects in this program area encompass upgrading and rehabilitating facilities involved in handling flows from the sanitary and combined sewer systems. These flows progress sequentially through the plant processes to ultimate discharge of the treated effluent into the Potomac River. Liquid treatment systems include headworks facilities that screen and pump the wastewater flows, grit facilities that remove sand and grit particles, primary treatment facilities that remove solids by sedimentation, secondary treatment facilities that remove organic pollutants using a biological process, nitrification/denitrification facilities that remove nitrogen using a biological process, and effluent filtration, disinfection, and dechlorination facilities.

Major projects under this program that are substantially complete include:

- *Grit Chamber Facilities Upgrade (Project TF) \$70.3 million* – This project is for the construction of an automated, continuous grit removal system consisting of sixteen chambers in all. Impact on operations include the elimination of current manual cleaning of each grit tank and lowered maintenance costs of tanks and pumps due to reduced grit load into downstream processes. While all of the grit collection bridges and grit conveyance systems are in operation, a new heating system for Grit Chamber Building No.1, that meets the current low emissions regulations, will be constructed.
- *Influent Screen Facility (Project TM) \$39.1 million* – This project has provided for the installation of fine screens as a preliminary treatment step in the wastewater process. The fine screening removes rags and other debris from the wastewater and thereby improves treatment processes and protects equipment.
- *Primary Treatment Facility (Project TN) \$38.7 million* – This project entails replacing the clarifier mechanism in the primary sedimentation tanks. As a result, the primary treatment process has been removing additional suspended solids from the wastewater.
- *Secondary Treatment Facility (Project TO) \$70.6 million* - – This project entailed replacing sludge and scum collection equipment and rebuilding deteriorated portions of the concrete sedimentation basins in the East and West Secondary Treatment Process.
- *Raw Wastewater Pumping Station 1 Upgrade (Project UD) \$15.4 million* – This project will rehabilitate pumping equipment and appurtenances in one of the two stations that pump incoming wastewater into the plant.
- *Biological Nutrient Removal (Project TK & TQ) \$143.0 million* – Project TK is combined with Project TQ in a single construction contract to demonstrate and implement Biological Nitrogen Removal capability in order to meet the goals of the Chesapeake Bay Agreement; that is, to meet a total nitrogen discharge goal of 7.5 mg/l. This upgrade will provide for better flow distribution to the reactors and better process control within the reactors, methanol feed control, and rehabilitation and upgrade of nitrification sedimentation basins. While this project alone will not enable DC Water to meet its new total nitrogen limit of 4.2 mg/l, it will continue to remove a significant portion of nitrogen from the wastewater, provide better process control and optimize methanol feed.
- *Filtration and Disinfection Facilities Upgrade (Project UC) \$73.6 million* – Replacement of existing filter media and the addition of an air/water backwash system and improvements to pump operation will result in reduced power usage and treatment costs due to reduced backwash water usage. A portion of the work was designed and bid ahead of the rest of the project to expedite the full rehabilitation of the facility, which had experienced filter failures. The first contract, completed in FY 2007, restored all the filters to operability with new filter underdrains and media. The second contract, completed in FY 2011, provided a new air-water wash system and improved backwashing controls and instrumentation. Now that the process facility is robust due to the replacement of existing equipment with new equipment and improved process systems, the filter influent channels will be lined to prevent leaking over the long-term.

Major projects under this program that are now underway include:

- *Dual Purpose Rehabilitation (Project BG) \$21.1 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 design, which is currently underway, will revise the operating conditions to dedicate four (4) basins to service the secondary treatment process and dedicate four (4) basins to service the enhanced

nitrogen removal process. The design and construction will be combined with Project BI, Secondary Treatment Facilities Upgrade, ENR-N.

- *Nitrification/Denitrification Facilities Upgrade (Project BR) \$64.8 million* – This project includes major electrical rehabilitation of the entire facility, major HVAC and plumbing upgrade for all buildings and galleries, and architectural rehabilitation of the Nitrification Blower Building, Control Buildings, and Electrical Buildings. Benefits of this project include lower maintenance and energy costs due to improved efficiency. The construction contract for the electrical upgrade was issued in FY 2011. Also, included in this project is rehabilitation of the nitrification return sludge line, which is scheduled over the next couple of years and will be coordinated with construction of the Enhanced Nitrogen Removal Facilities.
- *Filtration/Disinfection Facility Phase II (Project BT) \$18.3 million* – This project is an upgrade to major electrical equipment serving the Filtration/ Disinfection Facility. Construction began in FY 2011.
- *Headworks HVAC Rehabilitation (Project IX) \$0.4 million* – The heating, air conditioning and ventilation systems (HVAC) systems in the headworks are in need of upgrades to improve the condition of the air in the influent pump stations and preliminary treatment buildings at Blue Plains. The project is initially funded to perform investigations and provide recommendations and additional capital budget will be required in the future to implement the recommendations.

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

- *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.
- *Raw Wastewater Pump Station 2 (Project BV) \$27.5 million* – An upgrade to the Raw Wastewater Pump Station is required to replace equipment that is at the end of its useful life and to improve reliability. This project is scheduled to begin in FY 2013.

Plantwide Facilities Program – \$345.9 million

(project pages III-27 to III-52)

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

Major projects under this program that are substantially complete include:

- *Process Control and Computer System - Phases 1, 2 and 3 (Project TA) \$63.9 million* – This system allows for automation of a significant number of plant processes at Blue Plains, and better management of processes that are currently manually

monitored. Operating savings have been realized from lowered chemical usage and electricity consumption, by minimizing peak demand, as well as lower staffing levels. This project is critical to achieving the goals presented in the Blue Plains Internal Improvement Plan. The new system is being implemented in three phases – Phase I which began with the screens, grit chambers, primary and secondary treatment facilities, and dewatering processes, is substantially complete. Phase II will include nitrification, filtration, and disinfection facilities, and Phase III will add the solids processing facilities. Construction on the project began in August 2002 and is almost complete.

- *Additional Chemical Systems (Project TC) \$74.1 million* – This project provided centralized chemical storage and feed facilities at Blue Plains.

Major projects under this program that are now underway include:

- *Instrumentation and Control Engineering Program Management (Project GP) \$16.2 million* - This project would ensure that new projects, from design through construction, are properly coordinated with DC Water standards for I&C and Electrical and properly interfaced into the plant control system. The project includes programming of the plant control system as well as reviewing design documents and coordinating control strategies between designers and operations.
- *Central Operations Facility Renovations (Project AZ) - \$17.2 million* – This project includes several contracts to upgrade space and building systems in the Central Operations Facility. Examples of contracts include an upgrade to the data center, office space renovation, and rehabilitation of heating, ventilation of air conditioning systems.
- *Electrical Power System – Switchgear (Project TZ) \$37.2 million* – The electrical power system at Blue Plains is comprised of area sub stations that feed unit substations throughout the facility. This project includes several projects to upgrade electrical switchgear and appurtenances that have reached the end of their useful lives and/or to replace equipment for which parts are obsolete.

Solids Processing Program – \$719.5 million

(project pages III-53 to III-62)

Biosolids processing involves reductions in volume along with treatment to meet applicable federal, state and local requirements for the ultimate disposal method. Treatment is provided by a system of processing facilities that include gravity thickening of primary sludge, floatation thickening of the biological waste sludges produced by the secondary and nitrification/denitrification processes, dewatering by centrifuge and lime stabilization. Dewatered-stabilized biosolids are conveyed to the Dewatered Sludge Loading Facility, from which the biosolids are loaded into tractor-trailers and hauled offsite for beneficial reuse. Examples of beneficial reuse are land application, silviculture, and land reclamation. Solids processing facilities are required to produce a biosolids product that can be reused or disposed of in an economical and environmentally acceptable manner.

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

Wastewater Treatment Plant that can produce a diverse Class A biosolids product, significantly reduce lime use and enhance land application.

The updated BMP includes construction of four Cambi thermal hydrolysis trains, four digesters, new dewatering equipment and a combined heat and power plant. This plan has the potential to significantly manage biosolids operating costs when it is placed in operation as it produces power from digester gas to meet over one third of DC Water's electric demand at Blue Plains. The digestion process will eliminate nearly one half of the biosolids, which will result in lower reuse costs. However, results of the Belt Filter Press (BFP) pilot testing have highlighted a number of requirements and additional work necessary for the Final Dewatering Facility. This requires additional ancillary equipment and additional building space to accommodate the equipment, thus resulting in an increased lifetime budget. As procurements are finalized and additional knowledge of operating processes are finalized, we will review the impact of all revised assumptions on the operating costs and benefits.

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

Major projects under this program that are substantially complete include:

- *Gravity Thickeners (Project TP) \$20.0 million* – This project has rehabilitated gravity thickeners 1-4.
- *Additional Dewatering Facilities (Project XC) \$81.7 million* – This project provides new centrifuges to expand the dewatering capacity and efficiency of solids processing at Blue Plains.

Major projects underway in this program include:

- *New Digestion Facilities (Project XA) \$475.5 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.
- *Biological Sludge Thickening Facilities (Project XB) \$48.1 million* - This project will upgrade the existing dissolved air floatation thickening units. Improvements are expected to reduce sludge processing and chemical costs through improved efficiency. The construction contract for this project began in FY 2009 and construction is underway.
- *Gravity Thickening Upgrade (Project BX) \$15.5 million* – This project will demolish Thickener Units 5 and 6 and provide a major upgrade to Thickener Units 7 to 10, including collector mechanisms, thickened sludge pumps, and scum pumps. Concept Design began in FY2011.

Enhanced Nitrogen Removal Facilities – \$988.8 million

(project pages III-63 to III-71)

This program provides for new facilities and upgrades to existing facilities needed at Blue Plains to meet the total nitrogen discharge limit that has been included in DC Water's 2010 NPDES permit. Projects included in the Blue Plains Enhanced Nitrogen Removal Facilities (ENRF) were identified through a strategic planning process that resulted in development of DC Water's proposed Total

Nitrogen -Wet Weather (TN/WW) Plan, which addresses the requirements of the Clean Rivers Project (aka Long Term Control Plan) as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The recommended alternative in the plan requires removal of additional nitrogen from the wastewater prior to discharge, and improves the quality of discharge to the Potomac and Anacostia Rivers during wet weather events. All projects in this program are in the construction, planning or design phase.

- *Enhanced Nitrogen Removal- North (Project BI) \$59.8 million* (formerly named *Plantwide Fine Bubble Aeration System in the Plantwide Program Area*). This project involves replacing the existing coarse bubble diffusers in the secondary treatment aeration system with a more efficient system. In addition to a more efficient process, this project will result in an overall savings in energy consumption. A project design engineer has investigated the upgrades required to the system and determined that to meet the new stringent discharge limit for total nitrogen from Blue Plains, upgrades in addition to the improvements to the aeration system are required for the secondary treatment process. Detailed design began in FY 2011.
- *Enhanced Clarification Facilities - (Project E8) \$247.0 million* – The principal components of this project are grit removal and screening for influent wastewater followed by an enhanced clarification facility. The new facilities will treat excess flow during wet weather events resulting in improved water quality of the excess flow discharge. Preliminary planning has begun on this project as it relates to site planning needs at Blue Plains.
- *Enhanced Nitrogen Removal Facilities (Project E9) \$291.6 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.
- *Centrate Treatment Facilities – (Project EE) \$92.4 million* - This project provides for the treatment of recycle streams from the sludge dewatering process. Digestion of sludge, which results in a greatly reduced volume of sludge, also results in a high concentration of ammonia in the centrate from the dewatering process. This high concentration of ammonia has the potential to overload the nitrogen removal processes. In FY 2011, DC Water investigated several design concepts for this project and selected deammonification as the most cost-effective and reliable method to provide separate treatment of the centrate recycle stream. Detail design is scheduled to begin in FY 2012.
- *Wet Weather Mitigation, Diversion at Bolling and Tunnel Dewatering Pump Station – (Projects EG, FR, H7 and FS) \$238.1 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.

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: A2 - Liquid Processing Program Management
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2014

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 - 41.51%
 EPA/Fed - 0.00%
 WSSC - 45.61%
 Fairfax - 8.34%
 Loudoun/PI - 4.54%



FY2011 Approved Life Budget	14,368,222
FY2012 Revised/FY2013 Approved Life Budget	13,491,123
Increase/(Decrease) to Approved Life Budget:	-877,099

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	6,607	1,389	2,638	1,614	0	0	0	0	0	0	0
Commitments Budget	7,291	5,100	0	1,100	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: BG - Dual Purpose Rehabilitation
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jul 2011
Construction:	Sep 2011
Project Completion:	Apr 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	20,871,445
FY2012 Revised/FY2013 Approved Life Budget	21,091,668
Increase/(Decrease) to Approved Life Budget:	220,223

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,530	4,993	1,738	3,717	2,219	161	0	0	0	0	0
Commitments Budget	10,334	50	10,707	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: BP - Grit Chamber Facilities Phase II
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2015
Construction:	Mar 2017
Project Completion:	Oct 2019

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%



FY2011 Approved Life Budget	5,434,000
FY2012 Revised/FY2013 Approved Life Budget	5,434,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	60	334	1,586	1,761	24	0	0
Commitments Budget	0	0	0	0	427	152	4,856	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: BQ - Primary Treatment Facilities Ph II
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jun 2015
Construction:	Mar 2018
Project Completion:	Jan 2021

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%



FY2011 Approved Life Budget	14,625,000
FY2012 Revised/FY2013 Approved Life Budget	14,625,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	58	461	607	1,871	7,070	992	14
Commitments Budget	0	0	0	0	1,200	0	360	13,065	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: BR - Nitrification/Denitrification Fac
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Aug 2007
Construction:	Mar 2009
Project Completion:	Jun 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 40.41%
 EPA/Fed - 0.00%
 WSSC - 44.94%
 Fairfax - 8.22%
 Loudoun/PI - 4.47%



FY2011 Approved Life Budget	59,494,112
FY2012 Revised/FY2013 Approved Life Budget	64,771,768
Increase/(Decrease) to Approved Life Budget:	5,277,656

	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
Disbursements Budget	8,645	7,279	18,658	9,946	4,399	549	0	0	0	0	0
Commitments Budget	37,985	26,686	100	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: BT - Filtration/Disinfection Fac PH II
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2009
Construction:	Apr 2011
Project Completion:	Dec 2014

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 - 34.84%
 EPA/Fed - 6.38%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.56%



FY2011 Approved Life Budget	18,060,088
FY2012 Revised/FY2013 Approved Life Budget	18,250,039
Increase/(Decrease) to Approved Life Budget:	189,951

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,969	5,582	3,202	399	20	0	0	0	0	0	0
Commitments Budget	18,152	16	83	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: BV - RWWPS No. 2 Upgrades
 Managing Department: Engineering and Technical Services **EPMC: NRPM**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	May 2013
Construction:	Dec 2015
Project Completion:	Sep 2019

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	27,522,000
FY2012 Revised/FY2013 Approved Life Budget	27,522,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	204	1,095	676	3,505	9,880	4,668	334	0	0
Commitments Budget	0	0	2,530	100	131	24,761	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

Phase	Start Date
Design:	
Construction:	
Project Completion:	Mar 2014

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	3,796,091
FY2012 Revised/FY2013 Approved Life Budget	4,101,235
Increase/(Decrease) to Approved Life Budget:	305,144

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,246	954	355	78	0	0	0	0	0	0	0
Commitments Budget	3,676	425	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: IX - Headworks HVAC Rehab
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Jan 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	
FY2012 Revised/FY2013 Approved Life Budget	366,000
Increase/(Decrease) to Approved Life Budget:	366,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	1	257	0	0	0	0	0	0	0	0
Commitments Budget	0	366	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: TF - 504C5 - Grit Chamber Bldg. 1&2
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 1998
Construction:	Jan 2003
Project Completion:	Nov 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 14.84%
 EPA/Fed - 26.48%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.46%



FY2011 Approved Life Budget	70,144,788
FY2012 Revised/FY2013 Approved Life Budget	70,314,285
Increase/(Decrease) to Approved Life Budget:	169,497

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	66,161	165	1,971	306	0	0	0	0	0	0	0
Commitments Budget	67,706	2,609	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: TK - 504G3 - Biological Nutrient Removal
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Sep 1998
Construction:	Jun 1999
Project Completion:	Aug 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 32.42%
 EPA/Fed - 8.83%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.53%



FY2011 Approved Life Budget	95,469,814
FY2012 Revised/FY2013 Approved Life Budget	95,590,339
Increase/(Decrease) to Approved Life Budget:	120,525

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	89,503	346	0	0	0	0	0	0	0	0	0
Commitments Budget	95,590	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: TM - 504G6 - Influent Screen Facility
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 1998
Construction:	Jan 2003
Project Completion:	Oct 2011

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	38,983,697
FY2012 Revised/FY2013 Approved Life Budget	39,123,170
Increase/(Decrease) to Approved Life Budget:	139,473

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	38,426	0	0	0	0	0	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	39,123	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: TN - 504G9 - Primary Treatment Facility
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 1999
Construction:	Oct 2001
Project Completion:	Nov 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	38,519,262
FY2012 Revised/FY2013 Approved Life Budget	38,658,735
Increase/(Decrease) to Approved Life Budget:	139,473

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	38,012	24	24	4	0	0	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	38,659	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 1999
Construction:	Feb 2002
Project Completion:	Aug 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	70,593,858
FY2012 Revised/FY2013 Approved Life Budget	70,593,858
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	68,752	457	0	0	0	0	0	0	0	0	0
Commitments Budget	70,594	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2003
Construction:	Jun 2005
Project Completion:	Aug 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 35.53%
 EPA/Fed - 6.02%
 WSSC - 45.58%
 Fairfax - 8.33%
 Loudoun/PI - 4.54%



FY2011 Approved Life Budget	47,296,738
FY2012 Revised/FY2013 Approved Life Budget	47,417,263
Increase/(Decrease) to Approved Life Budget:	120,525

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	43,945	546	0	0	0	0	0	0	0	0	0
Commitments Budget	47,417	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: TS - 504H5 - IMP EAST PRIM EFFL EXCESS FL
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jan 1999
Project Completion:	Nov 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,684,749
FY2012 Revised/FY2013 Approved Life Budget	1,684,749
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,631	33	32	5	0	0	0	0	0	0	0
Commitments Budget	1,685	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2002
Construction:	Mar 2004
Project Completion:	Sep 2017

Project Description:

This project upgrades the Filtration and Disinfection Facility at the Blue Plains AWTP. The project converts the filters to an air-water wash type backwash system, which eliminates the surface wash system. Projects provides new underdrains, filter media, process aeration blowers and piping, and the instruments and controls to automatically backwash the filters, using the PCCS. This project upgrades process technology to improve treatment and increase reliability of the facilities. In FY 2010 a survey was conducted on the reliability of reinforced and non-reinforced concrete structures plant-wide. Based on results from the survey additional budget dollars are needed to continue the project with the additional scope in program management, construction management, OCIP and additional cost related to construction contract.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	70,659,476
FY2012 Revised/FY2013 Approved Life Budget	73,641,935
Increase/(Decrease) to Approved Life Budget:	2,982,459

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	58,633	1,034	6,126	1,569	146	0	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	62,988	1,346	9,309	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Liquid Processing
 Activity Group/Project Title: UD - 504J2 - Raw Water Pump Stations 1&2
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	May 2001
Construction:	Apr 2007
Project Completion:	Nov 2013

Project Description:

This project rehabilitates the pumps, motors, and drives in Raw Wastewater Pump Station 1 and replaces the smallest pump with a larger 80 mgd pump. The project also repairs or replaces the pump discharge conduits and provides new pump controls and pump support systems. This project rehabilitates the pumping equipment to ensure reliability of this facility.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	15,225,929
FY2012 Revised/FY2013 Approved Life Budget	15,428,915
Increase/(Decrease) to Approved Life Budget:	202,986

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	14,216	460	166	23	0	0	0	0	0	0	0
Commitments Budget	14,871	558	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 41.66%
 EPA/Fed - 0.00%
 WSSC - 45.49%
 Fairfax - 8.32%
 Loudoun/PI - 4.53%



FY2011 Approved Life Budget	12,884,889
FY2012 Revised/FY2013 Approved Life Budget	11,219,687
Increase/(Decrease) to Approved Life Budget:	-1,665,202

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	5,871	104	1,890	1,177	337	222	0	0	0	0	0
Commitments Budget	6,120	4,000	0	1,100	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: AZ - COF Renovations
 Managing Department: Facilities and Security **EPMC: NRPM**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2011
Construction:	Jun 2012
Project Completion:	Mar 2013

Project Description:

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

Impact on Operations:

This project has no material impact on the operating budget.

Effective Funding by User (percent):

DC - 72.32%
 EPA/Fed - 0.00%
 WSSC - 21.64%
 Fairfax - 3.96%
 Loudoun/PI - 2.07%



FY2011 Approved Life Budget	17,680,663
FY2012 Revised/FY2013 Approved Life Budget	17,202,555
Increase/(Decrease) to Approved Life Budget:	-478,108

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	11,726	1,725	1,062	0	0	0	0	0	0	0	0
Commitments Budget	12,527	4,676	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2018
Construction:	Sep 2020
Project Completion: Jun 2024	

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	3,821,638
FY2012 Revised/FY2013 Approved Life Budget	3,821,638
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	21	137	47	3,183
Commitments Budget	0	0	0	0	0	0	0	285	0	3,537	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

Phase	Start Date
Design:	
Construction:	
Project Completion:	Dec 2015

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 61.71%
 EPA/Fed - 0.00%
 WSSC - 29.91%
 Fairfax - 5.47%
 Loudoun/PI - 2.92%



FY2011 Approved Life Budget	7,118,501
FY2012 Revised/FY2013 Approved Life Budget	7,313,217
Increase/(Decrease) to Approved Life Budget:	194,716

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	3,071	1,905	50	31	31	5	0	0	0	0	0
Commitments Budget	5,912	1,401	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: CK - WWTP Sampler Program
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	
Project Completion:	Nov 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,265,861
FY2012 Revised/FY2013 Approved Life Budget	1,286,308
Increase/(Decrease) to Approved Life Budget:	20,447

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	1,207	1	1	0	0	0	0	0	0	0	0
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	1,286	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2007
Construction:	Sep 2010
Project Completion: Dec 2012	

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	5,759,365
FY2012 Revised/FY2013 Approved Life Budget	5,951,396
Increase/(Decrease) to Approved Life Budget:	192,031

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,272	2,016	30	0	0	0	0	0	0	0	0
Commitments Budget	5,951	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: CW - Perimeter Security at Blue Plains
 Managing Department: Facilities and Security **EPMC: NRPM**
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Jun 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,450,000
FY2012 Revised/FY2013 Approved Life Budget	1,465,761
Increase/(Decrease) to Approved Life Budget:	15,761

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	16	579	371	0	0	0	0	0	0	0	0
Commitments Budget	66	886	514	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: DP - Chemical Building Enhancements
 Managing Department: Engineering and Technical Services **EPMC: NRPM**
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2008
Construction:	Sep 2011
Project Completion:	Jul 2012

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%



FY2011 Approved Life Budget	1,670,000
FY2012 Revised/FY2013 Approved Life Budget	1,862,031
Increase/(Decrease) to Approved Life Budget:	192,031

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	434	402	0	0	0	0	0	0	0	0	0
Commitments Budget	1,862	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: DQ - PCCS PLC Interface(s) / Replacements
 Managing Department: Engineering and Technical Services **EPMC: NRPM**
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	
Project Completion:	Jan 2015

Project Description:

This project is to interface the non-OEM Programmable Logic Controllers (PLCs) across the plant with the Ovation control software within the PCCS. DC Water has installed a number of PLCs over the past 8 years to provide monitoring and control of various plant systems - these PLCs were used before the Emerson PCCS was available. There are other PLCs in the system that have been supplied with process equipment by the Original Equipment Manufacturer (OEM) to control and safe-guard specific pieces of equipment, such as the influent screens, traveling grit bridges and centrifuges. This project is to provide the non-OEM PLCs across the plant the capability, with proper interfaces, to communicate with the Ovation control software within the PCCS.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,040,000
FY2012 Revised/FY2013 Approved Life Budget	2,107,090
Increase/(Decrease) to Approved Life Budget:	67,090

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	731	165	142	467	93	0	0	0	0	0	0
Commitments Budget	1,177	0	930	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: EI - Plantwide Painting of Steel Pipes
 Managing Department: Engineering and Technical Services **EPMC: NRPM**
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Sep 2012
Project Completion:	Sep 2015

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%



FY2011 Approved Life Budget	4,960,000
FY2012 Revised/FY2013 Approved Life Budget	4,960,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	87	999	1,078	1,062	0	0	0	0	0	0
Commitments Budget	0	4,960	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Aug 2010
Project Completion:	Jun 2016

Project Description:

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

Impact on Operations:

This project will have no impact on the operating budget.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,466,530
FY2012 Revised/FY2013 Approved Life Budget	2,601,736
Increase/(Decrease) to Approved Life Budget:	135,206

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,198	242	353	148	104	77	0	0	0	0	0
Commitments Budget	2,058	544	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

Phase	Start Date
Design:	
Construction:	
Project Completion:	Nov 2011

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	500,000
FY2012 Revised/FY2013 Approved Life Budget	607,513
Increase/(Decrease) to Approved Life Budget:	107,513

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	542	44	0	0	0	0	0	0	0	0	0
Commitments Budget	608	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: GP - Instrumentation, Control, & Electric -EPMC
 Managing Department: Engineering and Technical Services **EPMC: NRPM**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Sep 2019

Project Description:

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



FY2011 Approved Life Budget	19,187,030
FY2012 Revised/FY2013 Approved Life Budget	16,180,032
Increase/(Decrease) to Approved Life Budget:	-3,006,998

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,407	1,030	725	1,111	1,161	1,108	628	614	117	0	0
Commitments Budget	7,363	8,817	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: H1 - MWCOG Budget Items
 Managing Department: Engineering and Technical Services **EMPC: NRPM**
Priority: Health Safety

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2011

Project Description:

The Metropolitan Washington Council of Governments (MWCOG) provides regional planning services for the District of Columbia and its metropolitan area. DC Water contributes, in proportion to its benefit, to the regional wastewater planning efforts performed by MWCOG. The capital funding for these tasks were historically budgeted under Project YD, Miscellaneous Projects. Project H1 tracked these efforts independent of the other projects under YD. This project will be closed in FY 2012 and dropped from the CIP in FY 2013.

Impact on Operations:

There are no anticipated impacts on operations or maintenance costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,097,332
FY2012 Revised/FY2013 Approved Life Budget	39,499
Increase/(Decrease) to Approved Life Budget:	-1,057,833

CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	38	0	0	0	0	0	0	0	0	0	0
Commitments Budget	39	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: H9 - Blue Plains High Priority Upgrades & Replacements
 Managing Department: Maintenance Services **EPMC:** NRPM
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Aug 2012

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

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,442,000
FY2012 Revised/FY2013 Approved Life Budget	2,442,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,710	50	0	0	0	0	0	0	0	0	0
Commitments Budget	2,442	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: HC - New Warehouse Facility at Blue Plains
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2011
Construction:	May 2012
Project Completion:	Jul 2014

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	16,361,600
FY2012 Revised/FY2013 Approved Life Budget	16,361,600
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	612	1,841	5,833	2,295	0	0	0	0	0	0	0
Commitments Budget	850	12,057	3,455	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: HJ - COF Renovations and Additions
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2016
Construction:	Sep 2017
Project Completion:	Sep 2020

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,872,000
FY2012 Revised/FY2013 Approved Life Budget	8,872,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	44	885	3,821	1,171	510	0
Commitments Budget	0	0	0	0	0	1,470	6,485	0	917	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: HK - CMF Renovations and Consolidation
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2016
Construction:	Feb 2017
Project Completion:	Sep 2018

Project Description:

This project will provide for the renovations and consolidation of the Central Maintenance Facility. The current design of the first floor shop areas and the mezzanine area, which is the location of lockers and kitchens (for each individual shop area) was created at the time the building was constructed and the maintenance workforce was significantly higher than what has been determined is necessary for a plant of this type and size. By consolidating these shops into smaller facilities, eliminating duplicate stored material, DC Water will be able to consolidate other function (division of Facilities) into this building and demolish the obsolete buildings known as Supply Building No. 1 and 2. In addition by relocating the lockers and kitchens to the first floor, the mezzanine area can be converted into much-needed office area – by on sight project management and consulting groups. The current floor of mezzanine will be doubled in size by building out over the part of the shop area below (as the two-story area of shops is for the most part, unnecessary.)

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	4,032,000
FY2012 Revised/FY2013 Approved Life Budget	4,032,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	0	0	0	0	223	978	1,573	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	0	0	0	0	498	3,334	200	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: HL - DWT - Process and Operations Jobs
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	
Project Completion:	Jun 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	3,020,000
FY2012 Revised/FY2013 Approved Life Budget	3,020,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	372	551	498	434	324	0	0	0	0	0
Commitments Budget	2,660	360	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jan 2012
Project Completion:	Sep 2015

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	625,800
FY2012 Revised/FY2013 Approved Life Budget	6,006,283
Increase/(Decrease) to Approved Life Budget:	5,380,483

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	1,689	791	720	732	0	0	0	0	0	0
Commitments Budget	0	3,006	1,000	1,000	1,000	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

Phase	Start Date
Design:	
Construction:	
Project Completion:	Dec 2013

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%



FY2011 Approved Life Budget	1,650,000
FY2012 Revised/FY2013 Approved Life Budget	1,650,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	856	226	0	0	0	0	0	0	0
Commitments Budget	0	0	1,650	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: JY - IT - Data Center
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	May 2011
Construction:	Jun 2013
Project Completion:	Mar 2016

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 in the operating budget.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget

FY2012 Revised/FY2013 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

	3,335,175
	3,335,175

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	58	250	433	1,180	334	21	0	0	0	0	0
Commitments Budget	180	557	2,567	31	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

Phase	Start Date
Design:	Sep 1998
Construction:	Aug 2002
Project Completion:	Aug 2012

Project Description:

The Process Control & Computer System provides monitoring and control for the Raw Wastewater Pumping Stations, Grit and Screen Facilities, Primary and Secondary Treatment Facilities, additional Chemical Systems, alternate Disinfection System, additional Dewatering Systems, Nitrification, Filtration and Disinfection Facilities, and Gravity Thickening in the first two phases of a plant-wide system. The PCCS provides monitoring and control of key process functions such as aeration, sludge pumping, and chemical feed dosing. Monitoring of energy usage is provided by plant process area and for large pumps and blowers. This project upgrades technology to improve treatment, control and optimize chemical and power costs and increase reliability of the facilities.

Impact on Operations:

The new Process Control Computer System (PCCS) assists in optimizing labor, chemical and electricity costs. The PCCS permits plant operations from a centralized location by allowing operations staff to monitor process condition and equipment status remotely. The system monitors power usage and permits discretionary operation of non-critical equipment during off-peak hours. Dissolved oxygen (DO) control is provided in the Secondary and Nitrification processes to match blower operation with process air needs, thereby saving power costs of approximately \$1 million per year. The system automates chemical feed, paced by plant flows and other variables, to optimize chemical usage and cost. Implementation of PCCS, in conjunction with the Grit and Screen Facility Upgrades and Gravity Thickener Upgrade is expected to save about \$200,000 per year in labor costs. Implementation of PCCS, in conjunction with the Primary Treatment, Secondary Treatment and Nitrification Facility Upgrade projects is expected to save nearly \$2 million per year in labor costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	61,392,358
FY2012 Revised/FY2013 Approved Life Budget	63,896,572
Increase/(Decrease) to Approved Life Budget:	2,504,214

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	55,121	3,942	0	0	0	0	0	0	0	0	0
Commitments Budget	63,897	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: TC - 504B6 - Additional Chemical Systems
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 1998
Construction:	Apr 2001
Project Completion:	Nov 2011

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	74,060,546
FY2012 Revised/FY2013 Approved Life Budget	74,080,993
Increase/(Decrease) to Approved Life Budget:	20,447

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	73,241	0	0	0	0	0	0	0	0	0	0
Commitments Budget	74,081	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2003
Project Completion:	Mar 2020

Project Description:

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

Impact on Operations:

Project has no material impact on operations costs

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	36,993,479
FY2012 Revised/FY2013 Approved Life Budget	37,224,707
Increase/(Decrease) to Approved Life Budget:	231,228

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	3,187	202	1,036	578	54	0	248	5,946	5,315	912	0
Commitments Budget	14,968	4,697	53	0	0	70	1,011	16,425	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Plantwide
 Activity Group/Project Title: YD - 700D5 - Miscellaneous Projects
 Managing Department: Engineering and Technical Services **EPMC: NRPM**
Priority: Health Safety

Phase	Start Date
Design:	May 2011
Construction:	Jul 2011
Project Completion:	Nov 2017

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 - 38.09%
 EPA/Fed - 3.72%
 WSSC - 45.39%
 Fairfax - 8.30%
 Loudoun/PI - 4.50%



FY2011 Approved Life Budget	46,319,061
FY2012 Revised/FY2013 Approved Life Budget	48,347,692
Increase/(Decrease) to Approved Life Budget:	2,028,631

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	29,369	1,371	3,524	4,280	1,649	1,179	1,155	166	0	0	0
Commitments Budget	35,683	5,989	2,576	3,600	0	3,061	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Solids Processing
 Activity Group/Project Title: AM - Solids Processing Program Management
 Managing Department: Engineering and Technical Services **EPMC: EPMC4**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	
Project Completion:	Feb 2018

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 41.45%
 EPA/Fed - 0.00%
 WSSC - 45.66%
 Fairfax - 8.35%
 Loudoun/PI - 4.54%



FY2011 Approved Life Budget	20,599,567
FY2012 Revised/FY2013 Approved Life Budget	27,531,460
Increase/(Decrease) to Approved Life Budget:	6,931,893

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	6,485	8,364	3,999	3,468	1,715	314	341	86	0	0	0
Commitments Budget	14,071	12,460	0	0	1,000	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Solids Processing
 Activity Group/Project Title: BX - Gravity Thickener Upgrades Ph II
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Feb 2011
Construction:	Oct 2014
Project Completion:	Oct 2018

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	15,497,200
FY2012 Revised/FY2013 Approved Life Budget	15,499,200
Increase/(Decrease) to Approved Life Budget:	2,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	196	981	18	11	2,356	5,188	2,509	269	1	0	0
Commitments Budget	608	785	108	1,378	12,620	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Solids Processing
 Activity Group/Project Title: EV - Area Substation No. 6
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	Apr 2010
Project Completion:	Jun 2014

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 24.29%
 EPA/Fed - 16.93%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.56%



FY2011 Approved Life Budget	22,857,532
FY2012 Revised/FY2013 Approved Life Budget	22,864,166
Increase/(Decrease) to Approved Life Budget:	6,634

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	11,428	5,320	271	53	0	0	0	0	0	0	0
Commitments Budget	22,665	199	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

Phase	Start Date
Design:	
Construction:	Oct 2011
Project Completion:	Apr 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,350,000
FY2012 Revised/FY2013 Approved Life Budget	2,350,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	27	1,203	691	0	0	0	0	0	0	0	0
Commitments Budget	28	2,322	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Solids Processing
 Activity Group/Project Title: TP - 504H2 - Gravity Thickeners
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Oct 1999
Construction:	Dec 2002
Project Completion:	Nov 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	19,958,237
FY2012 Revised/FY2013 Approved Life Budget	19,958,237
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	19,665	12	12	2	0	0	0	0	0	0	0
Commitments Budget	19,958	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2002
Construction:	Dec 2010
Project Completion:	Jan 2018

Project Description:

Project provides for construction of a new advanced digestion facility capable of anaerobically digesting all biosolids generated at the Blue Plains AWTP, as called for in the Biosolids Master Plan. The anaerobic digestion process reduces the volume and weight of biosolids to be transported to land. An update to the Biosolids Management Plan was started in FY 2007 to review biosolids technologies that are now available to DC Water and to evaluate less expensive digester vessels. The final options utilizes digestion and can produce a Class A biosolids product. DC Water will utilize the Cambi Thermal Hydrolysis digestion process; first for the United States. Results of the Belt Filter Press (BFP) pilot testing have highlighted a number of requirements and additional work necessary for the Final Dewatering Facility. This requires additional ancillary equipment and additional building space to accommodate the equipment, thus resulting in an increased lifetime budget.

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 is estimated to provide savings of nearly \$30 million per year, that include savings in biosolids hauling and reuse, personnel, chemicals, contracts, and energy costs. A thorough review of operating costs and benefits will be undertaken as all contract costs and criteria are finalized.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	441,342,224
FY2012 Revised/FY2013 Approved Life Budget	475,490,011
Increase/(Decrease) to Approved Life Budget:	34,147,787

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	64,950	97,324	186,023	64,705	8,869	2	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	306,348	169,142	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2005
Construction:	Mar 2009
Project Completion:	Feb 2013

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%



FY2011 Approved Life Budget	47,947,646
FY2012 Revised/FY2013 Approved Life Budget	48,139,625
Increase/(Decrease) to Approved Life Budget:	191,979

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	41,441	3,889	112	0	0	0	0	0	0	0	0
Commitments Budget	47,902	238	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Solids Processing
 Activity Group/Project Title: XC - Additional Dewatering Facilities
 Managing Department: Engineering and Technical Services **EPMC: NRPM**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 1998
Construction:	Dec 2001
Project Completion:	Nov 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 15.55%
 EPA/Fed - 25.77%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.46%



FY2011 Approved Life Budget	81,725,849
FY2012 Revised/FY2013 Approved Life Budget	81,725,849
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	80,488	16	16	2	0	0	0	0	0	0	0
Commitments Budget	81,726	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Solids Processing
 Activity Group/Project Title: XZ - Solids Processing Building / DSLF
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	Sep 2005
Project Completion:	Jun 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	34,293,762
FY2012 Revised/FY2013 Approved Life Budget	23,743,762
Increase/(Decrease) to Approved Life Budget:	-10,550,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	7,613	2,157	3,522	2,799	2,793	963	0	0	0	0	0
Commitments Budget	8,028	15,715	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Solids Processing
 Activity Group/Project Title: YZ - Digestion Facilities Site Preparation
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	May 2000
Construction:	Nov 2001
Project Completion:	Nov 2013

Project Description:

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

Impact on Operations:

No significant O&M cost impact.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,234,454
FY2012 Revised/FY2013 Approved Life Budget	2,234,454
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,739	29	308	41	0	0	0	0	0	0	0
Commitments Budget	1,895	339	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2009
Construction:	Jan 2013
Project Completion:	Jun 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	56,492,875
FY2012 Revised/FY2013 Approved Life Budget	59,803,602
Increase/(Decrease) to Approved Life Budget:	3,310,727

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	2,357	4,637	6,600	18,598	11,870	905	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	7,578	4,847	47,379	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2012
Construction:	Jul 2015
Project Completion:	Mar 2019

Project Description:

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

Impact on Operations:

Operation of the ECF will increase operating and maintenance costs, and specifically power and chemical costs, beginning in FY 2014. The estimated increase in annual O&M costs is \$3,000,000 per year in 2007 dollars.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	237,274,000
FY2012 Revised/FY2013 Approved Life Budget	246,986,000
Increase/(Decrease) to Approved Life Budget:	9,712,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,736	3,136	7,382	7,209	8,887	67,118	68,271	20,569	756	0	0
Commitments Budget	13,600	262	13,108	0	220,017	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Enhanced Nitrogen Removal Facilities Project
 Activity Group/Project Title: E9 - Nitrogen Removal Facilities
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2009
Construction:	Jan 2011
Project Completion:	Aug 2016

Project Description:

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

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 27.90%
 EPA/Fed - 13.32%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.56%



FY2011 Approved Life Budget	346,550,818
FY2012 Revised/FY2013 Approved Life Budget	291,581,615
Increase/(Decrease) to Approved Life Budget:	-54,969,203

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	49,237	64,600	63,424	23,734	11,756	356	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	331,392	-40,385	575	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2009
Construction:	Sep 2013
Project Completion:	Nov 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	89,125,000
FY2012 Revised/FY2013 Approved Life Budget	92,425,000
Increase/(Decrease) to Approved Life Budget:	3,300,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	3,940	5,994	3,524	31,567	24,515	927	4	0	0	0	0
Commitments Budget	7,465	9,151	74,090	1,719	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

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

Phase	Start Date
Design:	
Construction:	
Project Completion:	May 2020

Project Description:

The Blue Plains Tunnel is part of DC Water's proposed Total Nitrogen -Wet Weather (TN/WW) Plan, which addresses the requirements of the Long Term Control Plan as well as the Chesapeake Bay Tributary Strategies for reducing nitrogen discharged into the Chesapeake Bay. The principal components of this project are a 23 foot diameter tunnel from Main and O Streets to Blue Plains and a tunnel dewatering pump station at Blue Plains.

The Blue Plains Tunnel has been included in the draft TN/Wet Weather Plan that DC Water submitted to the USEPA. The recommended alternative in the plan removes additional nitrogen from the wastewater prior to discharge and improves the quality of discharge to the Potomac and Anacostia Rivers during wet weather events.

Impact on Operations:

Dewatering pump station costs will increase operating and maintenance costs beginning in FY 2014.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	177,380,058
FY2012 Revised/FY2013 Approved Life Budget	177,380,058
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	15,251	35,207	46,727	23,374	18,959	573	16	16	16	11	0
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	177,380	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Enhanced Nitrogen Removal Facilities Project
 Activity Group/Project Title: FG - Secondary Treatment Upgrades for TN
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2018
Construction:	Feb 2021
Project Completion: Jan 2025	

Project Description:

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

Impact on Operations:

This project would improve plant performance but would have marginal increased operational and maintenance costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	59,925,000
FY2012 Revised/FY2013 Approved Life Budget	59,925,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	181	1,811	1,879	50,451
Commitments Budget	0	0	0	0	0	0	0	8,105	0	66	51,754

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Enhanced Nitrogen Removal Facilities Project
 Activity Group/Project Title: FR - BP Tunnel Dewatering Pumping Sta
 Managing Department: Engineering and Technical Services **EPMC:** NRPM
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2011
Construction:	Nov 2014
Project Completion:	Nov 2018

Project Description:

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

Impact on Operations:

The dewatering pump station is an integral part of the underground storage solution to CSO control. Without a dewatering pump station a deep underground storage tunnel solution cannot be employed. The estimated annual cost increase is \$3 million per year, in 2007 dollars.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	26,704,635
FY2012 Revised/FY2013 Approved Life Budget	29,274,635
Increase/(Decrease) to Approved Life Budget:	2,570,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	625	681	1,670	368	4,456	9,918	3,447	664	69	0	0
Commitments Budget	2,122	184	1,729	1,650	23,589	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Enhanced Nitrogen Removal Facilities Project
 Activity Group/Project Title: FS - Div D - Bolling Overflow and Diversion
 Managing Department: Engineering and Technical Services **EPMC: EPMC5**
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2014
Construction:	Jul 2015
Project Completion:	Sep 2017

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	25,042,180
FY2012 Revised/FY2013 Approved Life Budget	25,042,180
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,065	406	332	841	1,052	9,600	5,367	0	0	0	0
Commitments Budget	2,734	0	0	1,550	20,759	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
 Program Title: Enhanced Nitrogen Removal Facilities Project
 Activity Group/Project Title: H7 - Blue Plains Tunnel Site Preparation
 Managing Department: Engineering and Technical Services **EPMC:** EPMC5
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2009
Construction:	Feb 2010
Project Completion:	Oct 2012

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%



FY2011 Approved Life Budget	6,360,303
FY2012 Revised/FY2013 Approved Life Budget	6,360,303
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	4,789	608	0	0	0	0	0	0	0	0	0
Commitments Budget	5,875	486	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2011 – 2020

SECTION IV

SANITARY SEWER SERVICE AREA

SANITARY SEWER

DC Water is responsible for wastewater collection and transmission in the District of Columbia, including operation and maintenance of the sanitary sewer system. DC Water's sanitary sewer system includes approximately 600 miles of large interceptor sewers and smaller gravity collection sewers. DC Water is also responsible for sewer lateral connections from the sewer mains to the property lines of residential, government, and commercial properties. In addition, DC Water is responsible for the 50 mile long Potomac Interceptor System, which provides conveyance of wastewater from Dulles Airport, areas in Virginia and Maryland, to Blue Plains WWTP. The existing sanitary sewer system in the District of Columbia dates back to 1810, and includes a variety of materials such as brick and concrete, vitrified clay, reinforced concrete, ductile iron, plastic, steel, brick, cast iron, cast in place concrete, and even fiberglass.

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

Key Findings of the 2009 Sewer Facilities Plan:

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

Key Recommendation of 2009 Sewer Facilities Plan:

- Continue a two-pronged, parallel approach to the CIP program – implement identified projects resulting from ongoing system condition and needs assessment *and* increase and continue an annual sewer pipe renewal program. Based on a 20-year planning outlook, this will require a \$1.2 billion increase (2008 dollars) in capital funding to address currently identified projects (\$536 million) and a sewer pipe renewal program (\$664 million). Of the \$536 million, about \$234 million are currently

included in the lifetime budget for this service area. The remaining \$300 million will be included in future requests as they are analyzed and prioritized with all other funding needed for all service areas.

As a result, the lifetime budgets in this area were increased by more than \$500 million in the last two years and the related ten-year disbursements have increased by approximately \$300 million for the proposed ten-year CIP planning period. Also, there are approximately \$180 million in sanitary collection sewer projects identified in the 10-year Capital Improvement Plan that transmit some flow from our wholesale customers. These are projects in planning or design exclusive of projects already under construction. D.C. Water has implemented a new hydrodynamic model to determine our wholesale customer's share of these projects. Accordingly, we have reached a preliminary agreement that their share of these projects totals approximately \$60 million; pending this agreement this portion was previously identified in the CIP as assigned to the District of Columbia ratepayers as a placeholder. The suburban share of these projects is consistent with the 1985 Inter Municipal Agreement (IMA) as well as the proposed new 2012 IMA.

Some of the projects (or jobs within a project) that are planned for design and construction in FY 2012 and FY 2013 include:

- FV01 – Rehab of Lower East Side Interceptor
- FW01 – Rehab of Piney Branch Trunk Sewer
- G100 – Local Sewer Rehab 1
- G101 – Georgetown Sewer Rehab
- G401 – Upper Potomac Interceptor Sewer Rehab
- G501 – Glover Park Sewer Rehab
- G502 – Soapstone Park Sewer Rehab
- G503 – Foundry Branch Sewer Rehab
- G801 – Local Sewer Rehab 2
- GG01 – Large Sewer Rehab 2
- HS01 – Evaluation of Influent Sewers
- J001 – B St / NJ Ave Trunk Sewer Rehab
- J101 – Oxon Run Sewer Rehab
- J306 – National Arboretum Sewer Rehab
- Q302 – Pope Branch Sewer Rehab
- N701 - Potomac Interceptor Rehab at Fairfax & Loudoun Counties
- N708 - Potomac Interceptor Repairs at Waxpool Road, Loudoun County, Virginia

The current CIP includes the following projects:

Sanitary Collection Sewers – \$133.9 million

(project pages IV-7 to IV-19)

This program includes studies and projects to effectively eliminate stormwater, groundwater, and other infiltration and inflow to the sewer system, to separate stormwater flows, and to reduce other extraneous flows to Blue Plains. This category also includes projects to rehabilitate collection system sewers as well as projects that serve existing properties and new development. Noteworthy projects are:

- East Side Interceptor Rehabilitation – Project ‘J3’ - The portion of the sewer that traverses the National Arboretum has significant structural distress. Construction has been completed for a significant portion with the remaining sections inside the Arboretum scheduled for construction in FY 2012.
- Local Sewer Rehab 1 – Project ‘G1’ - This project consists of all necessary repairs and rehabilitation of the local sewers that convey sewage from six neighborhoods as identified in the Sewer System Facilities Plan. Design has started with construction anticipated in early FY2013.

Sanitary On-Going Projects – \$159.7 million

(project pages IV-20 to IV-35)

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

- Pope Branch 12 inch Sewer Replacement – Project Q3 - This involves the complete rehabilitation of the existing sanitary sewer that runs along Pope Branch as part of an intergovernmental project to restore the park. Project includes rehabilitation of approximately 4,400 feet of sewer. Design is completed and construction is anticipated to start in 2012.

Sanitary Pumping Facilities – \$25.9 million

(project pages IV-36 to IV-40)

This program includes projects required for the rehabilitation or replacement of existing wastewater pumping stations as well as projects for the engineering and construction of new wastewater pumping facilities, as needed, to enhance the reliability and integrity of DC Water’s sanitary sewer system. In addition, a Security Upgrade (Project ‘CX’) is scheduled to begin in FY 2012, which will place interior and exterior cameras throughout DC Water’s Sewer Services facilities, install traffic control devices, and install

perimeter fencing. Additionally, this program includes future projects related to DC Water's planned relocation of certain facilities located at the Main and 'O' Street Pumping stations.

Sanitary Sewer Program Management – \$103.1 million

(project pages IV-41 to IV-42)

During FY 2011, DC Water continued with an ongoing evaluation of the sanitary and combined sewer systems, as well as design management for sewer pumping station rehabilitations and sewer infrastructure projects, as described in more detail below.

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

Sanitary Interceptor/Trunk Force Sewers – \$432.6 million

(project pages IV-43 to IV-74)

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

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

- Potomac Interceptor Rehabilitation – Project 'N7' - The Potomac Interceptor Sewer System is a 50-mile long sewer that provides conveyance of wastewater from areas in Virginia, Maryland and the District to Blue Plains. DC Water has been working with its wholesale customers on a variety of capital projects to address odor control issues related to the Potomac Interceptor and to ensure the long-term structural integrity of this major sewer. The project (\$53.3 million) has faced challenges, such as, larger equipment needed to control odors, high architectural costs related in part to historical preservation requirements of the National Park Service, and difficult construction locations. The project work includes:
 - Potomac Interceptor Rehabilitation in Fairfax and Loudon Counties – This capital improvement Project includes funding to design and reconstruct two separate portions of the interceptor in Fairfax and Loudoun Counties.

- Additional Inspections and Access Road Improvements – There are three projects to further assess over 20 miles of the pipeline, improve deteriorated access roads for operations and maintenance needs, and to evaluate soil erosion along the pipeline at stream crossings and along the banks of the C&O Canal.
- PI Repair @ Waxpool Rd - This capital project involves the relining of 930 feet of the 48-inch Potomac Interceptor in Loudoun County near Waxpool Road.
- 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. Permits and property access issues are continuing for some sites in Virginia; however, construction has started for 4 sites in Maryland and the District.
- Upper Potomac Interceptor Rehabilitation – Project ‘G4’ - This project involves the repair of a major portion of the trunk sewer. This project was separated out as a stand alone contract due to access restriction and ongoing negotiation with National Park Service. The design was completed in FY 2009, and construction is anticipated to start in early 2012.

Some projects scheduled to begin in FY 2012 and FY 2013:

- Sewer Rehab Near Creek Beds – Project ‘G5’ - The Sewer Facilities Plan identified several areas within the city’s stream valleys where sewer systems have become exposed due to creek bed erosion. Start up-funds were programmed to begin planning, design and coordination with park authorities so some progress can be made to begin addressing vulnerable sewers in these very vulnerable locations. Three identified locations where design started in FY2011 and construction is anticipated in late FY 2012 include Glover Archbold Park, Soapstone Park and Foundry Branch Park.
- Sanitary Sewer Rehab Under Buildings – ‘G6’ – This project rehabilitates sanitary sewers located under and adjacent to buildings citywide. Other activities included in this project are cleaning, pre and post closed circuit television inspection (CCTV), sealing joints and repair of offset pipe.

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: G1 - Small Local Sewer Rehab 1
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Nov 2011
Construction:	Jul 2013
Project Completion:	Sep 2015

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	28,000,000
FY2012 Revised/FY2013 Approved Life Budget	28,000,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	772	1,082	9,423	5,677	0	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	1,864	26,136	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: G8 - Small Local Sewer Rehab 2
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2012
Construction:	Jan 2014
Project Completion:	Mar 2016

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 10,000 liner feet of defective sewer pipes with an average sewer diameter of 18 inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,750,000
FY2012 Revised/FY2013 Approved Life Budget	2,750,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	51	79	382	954	219	0	0	0	0	0
Commitments Budget	0	183	0	2,567	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: G9 - Small Local Sewer Rehab 3
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2013
Construction:	Jan 2015
Project Completion:	Mar 2017

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 20,000 liner feet of defective sewer pipes with an average sewer diameter of 18 inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	5,650,000
FY2012 Revised/FY2013 Approved Life Budget	5,650,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	94	137	798	1,967	450	0	0	0	0
Commitments Budget	0	0	377	0	5,273	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: GA - Small Local Sewer Rehab 4
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2014
Construction:	Jan 2016
Project Completion:	Mar 2018

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 30,000 liner feet of defective sewer pipes with an average sewer diameter of 18 inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,700,000
FY2012 Revised/FY2013 Approved Life Budget	8,700,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	136	214	1,239	3,025	703	0	0	0
Commitments Budget	0	0	0	580	0	8,120	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title:
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2015
Construction:	Jan 2017
Project Completion:	Mar 2019

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 40,000 liner feet of defective sewer pipes with an average sewer diameter of 18 inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<input type="text" value="12,000,000"/>
FY2012 Revised/FY2013 Approved Life Budget	<input type="text" value="12,000,000"/>
Increase/(Decrease) to Approved Life Budget:	<input type="text" value="0"/>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	191	297	1,705	4,244	976	0	0
Commitments Budget	0	0	0	0	800	0	11,200	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: GC - Small Local Sewer Rehab 6
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2016
Construction:	Jan 2018
Project Completion:	Mar 2020

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 40,000 liner feet of defective sewer pipes with an average sewer diameter of 18 inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	12,400,000
FY2012 Revised/FY2013 Approved Life Budget	12,400,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	198	307	1,789	4,412	1,004	0
Commitments Budget	0	0	0	0	0	827	0	11,573	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: GD - Small Local Sewer Rehab 7
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2017
Construction:	Jan 2019
Project Completion:	Mar 2021

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 40,000 liner feet of defective sewer pipes with an average sewer diameter of 18 inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	12,700,000
FY2012 Revised/FY2013 Approved Life Budget	12,700,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	204	318	1,839	4,497	1,489
Commitments Budget	0	0	0	0	0	0	847	0	11,853	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: GE - Small Local Sewer Rehab 8
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2018
Construction:	Jan 2020
Project Completion:	Jan 2023

Project Description:

This project to rehabilitate and repair local sewers throughout the District of Columbia is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would repair approximately 40,000 liner feet of defective sewer pipes with an average sewer diameter of 18 inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	13,100,000
FY2012 Revised/FY2013 Approved Life Budget	13,100,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	213	331	1,903	8,243
Commitments Budget	0	0	0	0	0	0	0	874	0	12,226	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title:
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2019
Construction:	Jan 2021
Project Completion:	May 2023

Project Description:

This project is to rehabilitate local sanitary sewers throughout the District of Columbia and is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. This project would rehabilitate approximately 40,000 linear feet (LF) of defective sewer pipes of various diameters ranging from 10-inches to 36-inches with an average sewer pipe diameter of approximately 18-inches. Sewer segments would be rehabilitated using an appropriate lining method and include any necessary cleaning and point repairs. The selected local neighborhood sewers to be rehabilitated would be distributed throughout the four quadrants of the city.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<input type="text" value="13,495,000"/>
FY2012 Revised/FY2013 Approved Life Budget	<input type="text" value="13,495,000"/>
Increase/(Decrease) to Approved Life Budget:	<input type="text" value="0"/>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	208	320	11,831
Commitments Budget	0	0	0	0	0	0	0	0	900	0	12,595

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: HB - DSS Sewer Pumping Project
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Oct 2010
Project Completion:	Sep 2015

Project Description:
 Annual program for the repair and replacement of large motors and pumps in the Sewer Service area.

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	4,560,000
FY2012 Revised/FY2013 Approved Life Budget	4,560,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	290	886	540	505	514	0	0	0	0	0	0
Commitments Budget	1,520	760	760	760	760	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: I1 - Selective Sewer Separation & I/I Sewer Rehab.
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2004
Project Completion:	Feb 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	6,682,537
FY2012 Revised/FY2013 Approved Life Budget	6,682,537
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	4,165	77	154	733	423	4	0	0	0	0	0
Commitments Budget	4,502	0	2,181	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: I9 - Sewer Rehab.10th-12th St, Bet. Penn
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2007
Construction:	Oct 2009
Project Completion:	Jun 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,150,000
FY2012 Revised/FY2013 Approved Life Budget	1,150,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	553	91	0	0	0	0	0	0	0	0	0
Commitments Budget	1,150	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Collection Sewers
 Activity Group/Project Title: J3 - Sewer Upgrade - City Wide
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Nov 2002
Project Completion:	Jan 2015

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	12,718,000
FY2012 Revised/FY2013 Approved Life Budget	12,718,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	3,420	263	4,224	296	102	0	0	0	0	0	0
Commitments Budget	4,390	0	8,328	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: Q3 - FY2003 - DSS Sanitary Sewer Project
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Apr 2003
Project Completion:	Apr 2014

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 93.19%
 EPA/Fed - 6.81%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	8,711,000
FY2012 Revised/FY2013 Approved Life Budget	13,753,484
Increase/(Decrease) to Approved Life Budget:	5,042,484

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	4,338	1,831	4,636	714	0	0	0	0	0	0	0
Commitments Budget	5,205	8,548	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: Q7 - FY2007 - DSS Sanitary Sewer Project
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2007
Project Completion:	Aug 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	5,670,000
FY2012 Revised/FY2013 Approved Life Budget	5,670,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	5,489	0	0	0	0	0	0	0	0	0	0
Commitments Budget	5,670	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: Q8 - FY2008 - DSS Sanitary Sewer Project
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jun 2008
Project Completion:	Nov 2012

Project Description:

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

Impact on Operations:

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%



FY2011 Approved Life Budget	4,640,000
FY2012 Revised/FY2013 Approved Life Budget	4,640,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	4,160	272	5	0	0	0	0	0	0	0	0
Commitments Budget	4,640	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: AP - FY2009 - DSS Sanitary Sewer Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	May 2009
Project Completion:	Dec 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget

5,720,000

FY2012 Revised/FY2013 Approved Life Budget

5,720,000

Increase/(Decrease) to Approved Life Budget:

0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	4,498	876	16	0	0	0	0	0	0	0	0
Commitments Budget	4,640	1,080	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: A9 - FY2010 - DSS Sanitary Sewer Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jun 2010
Project Completion:	Aug 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	6,790,000
FY2012 Revised/FY2013 Approved Life Budget	6,790,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	6,540	551	0	0	0	0	0	0	0	0	0
Commitments Budget	6,790	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: BF - FY2011 - DSS Sanitary Sewer Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Aug 2012
Project Completion:	Aug 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,165,000
FY2012 Revised/FY2013 Approved Life Budget	8,165,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,096	4,166	1,522	0	0	0	0	0	0	0	0
Commitments Budget	5,584	2,581	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: CE - FY2012 - DSS Sanitary Sewer Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2012
Project Completion:	Apr 2013

Project Description:

This project provides for the FY2012 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	9,385,000
FY2012 Revised/FY2013 Approved Life Budget	9,385,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	5,057	2,489	0	0	0	0	0	0	0	0
Commitments Budget	0	9,385	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: CQ - FY2013 - DSS Sanitary Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Feb 2013
Project Completion:	May 2014

Project Description:

This project provides for the FY2013 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	10,205,000
FY2012 Revised/FY2013 Approved Life Budget	10,205,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	4,957	2,017	0	0	0	0	0	0	0
Commitments Budget	0	0	10,205	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: D6 - FY2014 - DSS Sanitary Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2014
Project Completion:	May 2015

Project Description:

This project provides for the FY2014 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the sanitary sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	10,575,000
FY2012 Revised/FY2013 Approved Life Budget	10,575,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	4,064	2,023	0	0	0	0	0	0
Commitments Budget	0	0	0	10,575	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: DI - FY2015 - DSS Sanitary Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2015
Project Completion:	Apr 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	10,846,000
FY2012 Revised/FY2013 Approved Life Budget	10,846,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	5,052	2,412	0	0	0	0	0
Commitments Budget	0	0	0	0	10,846	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: DW - FY2016 - DSS Sanitary Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Feb 2016
Project Completion:	Apr 2017

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	11,215,000
FY2012 Revised/FY2013 Approved Life Budget	11,215,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	5,247	2,487	0	0	0	0
Commitments Budget	0	0	0	0	0	11,215	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: FP - FY2017 - DSS Sanitary Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2017
Project Completion:	May 2018

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	11,500,000
FY2012 Revised/FY2013 Approved Life Budget	11,500,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	5,378	2,601	0	0	0
Commitments Budget	0	0	0	0	0	0	11,500	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: H6 - FY2018 - DSS Sanitary Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2018
Project Completion:	Apr 2019

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	11,845,000
FY2012 Revised/FY2013 Approved Life Budget	11,845,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	5,537	2,657	0	0
Commitments Budget	0	0	0	0	0	0	0	11,845	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: HN - FY2019 - DSS Sanitary Sewer Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2019
Project Completion:	Apr 2020

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%



FY2011 Approved Life Budget	12,200,000
FY2012 Revised/FY2013 Approved Life Budget	12,200,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	5,933	2,797	0
Commitments Budget	0	0	0	0	0	0	0	0	12,200	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: JI - FY2020 - DSS Sanitary Sewer Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jan 2020
Project Completion:	Jan 2021

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%



FY2011 Approved Life Budget	
FY2012 Revised/FY2013 Approved Life Budget	12,568,000
Increase/(Decrease) to Approved Life Budget:	12,568,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	6,432	3,261
Commitments Budget	0	0	0	0	0	0	0	0	0	12,568	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary On-Going
 Activity Group/Project Title: EU - Sewer Lateral Rehab and Main Lining
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Dec 2008
Project Completion:	Sep 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	14,600,000
FY2012 Revised/FY2013 Approved Life Budget	14,600,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	7,762	3,329	2,070	0	0	0	0	0	0	0	0
Commitments Budget	14,600	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Pumping Facilities
 Activity Group/Project Title: CX - Sewer Facilities Security Upgrades
 Managing Department: Facilities and Security **EPMC: EPMC3**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Nov 2014

Project Description:

This project will provide for a security assessment, placement of exterior and interior cameras throughout Sewer Services Facilities, install traffic control devices (i.e., bollards & speed bumps), and install perimeter fencing (i.e., shoreline enclosures).

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<u>1,135,000</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>1,135,000</u>
Increase/(Decrease) to Approved Life Budget:	<u>0</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	35	135	195	216	37	0	0	0	0	0	0
Commitments Budget	435	0	700	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Pumping Facilities
 Activity Group/Project Title: GZ - Sewer Instrumentation & Control
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2014

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,400,000
FY2012 Revised/FY2013 Approved Life Budget	2,400,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	369	441	481	0	0	0	0	0	0	0
Commitments Budget	2,400	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Pumping Facilities
 Activity Group/Project Title: L3 - Rock Creek Sewage Pumping Station
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Nov 2003
Construction:	Apr 2007
Project Completion:	Jun 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	11,131,290
FY2012 Revised/FY2013 Approved Life Budget	11,131,290
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	7,711	42	0	0	0	0	0	0	0	0	0
Commitments Budget	11,131	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Pumping Facilities
 Activity Group/Project Title: L4 - Upper Anacostia Sew. Pump. Station
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Nov 2003
Construction:	May 2008
Project Completion:	Aug 2012

Project Description:

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

Impact on Operations:

There will be no material impact on operating costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	9,134,559
FY2012 Revised/FY2013 Approved Life Budget	9,134,559
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	6,606	66	0	0	0	0	0	0	0	0	0
Commitments Budget	9,135	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Pumping Facilities
 Activity Group/Project Title: L5 - Earl Place Sewage Pumping Station
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Feb 2002
Construction:	Aug 2005
Project Completion:	Jun 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,097,568
FY2012 Revised/FY2013 Approved Life Budget	2,097,568
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,410	47	0	0	0	0	0	0	0	0	0
Commitments Budget	2,098	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Sewer Program Mgmt
 Activity Group/Project Title: AU - Sanitary Sewer Program Management ¹
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2021

Project Description:

This project provides engineering program management services for the sanitary sewer service area in the District. This five-year project involves planning, assessments, and conceptual designs for capital projects related to the sanitary sewer system. This project also provides design management services for the rehabilitation of three sewage pumping stations. This project increases the reliability, restores the integrity, and maintains the capacity of DC Water's sanitary sewer system.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	61,094,994
FY2012 Revised/FY2013 Approved Life Budget	61,079,994
Increase/(Decrease) to Approved Life Budget:	-15,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	20,220	3,315	3,211	3,435	2,787	2,358	2,429	3,325	4,033	3,210	3,109
Commitments Budget	40,280	0	0	0	0	20,800	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Sewer Program Mgmt
 Activity Group/Project Title: DN - Sewer Inspection Program
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2010
Construction:	May 2011
Project Completion:	Jan 2023

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

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	42,055,000
FY2012 Revised/FY2013 Approved Life Budget	42,055,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	279	3,565	1,243	2,754	4,034	4,272	4,319	4,464	2,599	1,950	611
Commitments Budget	4,000	3,006	2,680	3,400	5,185	6,025	6,125	6,225	5,409	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: A4 - Future Sewer System Upgrades²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Oct 2003
Project Completion:	Apr 2024

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 85.37%
 EPA/Fed - 6.73%
 WSSC - 7.41%
 Fairfax - 0.38%
 Loudoun/PI - 0.12%



FY2011 Approved Life Budget	48,900,000
FY2012 Revised/FY2013 Approved Life Budget	43,815,515
Increase/(Decrease) to Approved Life Budget:	-5,084,485

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	14,265	3,523	865	2,269	2,398	1,815	627	222	0	0	0
Commitments Budget	29,543	10,272	2,000	2,000	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: DM - Upper Anacostia Main Interceptor Relief Sewer
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2010
Construction:	Jul 2012
Project Completion:	Dec 2014

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	12,350,000
FY2012 Revised/FY2013 Approved Life Budget	12,350,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	116	433	3,753	3,468	79	0	0	0	0	0	0
Commitments Budget	750	11,600	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: DR - Low Area Trunk Sewer Rehabilitation
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	Jun 2009
Project Completion:	May 2014

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	4,616,000
FY2012 Revised/FY2013 Approved Life Budget	4,416,000
Increase/(Decrease) to Approved Life Budget:	-200,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	749	30	626	450	0	0	0	0	0	0	0
Commitments Budget	2,708	0	1,708	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: FV - Rehab Lower East Side Interceptor
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2012
Construction:	Jan 2012
Project Completion: Dec 2015	

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%



FY2011 Approved Life Budget	14,800,500
FY2012 Revised/FY2013 Approved Life Budget	14,800,500
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	1,431	2,062	4,127	4,789	721	0	0	0	0	0
Commitments Budget	0	6,287	8,513	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: FW - Rehab Piney Branch Trunk Sewer
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2011
Construction:	May 2013
Project Completion:	May 2016

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%



FY2011 Approved Life Budget	25,000,000
FY2012 Revised/FY2013 Approved Life Budget	25,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	140	842	5,608	6,645	2,230	0	0	0	0	0
Commitments Budget	0	1,668	23,333	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: FY - Rehab Upper Rock Creek Interceptor²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2013
Construction:	May 2015
Project Completion:	Dec 2017

Project Description:

This project will rehabilitate approximately 13,800 feet of the upper part of the Rock Creek Main Interceptor (RCMI). The project will repair all known defects of the RCMI including broken pipes, holes, missing mortar, and visibly exposed aggregate and structural reinforcement. The project proposes rehabilitation by lining methods of the Rock Creek Main Interceptor between the intersection of Joyce Road & Ross Drive, NW and Beach Drive, NW close to the intersection of Oregon Avenue, NW and Western Avenue.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 12.20%
 EPA/Fed - 0.00%
 WSSC - 87.80%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	16,000,000
FY2012 Revised/FY2013 Approved Life Budget	16,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	104	493	739	5,186	3,999	413	0	0	0
Commitments Budget	0	0	1,070	0	14,930	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: G2 - Sewer Structure Rehabilitation (1)²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2012
Construction:	Jun 2014
Project Completion: Dec 2015	

Project Description:

This multi-phase / multi-job project was developed from the suggested project list included in the 2009 Sewer System Facilities Plan. Each job within the project proposes improvements to various sewer structures throughout the District. Project includes job G201, Rehabilitation of Structure 35B, to abandon the existing sewer structure inside the Kennedy Center and reinstate the structure at the intersection of 27th & G Street., NW. Project includes job G202, Sewer Structure 24 and 34 Improvements, to install access to the inflatable dams and rehabilitate Structures 24 and 34. Project includes job G203, Access Improvements to CSO 061, to provide maintenance accessibility to NPDES Outfall 061. Project includes job G204, Rehabilitation of Gates at Structures 5A, 5B and 5C, to replace the sluice gates for the sewer structures located outside of the Poplar Point Pumping Station.

Impact on Operations:

Not implementing this project may result in the possible failure or inability to access this infrastructure in an emergency in the future, resulting in undesirable environmental and social consequences.

Effective Funding by User (percent):

DC - 89.51%
 EPA/Fed - 0.00%
 WSSC - 10.49%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	9,000,000
FY2012 Revised/FY2013 Approved Life Budget	9,000,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	0	192	728	4,524	262	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	0	593	5,607	2,800	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: G4 - Upper Potomac Intercept Sewer Rehab.²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2009
Construction:	Mar 2012
Project Completion:	Jun 2013

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 - 52.70%
 EPA/Fed - 0.00%
 WSSC - 47.30%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	3,927,906
FY2012 Revised/FY2013 Approved Life Budget	3,927,906
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	273	875	712	0	0	0	0	0	0	0	0
Commitments Budget	513	3,415	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: G5 - Sewer Rehab Near Creek Beds
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2011
Construction:	Nov 2013
Project Completion:	Dec 2018

Project Description:

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

Impact on Operations:

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	32,000,000
FY2012 Revised/FY2013 Approved Life Budget	32,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	157	297	2,012	8,827	5,693	2,188	1,118	90	0	0
Commitments Budget	1,270	0	1,000	18,000	5,600	3,630	2,500	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: G6 - Sanitary Sewers Under Buildings 1
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2009
Construction:	Jan 2010
Project Completion:	Oct 2016

Project Description:

This project rehabilitates sanitary sewers located under buildings citywide. Other activities included in this project are cleaning, pre and post CCTV, sealing joints and repair of offset pipe. The budget for this project has been reduced to fund separate projects that were carved out for similar work in future years.

Impact on Operations:

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,468,000
FY2012 Revised/FY2013 Approved Life Budget	8,468,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	228	300	156	934	1,600	802	7	0	0	0	0
Commitments Budget	3,000	179	2,695	2,595	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: GG - Large Sewer Rehab 2
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2012
Construction:	Aug 2014
Project Completion:	Aug 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	3,000,000
FY2012 Revised/FY2013 Approved Life Budget	3,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	25	65	76	1,046	737	0	0	0	0	0
Commitments Budget	0	200	0	2,800	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: GH - Large Sewer Rehab 3
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2013
Construction:	Aug 2015
Project Completion:	Aug 2017

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	6,150,000
FY2012 Revised/FY2013 Approved Life Budget	6,150,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	60	144	159	2,156	1,507	0	0	0	0
Commitments Budget	0	0	410	0	5,740	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: GI - Large Sewer Rehab 4
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2014
Construction:	Aug 2016
Project Completion:	Aug 2018

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<u>9,530,000</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>9,530,000</u>
Increase/(Decrease) to Approved Life Budget:	<u>0</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	100	227	247	3,342	2,378	0	0	0
Commitments Budget	0	0	0	636	0	8,894	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: GJ - Large Sewer Rehab 5
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2015
Construction:	Aug 2017
Project Completion:	Aug 2019

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	13,100,000
FY2012 Revised/FY2013 Approved Life Budget	13,100,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	140	313	340	4,667	3,288	0	0
Commitments Budget	0	0	0	0	874	0	12,226	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: GK - Large Sewer Rehab 6
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2016
Construction:	Aug 2018
Project Completion:	Aug 2020

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	13,500,000
FY2012 Revised/FY2013 Approved Life Budget	13,500,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	145	322	356	4,827	3,379	0
Commitments Budget	0	0	0	0	0	900	0	12,600	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: GL - Large Sewer Rehab 7
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2017
Construction:	Aug 2019
Project Completion:	Aug 2021

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	13,900,000
FY2012 Revised/FY2013 Approved Life Budget	13,900,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	150	337	368	4,959	4,666
Commitments Budget	0	0	0	0	0	0	927	0	12,973	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: GM - Large Sewer Rehab 8
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2018
Construction:	Aug 2020
Project Completion:	Aug 2022

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	14,300,000
FY2012 Revised/FY2013 Approved Life Budget	14,300,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	156	348	377	11,683
Commitments Budget	0	0	0	0	0	0	0	954	0	13,346	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: GN - Large Sewer Rehab 9
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

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

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%



FY2011 Approved Life Budget	15,705,000
FY2012 Revised/FY2013 Approved Life Budget	15,705,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	152	337	13,921
Commitments Budget	0	0	0	0	0	0	0	0	980	0	14,725

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: HG - New Field Operations & Maintenance Facility
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2016
Construction:	Oct 2017
Project Completion:	Jul 2018

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	9,434,000
FY2012 Revised/FY2013 Approved Life Budget	9,434,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	23	736	5,542	0	0	0
Commitments Budget	0	0	0	0	0	382	1,075	7,977	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: HH - New Fleet Management Facility
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2016
Construction:	Oct 2017
Project Completion:	Jul 2018

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	9,669,000
FY2012 Revised/FY2013 Approved Life Budget	9,669,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	27	753	5,681	0	0	0
Commitments Budget	0	0	0	0	0	415	1,075	8,179	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: HS - Rehabilitation of Influent Sewers
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2013
Construction:	Jun 2014
Project Completion:	Jul 2015

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 83.45%
 EPA/Fed - 0.00%
 WSSC - 12.81%
 Fairfax - 2.44%
 Loudoun/PI - 1.29%



FY2011 Approved Life Budget	
FY2012 Revised/FY2013 Approved Life Budget	3,000,000
Increase/(Decrease) to Approved Life Budget:	3,000,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	96	485	1,582	0	0	0	0	0	0
Commitments Budget	0	0	200	2,800	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: HT - Rehabilitation of Anacostia Force Main
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2011
Construction:	Jun 2012
Project Completion:	Aug 2018

Project Description:

This project was developed to evaluate, rehabilitate and protect the Anacostia Force Main (AFM). The 108-inch diameter AFM extends 32,700 linear feet (LF) from the Maryland / District border to its terminus near South Capital Street and Firth Sterling Ave, SE. The AFM carries approximately 244 MGD (1/3 of WSSC's wastewater flow) to Blue Plains. This critical sewer consists largely of pre-stressed concrete cylinder pipe (PCCP) which has a history of failures throughout the industry. Job HT01 is to repair the force main's cathodic protection system due to its critical nature in protecting PCCP. Job HT02 is to repair known damaged pipe in 8 locations. Job HT03 provides electromagnetic survey inspections every 5 years to determine if future segments are at risk. Job HT04 provides visual and sonic material testing at various locations throughout the 32,700 LF of the AFM and Job HT05 plans for the future analysis and condition assessment of the AFM.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 65.74%
 EPA/Fed - 0.00%
 WSSC - 34.26%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	6,150,000
FY2012 Revised/FY2013 Approved Life Budget	6,150,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	373	1,495	1,007	82	44	90	435	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	700	1,800	2,750	0	0	150	750	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: IF - Sanitary Sewer Rehabilitation 2
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2014
Construction:	Jul 2015
Project Completion:	Sep 2019

Project Description:

This multi-job project to rehabilitate sanitary sewers in various locations throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer infrastructure to be rehabilitated is prioritized based on the criticality given to sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as any necessary replacement of offset pipes. Multiple jobs provide the annualized program to rehabilitate the large sewer inventory which exhibits deteriorated conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	12,000,000
FY2012 Revised/FY2013 Approved Life Budget	12,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	93	270	1,739	2,507	2,356	970	0	0
Commitments Budget	0	0	0	260	3,907	4,007	3,827	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: IG - Sanitary Sewer Rehabilitation 3
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2017
Construction:	Jul 2018
Project Completion:	Sep 2022

Project Description:

This multi-job project to rehabilitate sanitary sewers in various locations throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer infrastructure to be rehabilitated is prioritized based on the criticality given to sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as any necessary replacement of offset pipes. Multiple jobs provide the annualized program to rehabilitate the large sewer inventory which exhibits deteriorated conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	12,930,000
FY2012 Revised/FY2013 Approved Life Budget	12,930,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	104	299	1,901	2,738	4,626
Commitments Budget	0	0	0	0	0	0	287	4,203	4,305	4,135	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: IK - Potomac Force Main Rehabilitation
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2012
Construction:	Apr 2013
Project Completion:	Mar 2014

Project Description:

The project will provide for the rehabilitation of the Potomac Force Main. This is necessary in order to continue to gather information for the prioritization of rehabilitation projects established for both mainline sewers and sewer lateral repair work.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,500,000
FY2012 Revised/FY2013 Approved Life Budget	1,500,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	55	319	317	0	0	0	0	0	0	0
Commitments Budget	0	150	1,350	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: IL - Creekbed Sewer Rehabilitation 2²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2013
Construction:	Jun 2015
Project Completion:	Dec 2019

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 79.36%
 EPA/Fed - 0.00%
 WSSC - 20.64%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	20,010,000
FY2012 Revised/FY2013 Approved Life Budget	20,010,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	134	290	2,159	2,888	5,247	2,886	68	0
Commitments Budget	0	0	0	385	3,769	3,966	9,990	1,900	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: IM - Creekbed Sewer Rehabilitation 3²
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Health Safety

Phase	Start Date
Design:	Aug 2016
Construction:	Mar 2018
Project Completion:	Aug 2022

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	16,107,000
FY2012 Revised/FY2013 Approved Life Budget	16,107,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	4	244	685	3,427	4,245	3,592
Commitments Budget	0	0	0	0	0	150	540	6,428	6,085	2,904	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: IN - Upper East Side Trunk Sewer Rehabilitation
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2015
Construction:	Feb 2017
Project Completion:	Aug 2020

Project Description:

This project will be a multi job project for the rehabilitation of the Upper East Side Trunk Sewer. Job IN01 is associated with the cleaning and pre- and post CCTV inspection of part of the Upper East Side Interceptor located between the Arboretum and the intersection of this interceptor with the Northeast Boundary Trunk Sewer (NEBT). The section has a total length of approximately 6,370 LF. Job IN02 will rehabilitate the ESI by relining the pipe utilizing the appropriate methodology and reinstating service connections.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	14,250,000
FY2012 Revised/FY2013 Approved Life Budget	14,250,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	37	353	975	2,766	3,174	1,893	0
Commitments Budget	0	0	0	0	635	0	6,205	7,410	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: J0 - B St/New Jersey Ave Trunk Sewer Rehab.²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Mar 2009
Construction:	Jun 2014
Project Completion:	Sep 2015

Project Description:

This project involves a condition assessment and conceptual design for repair of the B Street / New Jersey Avenue trunk sewer. This project identifies the structural integrity of the sewer system, and develops adequate and cost effective repair approaches. This project increases the reliability, restores the integrity, and maintains the capacity of the sewer.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 85.50%
 EPA/Fed - 0.00%
 WSSC - 14.50%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	5,620,000
FY2012 Revised/FY2013 Approved Life Budget	5,620,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	101	4	61	533	2,886	0	0	0	0	0	0
Commitments Budget	470	100	0	5,050	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: J1 - Oxon Run Sewer Leakage Correction ²
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2011
Construction:	Feb 2014
Project Completion:	Feb 2016

Project Description:

This project assesses the condition and develops needed repairs for a segment of sewer that crosses Oxon Run. This project will increase the reliability, restore the integrity, stop leakage from the pipe, and maintain the capacity of the sewer.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 13.80%
 EPA/Fed - 0.00%
 WSSC - 86.20%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	7,945,000
FY2012 Revised/FY2013 Approved Life Budget	7,945,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	127	129	178	1,157	3,346	643	0	0	0	0	0
Commitments Budget	133	500	0	7,312	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: JQ - Hydraulic Protection Project
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2013
Construction:	Jun 2015
Project Completion:	Jul 2017

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	
FY2012 Revised/FY2013 Approved Life Budget	1,723,000
Increase/(Decrease) to Approved Life Budget:	1,723,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	66	257	885	45	0	0	0	0
Commitments Budget	0	0	0	117	1,606	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
 Program Title: Sanitary Interceptor/Trunk/Force Sewers
 Activity Group/Project Title: N7 - Potomac Sewer System Rehab.²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: High Profile, Good Neighbor Policy

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2003
Construction:	Dec 2001
Project Completion: Jul 2018	

Project Description:

This project provides odor control, sewer modifications, and rehabilitation of the Potomac Interceptor (PI) system. This project consists of eight jobs to control odors, and rehabilitate and modify manholes, sewer pipe, sewer vents, and other related components of the PI system. Implementation of this project will reduce odor complaints, maintain and restore structural integrity, and maintain the design hydraulic capacity of the sewer.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 7.96%
 EPA/Fed - 0.00%
 WSSC - 33.08%
 Fairfax - 33.08%
 Loudoun/PI - 25.88%



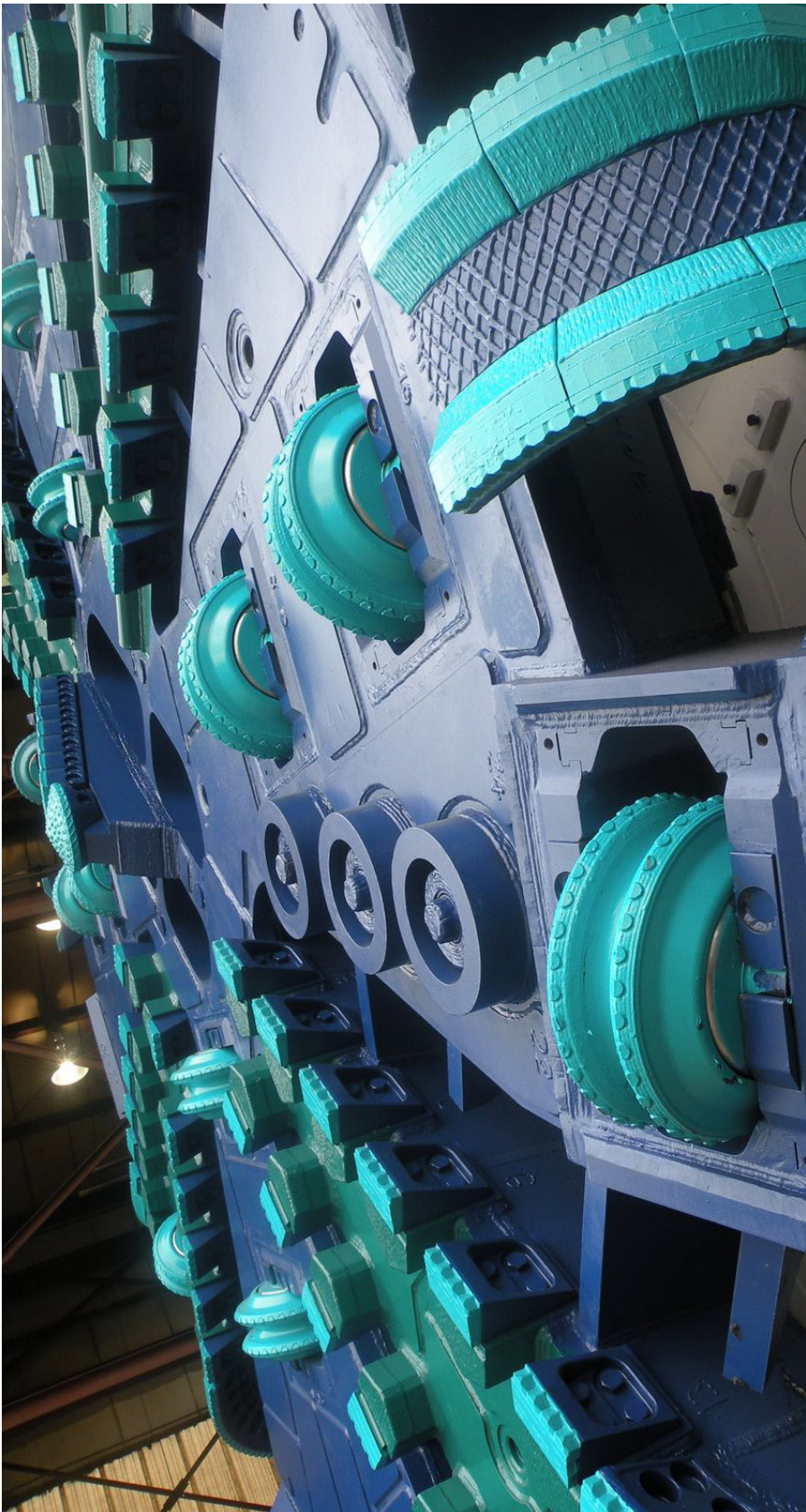
FY2011 Approved Life Budget	50,281,936
FY2012 Revised/FY2013 Approved Life Budget	53,281,936
Increase/(Decrease) to Approved Life Budget:	3,000,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	12,567	6,688	6,540	7,286	1,605	172	158	73	0	0	0
Commitments Budget	27,931	8,115	16,411	275	275	275	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY **2011 – 2020**

SECTION V

**COMBINED SEWER
OVERFLOW SERVICE AREA**

COMBINED SEWER AREA

(project pages V-5 to V-34)

Similar to many older communities in the Mid-Atlantic, Northeast, and Midwest portions of the country, a portion of the District of Columbia is served by a combined sewer system. Approximately one-third of the system is combined, mostly in the downtown and older parts of the city. In dry weather, the system delivers wastewater to the Blue Plains Wastewater Treatment Plant. In wet weather, rain water is captured by this system, and if the conveyance capacity of the system is exceeded, the excess flow spills into the waterways of the District of Columbia. This discharge is called Combined Sewer Overflow (CSO). There are 53 permitted CSO outfalls in the District. This service area includes projects that will reduce the number of overflows by 96 percent over a 20-25 year period, as well as rehabilitate, replace, or relocate combined sewer facilities throughout the District of Columbia.

DC Water is currently engaged in implementing its D.C. Clean Rivers Project (“DCCR”, formerly Long Term Control Plan, or ‘LTCP’) for CSOs that discharge to the Anacostia River, Rock Creek and the Potomac River. This is by far the largest portion of this service area, and the schedule for completing the Clean Rivers Project spans over a 20-year period, ending in 2025. It is mandated in a Federal Consent Decree between the United States, the District Government and DC Water. The consent decree was entered by the Court in March 2005. Projects to control CSOs to the Anacostia River are scheduled first in the court ordered schedule, and DC Water has completed a final Facility Plan for these projects. The Facility Plan includes a Summary Report and detailed implementation schedule which has been approved by the EPA. DC Water is now moving forward in the design and construction phases of the Anacostia River projects according to the detailed implementation schedule submitted to EPA. During Fiscal Year 2011 one of the largest contracts since the Authority was created was awarded for the first significant construction project for the Blue Plains Tunnel and as a result of a favorable bid environment the costs were approximately \$40 million below estimates.

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

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

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

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

Construction is nearly completion on projects worth approximately \$170 million that were included in the settlement of a lawsuit against DC Water regarding implementation of the federal CSO Nine Minimum Controls program. These projects were previously budgeted and planned by DC Water prior to the lawsuit. We are nearing completion for the rehabilitation of our major pumping stations to increase their capacity, with construction anticipated to end in 2011 or early 2012. Work completed on the 'nine minimum controls' program has already successfully reduced overflows from combined sewers by nearly 40 percent.

On-going and Upcoming projects in this area include:

- Poplar Point Pumping Station rehabilitation (Project K4), with a lifetime budget of \$5.8 million, provides for improvements that include replacement of the pump motors and controls and rehabilitation of the pumps, structural and architectural repairs, HVAC upgrades, the addition of an odor control system, and electrical and lighting upgrades. Design of the station is complete and construction began in FY 2010.
- Northeast Boundary Swirl Facility (Project EL), with a lifetime budget of \$4.5 million, provides for a partial rehabilitation of this facility including the replacement of the chemical feed systems, partial replacement of the electrical system and the replacement of other components damaged by flooding and chemicals. The design phase of the project is nearing completion with construction scheduled to begin in FY 2012.
- DC Water Low Impact Development Projects (Project BA) with a lifetime budget of \$3.0 million is designed to control wet weather related pollution from DC Water owned facilities as required for the LTCP Consent Decree. LID technology will be evaluated for it's effectiveness in controlling storm water runoff and improvement in water quality. Implementation of LID technologies has started at several facilities; the construction of the LID at the remaining facilities will begin in FY 2012.
- Rock Creek CSO Projects (Project BH) with a lifetime budget of \$16.6 million provides for further reduction of CSOs into Rock Creek as part of the agreement for the LTCP Consent Decree. The Rock Creek Regulator Adjustment project (Job BH01) includes modifications to various regulator structures and the separation of several segments of the combined sewer system. This project started construction in 2011 and continues until 2013. Job BH02, the Rock Creek Sewer Separation project provides for the separation of sanitary and storm sewers in four sub-watersheds of the Rock Creek drainage basin. The sewer separation was completed in 2011.
- Outfall Sewer Rehabilitation (Project D2) with a lifetime budget of \$56 million provides for the rehabilitation of approximately 16,000 feet of the influent sewers to Blue Plains to ensure reliable conveyance of 1,076 mgd by April 2011 (this project is substantially complete). After DC Water inspected the large diameter sewers which convey wastewater from the pumping stations to Blue Plains, the inspections revealed significant corrosion and exposed reinforcing steel in portions of the pipes.

Engineering analyses determined that the conduits could not convey the required 1,076 mgd due to their condition. As a result, this project rehabilitated approximately 4 miles of the influent sewers to Blue Plains (Outfall Sewers). In accordance with the Consent Decree, DC Water had requested approximately a 4 year extension to 2011 to convey 1,076 mgd until the rehabilitation project was completed. The cost of this project has been incorporated within the ten-year capital plan to ensure that the benefits of the Clean Rivers Project can be fully realized and that DC Water is in complete compliance with all requirements.

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: CSO Program Management
 Activity Group/Project Title: AV - CSO Program Management ¹
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2021

Project Description:

Project AV provides engineering project management services for planning, design and rehabilitation projects for DC Water's combined sewer system for the purpose of reducing adverse impact of combined sewer overflow to the receiving waters. Examples of the projects to be managed are: CSO Long Term Control Plan Development Project, CSO Nine Minimum Control Projects, Fabri-Dam Rehabilitation Project, Pump Stations Rehabilitation, and the CSO control projects recommended under the CSO LTCP Development Project and approved by the regulatory agencies.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	40,720,146
FY2012 Revised/FY2013 Approved Life Budget	40,720,146
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	5,606	1,524	1,533	2,272	1,840	1,555	1,593	2,181	2,645	2,105	2,182
Commitments Budget	26,120	0	0	0	0	14,600	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: CSO Program Management
 Activity Group/Project Title: K2 - CSO-Long Term Control Plan
 Managing Department: Engineering and Technical Services **EPMC: DETS**
Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	
Construction:	
Project Completion:	May 2012

Project Description:

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

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	14,518,848
FY2012 Revised/FY2013 Approved Life Budget	14,518,848
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	13,592	67	0	0	0	0	0	0	0	0	0
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	14,519	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: A7 - Supplemental Environmental Projects / Nine Minimum Controls
 Managing Department: Engineering and Technical Services **EPMC:** DETS
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2007
Project Completion:	Jul 2013

Project Description:

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

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,900,000
FY2012 Revised/FY2013 Approved Life Budget	1,900,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,455	46	34	0	0	0	0	0	0	0	0
Commitments Budget	1,900	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: BA - DC WATER Low Impact Development Projects / Nine Minimum Con
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	Feb 2002
Construction:	Jun 2004
Project Completion:	Oct 2014

Project Description:

This project was developed in accordance with DC Water's commitment to promote Low Impact Development (LID) to control wet weather related pollution, DC Water has or will under take projects to implement LID technology at its own facilities, when and where possible. In addition to reduce stormwater runoff and thereby contribute to the water quality of the receiving waters, this also provides DC Water the opportunity to examine effectiveness of various LID techniques.

Impact on Operations:

There will be some increase in O&M activities when these projects are implemented.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	3,000,000
FY2012 Revised/FY2013 Approved Life Budget	3,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	482	133	1,096	272	7	0	0	0	0	0	0
Commitments Budget	815	2,005	180	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: BB - Potomac Pumping Station Rehab / Nine Minimum Controls³
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 2002
Construction:	Apr 2005
Project Completion: Apr 2016	

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

DC - 24.90%
 EPA/Fed - 24.90%
 WSSC - 25.79%
 Fairfax - 15.93%
 Loudoun/PI - 8.48%



FY2011 Approved Life Budget	20,052,932
FY2012 Revised/FY2013 Approved Life Budget	20,052,932
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	19,289	75	4	4	5	4	0	0	0	0	0
Commitments Budget	20,053	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: BH - Rock Creek CSO Projects / Nine Minimum Controls
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	Mar 2007
Construction:	Mar 2009
Project Completion:	May 2014

Project Description:

These are Combined Sewer System (CSS) Long Term Control Plan (LTCP) early action projects. The regulators at outfalls 033, 036, 047 and 057 will be evaluated to determine if additional combined sewer flows can be contained within the sewer to reduce CSOs to Rock Creek. The CSS area served by outfalls 031, 037, 053, and 058 will be separated into an independent sanitary system and storm sewer system thus eliminating these outfalls and the resultant CSO.

Impact on Operations:

Elimination of the outfalls indicated will reduce operating costs by reducing the need for the periodic inspections effort.

Effective Funding by User (percent):

DC - 49.97%
 EPA/Fed - 50.03%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	18,070,900
FY2012 Revised/FY2013 Approved Life Budget	16,570,900
Increase/(Decrease) to Approved Life Budget:	-1,500,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	10,420	3,023	742	28	0	0	0	0	0	0	0
Commitments Budget	16,571	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: BK - CSO Nine Minimum Control Projects
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2008
Project Completion:	Oct 2011

Project Description:

This project has been added to make financial provisions to comply with requirements in the 3-party consent decree. These funds will provide for:

CSO Event Indicator Lights: The lights are triggered by CSO events, and will be placed at two CSO locations to alert potential users of the river of an active CSO. This will be an automatic system including an overflow detector, an automatic electronic communication system and a pole fitted with a light that will be visible to the users of the river.

Additional CSO Signs: At a select number of locations, at or near CSO outfall structures, special signs will be installed (pending National Park Service's approval) to alert potential users of CSO impacted rivers about the location of the outfall.

Impact on Operations:

Addition of the lights and signs will result in increased operating costs to provide for inspection and maintenance activities.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,391,000
FY2012 Revised/FY2013 Approved Life Budget	1,391,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	1,090	96	0	0	0	0	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	1,391	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: CI - O Street - Facility Projects²
 Managing Department: Facilities and Security **EPMC: EPMC3**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jul 2008
Project Completion:	Sep 2011

Project Description:

This project will rehab and upgrade various facilities and apparatus within the "O" street compound. This is a separate project from the rehabilitation of the Main & O Street Pumping Stations and will be managed by Facilities and DMS.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,396,891
FY2012 Revised/FY2013 Approved Life Budget	612,704
Increase/(Decrease) to Approved Life Budget:	-784,187

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	585	0	0	0	0	0	0	0	0	0	0
Commitments Budget	613	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: D2 - Outfall Sewer Rehabilitation / Nine Minimum Controls³
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	Nov 2007
Construction:	Apr 2009
Project Completion:	Jul 2012

Project Description:

This project will rehabilitate the existing Outfall Sewer System tributary to the headworks of the Blue Plains WWTP. Four 10-foot diameter sewers were inspected in 2005 and it was concluded that the pipelines will need to be rehabilitated in order to provide reliable service. This project is eligible for 50/50 matching funding from the Congressional CSO Appropriation.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 42.30%
 EPA/Fed - 42.30%
 WSSC - 14.00%
 Fairfax - 1.09%
 Loudoun/PI - 0.31%



FY2011 Approved Life Budget	56,000,000
FY2012 Revised/FY2013 Approved Life Budget	56,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	42,386	6,000	0	0	0	0	0	0	0	0	0
Commitments Budget	56,000	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: DB - Sewer Services Field Facility & Relocation²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project was to address the new stadium projects in the vicinity of Main and "O", and the renovations attendant thereto. This work and its budget was transferred to 'Land Use Facility Plan' projects under the Sanitary Sewer service area.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget

FY2012 Revised/FY2013 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

DROPPED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget											
Commitments Budget											

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: DD - Main & O Pump Sta. Development Effort²
 Managing Department: Chief Financial Officer **EPMC: EPMC3**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Feb 2012

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%



FY2011 Approved Life Budget	790,570
FY2012 Revised/FY2013 Approved Life Budget	790,570
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	648	56	0	0	0	0	0	0	0	0	0
Commitments Budget	791	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: DS - New DC Water Headquarters²
 Managing Department: Chief Financial Officer **EPMC: EPMC3**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Jan 2012

Project Description:
 This project is for the planning and feasibility study for a proposed new DC Water Headquarters 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%



FY2011 Approved Life Budget	460,000
FY2012 Revised/FY2013 Approved Life Budget	460,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	322	32	0	0	0	0	0	0	0	0	0
Commitments Budget	460	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: EJ - Potomac Pumping Station - Phase III
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Oct 2009
Construction:	Aug 2012
Project Completion:	Mar 2016

Project Description:

This project will provide a general upgrade to this station that was placed in service in 1963. It will provide for the replacement of the four existing screens, replacement of gate valve actuators, additional sluice gates between the pumps and the wet well, and a replacement lighting system. It will also provide a new fire alarm and suppression system.

Impact on Operations:

While there is no financial impact on Operations, this project will increase the efficiency and decrease the maintenance costs associated with the Potomac Pumping Station, as well as provide the flexibility to reroute influent from any wet well to another pump, easing the ability to do maintenance while still processing the maximum amount of flows for the station.

Effective Funding by User (percent):

DC - 44.22%
 EPA/Fed - 2.39%
 WSSC - 29.36%
 Fairfax - 17.76%
 Loudoun/PI - 6.27%



FY2011 Approved Life Budget	14,491,000
FY2012 Revised/FY2013 Approved Life Budget	20,552,605
Increase/(Decrease) to Approved Life Budget:	6,061,605

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	358	2,654	2,767	6,284	3,154	28	0	0	0	0	0
Commitments Budget	3,849	1,734	14,838	132	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: EK - Long Term Rehabilitation Main & O Pump Stations²
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2017
Construction:	Aug 2020
Project Completion: Jan 2024	

Project Description:

This project will provide for a 30 year upgrade to the Main Pumping Station and the O Street Pumping Stations. This project will replace the Main Pumping Station's sanitary pumps, motors and controls as necessary, all six storm pumps, motors and controls as necessary, rebuild or replace various large gates in the channels, provide a new roof, provide general HVAC improvements and provide a new and separate pumping station for the low area sewer. This project will replace the O Street Pumping Station's six storm pumps, motors and controls as necessary and provide miscellaneous structural, architectural and electrical upgrades. It will also provide various site improvements around both stations. Parts of this project that pertained to rehabilitation, and identified as necessary prior to 2019, have been rescheduled under a new project (FQ).

Impact on Operations:

While there is minimal financial impact on Operations, this project provides new sanitary and storm pumps, that will be more efficient than the ones currently in place, which were cast into the concrete in 1908 when the station was built. It also provides the long-term upgrade needed for the station for the next 30 years, and installs variable frequency drives to protect the large motors during startup, when the wet wells are unable to provide the flows necessary to cool such large motors.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	72,444,000
FY2012 Revised/FY2013 Approved Life Budget	72,444,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	0	0	0	0	0	573	2,677	2,628	2,725	56,366
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	0	0	0	0	0	11,533	0	0	60,391	520

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: EL - Swirl Facility Rehabilitation
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Nov 2008
Construction:	Mar 2012
Project Completion:	Dec 2014

Project Description:

This project will provide a partial rehabilitation to this facility that was placed in service in 1990. It will provide for the replacement of deteriorated chemical pumps, repair structural damage done by chemicals, make repairs to the control system and wiring for the chemical pumps, replace deteriorated conduits and wiring in the screen room and swirl room as necessary, replace damaged components of HVAC system and repair the control system for the mixing chamber.

Impact on Operations:

This project will decrease maintenance costs by generally improving the condition of the facility. Installing correctly sized pumps for the current capacity, thus decreasing the flooding of the station and the related cleanup costs, as well as preventing water getting into the switch gear and shorting out, which will also improve overall reliability and effectiveness of the station.

Effective Funding by User (percent):

DC - 98.53%
 EPA/Fed - 1.47%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	4,495,000
FY2012 Revised/FY2013 Approved Life Budget	4,495,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	176	989	1,785	395	5	0	0	0	0	0	0
Commitments Budget	744	3,521	230	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: EQ - Potomac Pump Station Rehab - Phase IV
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2018
Construction:	Nov 2019
Project Completion: May 2021	

Project Description:

This project will provide a general upgrade to this station that was placed in service in 1963. It will provide for architectural improvements, painting throughout the station, new men's and women's ADA compliant restrooms, an odor control system, and VFD's for the two large pumps.

Impact on Operations:

This project will have no material impact on the operating budget, but will provide protection for the large pumps by installing variable frequency drives to more efficiently handle start ups.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	7,515,000
FY2012 Revised/FY2013 Approved Life Budget	7,515,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	136	564	3,401	1,004
Commitments Budget	0	0	0	0	0	0	0	1,085	650	5,550	230

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: FQ - Main & O St PS Intermediate Upgrade²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2011
Construction:	Feb 2013
Project Completion: Mar 2015	

Project Description:

This project will provide for needed replacement of storm water pumps and various sluice gates and gate valves at the Main and O Street Pumping Stations. In Main, this project will replace three storm pumps, motors and controls and add a new sluice gate to isolate the suction side of Pump No. 4. Also, the project will replace the 48" Butterfly Valve 16 on the discharge side of Pump No. 4 with a plug valve, remove and plug the 30" Butterfly Valve 17 on the overflow to the river, and replace the 66" Sluice Gate 9 on the suction side of Pump No. 1. It replaces the discharge flap gates on all six storm pumps. In the 'O' Street Pumping Station this project will replace seven gate valves on the suction and discharge of the four sanitary pumps and automate these gate valves to improve control of the flow within the station.

Impact on Operations:

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	17,345,000
FY2012 Revised/FY2013 Approved Life Budget	17,345,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	134	723	2,381	6,127	1,437	0	0	0	0	0	0
Commitments Budget	2,488	205	14,352	300	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: FX - Rehab Northeast Boundary Sewer-PH 1
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2012
Construction:	May 2014
Project Completion:	Dec 2016

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%



FY2011 Approved Life Budget	18,500,000
FY2012 Revised/FY2013 Approved Life Budget	18,500,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	672	903	5,802	4,513	458	0	0	0	0
Commitments Budget	0	0	1,234	17,266	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: FZ - Tiber Creek Sewer Lining -Ph 1
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Nov 2013
Construction:	May 2015
Project Completion:	Dec 2017

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%



FY2011 Approved Life Budget	16,500,000
FY2012 Revised/FY2013 Approved Life Budget	16,500,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	581	790	5,175	3,989	410	0	0	0
Commitments Budget	0	0	0	1,101	15,399	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: G7 - Combined Sewers Under Buildings¹
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Mar 2009
Construction:	Jul 2010
Project Completion:	Oct 2016

Project Description:

This new project is the outcome of the recommendations of a comprehensive Sewer System Assessment (SSA) commissioned by DC Water. This study recommended certain High Priority rehabilitation projects that needed to be undertaken to fix structural defects and restore structural integrity of the sewer system. This project rehabilitates combined sewers located under buildings citywide identified as high priority activities under the SSA. Other activities included in this project are cleaning, pre and post CCTV, sealing joints and repair of offset pipe. New projects have been created to continue this work in phases, with associated budget transfers from G7 to the new projects.

Impact on Operations:

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	19,780,000
FY2012 Revised/FY2013 Approved Life Budget	19,780,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,375	3,079	1,006	2,296	3,747	1,883	16	0	0	0	0
Commitments Budget	7,000	417	6,269	6,094	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: IH - Combined Sewer Rehabilitation 2
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2014
Construction:	Sep 2015
Project Completion:	Oct 2019

Project Description:

This multi-job project to rehabilitate combined sewers in various locations throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer infrastructure to be rehabilitated is prioritized based on the criticality given to sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as any necessary replacement of offset pipes. Multiple jobs provide the annualized program to rehabilitate the large sewer inventory which exhibit deteriorated conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	27,600,000
FY2012 Revised/FY2013 Approved Life Budget	27,600,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	212	478	3,298	5,715	5,738	2,805	24	0
Commitments Budget	0	0	0	594	8,920	9,220	8,866	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: IJ - Combined Sewer Rehabilitation 3
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2017
Construction:	Sep 2018
Project Completion:	Oct 2022

Project Description:

This multi-job project to rehabilitate combined sewers in various locations throughout the District is one aspect of the Service Life Improvement Plan outlined in the 2009 Sewer System Facilities Plan. Sewer infrastructure to be rehabilitated is prioritized based on the criticality given to sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as any necessary replacement of offset pipes. Multiple jobs provide the annualized program to rehabilitate the large sewer inventory which exhibit deteriorated conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	30,000,000
FY2012 Revised/FY2013 Approved Life Budget	30,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	236	532	3,648	6,327	13,307
Commitments Budget	0	0	0	0	0	0	647	9,720	10,018	9,615	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: IP - Tiber Creek Trunk Sewer Rehabilitation
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2014
Construction:	Apr 2015
Project Completion:	Dec 2017

Project Description:

This project involves the rehabilitation of severely deteriorated sections found at various locations on three (3) segments of the Tiber Creek Combined Trunk Sewer between Massachusetts Avenue NW to the north and N Street SE to the south (approximately 65 locations total) using appropriate rehabilitation techniques. The size of the trunk sewer ranges from 14'-0" by 14'-3" to 10'-5" by 24'-0". Project also includes the cleaning of the entire 6,400 LF combined sewer main, pre- and post CCTV inspections, reinstating service connections and other related activities.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,250,000
FY2012 Revised/FY2013 Approved Life Budget	8,250,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	275	774	3,212	1,044	57	0	0	0
Commitments Budget	0	0	0	835	7,415	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: K1 - Main & "O" St. Pump Stations / Nine Minimum Controls²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2004
Construction:	Apr 2005
Project Completion:	Aug 2014

Project Description:

Project K1 provides for the restoration of the capacity of the Main Pumping Station to its rated flow of 240 MGD and the "O" Street Pumping Station to 45 MGD. Work will include rebuilding and upgrading the sanitary pumps, upgrading the electrical and ventilation systems, replacing screens and installing screening handling systems and odor control systems. These are needed to reduce combined sewer overflow to the river, meet the requirements of the Federal Clean Water Act and restore the stations to a reliable operating condition.

Impact on Operations:

Rehabilitation of these stations will increase the amount of flow that can be pumped to Blue Plains thus reducing the quantity of overflows. The project make the facilities safer for personnel by improving the ventilation, providing odor control, installing new lighting, replacing handrails and other safety features, repairing various structural defects in the two structures and eliminating the need to handle screenings by hand. It will also decrease the personnel hours spent handling the screenings. It will improve the appearance of the overall facility by replacing and upgrading the brickwork on the "O" Street Station, replacing the pavement, providing new landscaping and exterior lighting and restoring the building exterior of the Main Station. There will be no material impacts on operating costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	75,900,723
FY2012 Revised/FY2013 Approved Life Budget	79,900,723
Increase/(Decrease) to Approved Life Budget:	4,000,000

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	71,540	2,811	25	0	0	0	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	79,901	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: K3 - East Side Pumping Station / Nine Minimum Controls
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2003
Construction:	Aug 2004
Project Completion:	Aug 2012

Project Description:

Project K3 provides for the restoration of the pumping capacity of this facility to its rated flow of 45 MGD by providing a new, above grade pumping station. This is necessary to reduce combined sewer overflow to the Anacostia River by increasing flow to Blue Plain to meet the requirements of the Federal Clean Water Act.

Impact on Operations:

Replacement of this station will increase the amount of flow that can be pumped to Blue Plains thus reducing the quantity of overflow. It will provide a facility with greatly improved ventilation, odor control, screening handling system, lighting and safety features. It will provide a much higher degree of reliability than the existing facility. There will be no material impact on operating costs.

Effective Funding by User (percent):

DC - 55.82%
 EPA/Fed - 44.18%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	17,193,005
FY2012 Revised/FY2013 Approved Life Budget	17,193,005
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	16,146	242	0	0	0	0	0	0	0	0	0
Commitments Budget	17,193	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: K4 - Poplar Point Pumping Station / Nine Minimum Controls²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2005
Construction:	Jan 2010
Project Completion: Dec 2013	

Project Description:

Project K4 provides for the rehabilitation of the existing pumping station and improvement to its reliability. This project includes structural and architectural repairs to the station, HVAC upgrades, addition of odor control, electrical and lighting upgrades and storm drain and paving modifications. Final decision on a new station will depend on CSO Long Term Control Plan recommendations.

Impact on Operations:

The station's rated capacity of 45 mgd has been restored by replacing the pump impellers. This meets the Earth Justice Consent Decree requirement. The rehabilitation project will provide an improved ventilation system and a new odor control system, improve the station lighting, eliminate manual screenings handling by providing washers, compactors and dumpsters for the screenings and improve the station reliability by replacing many of the support systems. It will also repair structural defects and improve the appearance of the station exterior. There will be no material impact on operating costs.

Effective Funding by User (percent):

DC - 87.41%
 EPA/Fed - 7.35%
 WSSC - 5.24%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	9,751,001
FY2012 Revised/FY2013 Approved Life Budget	5,751,001
Increase/(Decrease) to Approved Life Budget:	-4,000,000

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	3,932	490	108	6	0	0	0	0	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	5,751	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: Combined Sewer Projects
 Activity Group/Project Title: K5 - Dry-Weather Overflow Elimination / Nine Minimum Controls²
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Dec 2000
Construction:	Mar 2000
Project Completion:	Jan 2013

Project Description:

Under this project, engineering and design for the rehabilitation of the CSO overflow structures to eliminate dry weather overflow has been completed. Construction has been initiated at these locations. As a separate activity, the combined sewer system area served by outfall 006 will be separated into two separate systems for the collection of sanitary and storm sewage flow separately. This will result in the elimination of the outfall and resultant CSOs. In addition, this project includes the inspection of the Anacostia River siphons in Year 2010. The siphons are scheduled for inspection every 10 years to ensure their reliability and to evaluate their condition.

Impact on Operations:

When the CSO structures are rehabilitated, there will be an increase in the efficiency of operation and maintenance tasks related to these structures that will result in a cost reduction. However, some additional workload will be required to operate and maintain the trash collection facilities at the separated stormwater outfalls resulting in no net reduction to operational costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	12,128,271
FY2012 Revised/FY2013 Approved Life Budget	12,128,271
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	9,931	55	11	0	0	0	0	0	0	0	0
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	12,028	100	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: DC Clean Rivers Project
 Activity Group/Project Title: CY - CSO LTCP Anacostia Projects
 Managing Department: Engineering and Technical Services **EPMC:** EPMC5
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2009
Construction:	Feb 2010
Project Completion:	Dec 2025

Project Description:

The purpose of this project is to capture and provide storage for combined sewer overflows (CSOs) being discharged to the Anacostia River. The project comprises construction of approximately 8 miles of tunnels with a volume of about 126 million gallons. Two basic tunnels will be constructed; one extending from Poplar Point to the area of RFK Stadium with the second running from the stadium area, then along Florida Avenue to about 8th Street NW. Construction also includes two side tunnels off the northerly side of the Florida Avenue tunnel for flood control, consolidation of 3 existing CSO outfalls in the Navy Yard area, a pumping station at Poplar Point to dewater the tunnels to the existing collection system for treatment of the stored CSO at Blue Plains, an intercepting sewer along the east side of the Anacostia River to capture overflows from two CSO outfalls and convey them to the tunnels and various diversion structures to convey combined sewer flow to the tunnels. When completed, this project together with CSO control projects already completed or underway are expected to reduce CSOs to the Anacostia River by about 98 percent.

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 - 90.51%
 EPA/Fed - 4.47%
 WSSC - 3.96%
 Fairfax - 0.68%
 Loudoun/PI - 0.37%



FY2011 Approved Life Budget	1,672,282,016
FY2012 Revised/FY2013 Approved Life Budget	1,672,282,016
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	83,183	114,366	138,668	91,726	143,635	132,510	122,307	36,237	53,201	83,986	371,432
Commitments Budget	411,076	77,153	296,820	112,774	100,518	101,742	4,587	192,980	116,865	2,467	271,499

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: DC Clean Rivers Project
 Activity Group/Project Title: CZ - CSO LTCP Potomac Projects
 Managing Department: Engineering and Technical Services **EPMC: EPMC5**
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2018
Construction:	Mar 2021
Project Completion:	Dec 2025

Project Description:

The purpose of this project is to capture and provide storage for combined sewer overflows (CSOs) being discharged to the Potomac River. The project comprises construction of a tunnel approximately 3 miles long with a volume of about 58 million gallons, along the Georgetown bank of the river. Construction also includes a pumping station near the Kennedy Center to dewater the tunnel to the existing collection system for treatment of the stored CSO at Blue Plains and various diversion structures to convey combined sewer flow to the tunnel. When completed, this project, together with CSO control projects already completed, or underway, are expected to reduce CSOs to the Potomac River by about 93 percent.

Impact on Operations:

The project will result in increased operations and maintenance costs related to the tunnel, pumping station and various diversion structures. Additional operations and maintenance costs will also be incurred for monitoring the completed facilities to assess performance of the CSO controls against predictions established as part of LTCP development.

Effective Funding by User (percent):

DC - 92.66%
 EPA/Fed - 0.25%
 WSSC - 5.53%
 Fairfax - 1.01%
 Loudoun/PI - 0.55%



FY2011 Approved Life Budget	418,700,000
FY2012 Revised/FY2013 Approved Life Budget	418,700,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	1,216	1,270	961	309	1,533	5,132	5,233	8,412	11,639	12,028	335,923
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	4,866	0	0	0	20,935	0	0	54,232	0	2,864	335,802

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
 Program Title: DC Clean Rivers Project
 Activity Group/Project Title: DZ - CSO LTCP Rock Creek Projects / Nine Minimum Controls
 Managing Department: Engineering and Technical Services **EPMC:** EPMC5
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2019
Construction:	Mar 2022
Project Completion:	Dec 2025

Project Description:

The purpose of this project is to capture and provide storage for combined sewer overflows (CSOs) being discharged to 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 - 99.28%
 EPA/Fed - 0.69%
 WSSC - 0.02%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	70,341,600
FY2012 Revised/FY2013 Approved Life Budget	70,341,600
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	615	286	227	71	0	232	771	800	1,417	2,026	57,302
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	1,399	0	0	0	0	3,086	0	0	10,551	0	55,306

(projected disbursements do not include contingencies)

(dollars in thousands)



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY **2011 – 2020**

SECTION VI

STORMWATER SERVICE AREA

STORMWATER

Over 34 miles of rivers and streams in and around the District of Columbia do not support swimming and aquatic life. Stormwater runoff from separated and combined sewers is one of the primary sources of pathogens that cause impairments to the District's local waterways. The District's stormwater system, not including the combined sewers, has approximately 600 miles of storm sewer pipes, catch basins, inlets, special structures and related facilities. Some components of the existing storm sewer system are over 100 years old. The system is constructed of a variety of materials such as ductile iron, plastic, steel, brick, cast iron, cast-in place concrete, brick and concrete, vitrified clay, and concrete. DC Water is responsible for the maintenance and replacement of certain public facilities that convey stormwater runoff to the Anacostia and Potomac Rivers, Rock Creek, and other receiving streams within certain areas of the District of Columbia, specifically the areas of the District served by combined sewers.

In other locations, those served by separate storm sewers, the tasks are shared by several agencies, with the District of Columbia's Department of the Environment (DDOE) having central responsibility for managing the work. The District is required to meet certain regulatory requirements in managing its separate stormwater system under the District's MS4 permit issued by the federal government. Since 2007, DDOE has been responsible for the separate storm water system and compliance with the Clean Water Act as the stormwater administrator. Among other things, DDOE coordinates the stormwater management (MS4) task force, making recommendations regarding stormwater priorities, goals and recommendations on the adequacy of funding mechanisms for stormwater management activities. In November 2007, DDOE negotiated a revised permit with several best practice enhancements, with some having measurable and quantifiable milestones.

While DC Water has a long term control plan to address these issues within the combined sewer areas, DC Water's staff continues to participate in the MS4 task force, and to monitor the impact of other MS4 NPDES requirements on DC Water and its ratepayers. Significant progress has been made throughout the District. Since 2001, DC Water collected the MS4 stormwater fees on behalf of the District and acted as stormwater administrator until the creation of DDOE and the transfer of duties in early 2007. DC Water continues to collect those fees on behalf of the District and transfers them to DDOE quarterly. Most recently, a Memorandum of Understanding and continued dialogue among task force members resulted in a better definition of roles, responsibilities and funding sources for the activities required to enhance stormwater management. Discussion of other matters, such as the turnover of stormwater pumping facility maintenance continues.

DC Water's lifetime budget for the Stormwater Service Area is \$58.5 million. Projects include rehabilitation or replacement of certain storm sewer systems that have experienced structural deterioration, studies and analysis. DC Water has continued to support stormwater management in the District of Columbia through catch basin cleaning in the combined sewer area (per our Blue Plains NPDES permit and an important component of storm water pollution control efforts) and through coordination of cleaning activities throughout the District (along with DC Public Works) as a member of the taskforce and an agency that values the design and implementation of environmentally responsible policies and programs. As new technologies for water quality, catch basin and best management practices become available and are installed by DC Department of Transportation, DC Water has pledged to support

stormwater efforts through expeditious review and approval, as appropriate, of proposals and providing catch basin cleaning and maintenance of new technologies utilizing available funding under the MS4 program. In addition, DDOE has, from time to time, identified areas within the District that may require additional study of stormwater impact. DC Water has the expertise available to support this research as required to enable evaluation of alternatives and best practices for future decision making.

Stormwater Local Drainage - \$18 million

(project pages VI-5 to VI-8)

This category includes several projects to relieve local flooding and to address short term needs for improvements to storm sewers located in the separate and combined sewer areas. A significant project to highlight is the sewer lining for the Northwest Boundary Sewer Overflow (NWBSO) at 22nd & P Streets, NW (Job A601), which will correct a drainage and flooding problem. Complication with easements and access permits have resulted in delays prior to construction advertisement. The design was completed in FY 2009 with construction delayed until FY 2012.

Stormwater On-Going Projects – \$9.7 million

(project pages VI-9 to VI-24)

These include projects carried out by DC Water’s Department of Sewer Services, including storm sewer rehabilitation and extensions to serve new development. These annual projects provide funding to assist in immediate storm sewer construction to alleviate flooding.

Stormwater Pumping Facilities - \$0.0 million

As in previous year’s budgets, we have not included funding for stormwater pumping rehabilitation projects. We have been engaged in extensive discussions with the District over the last few years regarding how responsibilities for a variety of stormwater-related functions are divided among District agencies, including responsibility for stormwater pumping stations. To date, turn over of these activities to others is still anticipated.

DDOT Stormwater Projects – \$4.7 million

(project pages VI-25 to VI-42)

This program funds projects associated with DDOT road projects, which often require relocation of storm sewers, inlets or other structures.

Stormwater Research and Program Management - \$10.6 million

(project pages VI-43 to VI-43)

This area provides for required technical assessments and hydraulic studies required to assess problems in the storm water system. For example, a comprehensive study of the Palisades Stormwater neighborhood flooding problems was completed in FY 2008 .A study of the Federal Triangle area, requested by various federal agencies, is ongoing. These investigations are anticipated to be reimbursed through the MS4 fees and thus have no impact on the rate payers; however, the budget is included within this program.

This also funds program management costs associated with studies and designs of DC Water facilities that may involve review of stormwater facilities.

Stormwater Trunk/Force Sewers – \$15.5 million

(project pages VI-44 to VI-44)

This program includes funds for major maintenance of the storm water piping system as well as funding for two capital projects that were previously undertaken.

- Henson Ridge Relief Sewer – Job BO01 – The project involves the installation of a relief sewer for the Henson Ridge neighborhood in the SE quadrant of the District to relieve flooding on Mississippi Avenue. Construction has started and the project is anticipated to be completed in early FY2012.
- Park Drive Storm Outfall Rehabilitation – Job BO06 - The budget includes reconstruction of a stormwater outfall to a stream on National Park Service property at the end of 32nd Street, SE, near Park Drive. The outfall will include an energy dissipater and stabilization of the stream bank in the immediate vicinity of the outfall to prevent erosion of the outfall. Construction is anticipated to be completed in FY 2012.

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater Local Drainage
 Activity Group/Project Title: A6 - Lining, 22nd & Psts., NW
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2004
Construction:	Aug 2012
Project Completion:	Feb 2014

Project Description:

This projects is for the investigation, design and repair of the existing 8'-3" diameter Northwest Boundary Interceptor Sewer, which has shown signs of structural defects during prior inspections. The project will decrease further deterioration of the asset.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	3,019,246
FY2012 Revised/FY2013 Approved Life Budget	3,019,246
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	224	12	86	23	0	0	0	0	0	0	0
Commitments Budget	526	2,493	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater Local Drainage
 Activity Group/Project Title: GY - Storm Rehab @ Various Locations
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2011
Construction:	Jul 2012
Project Completion:	Aug 2018

Project Description:

This multi-job project rehabilitates storm sewers located throughout the District. Storm sewer infrastructure to be rehabilitated is prioritized based on the criticality given to inspected sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as the repair of any offset pipe. Multiple jobs provide the annualized program to rehabilitate the storm sewer inventory which exhibits deteriorated conditions and is located under buildings.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	6,580,000
FY2012 Revised/FY2013 Approved Life Budget	6,580,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	5	18	45	65	76	70	24	0	0	0
Commitments Budget	0	495	930	1,390	1,905	1,860	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater Local Drainage
 Activity Group/Project Title: ID - Storm Sewer Rehabilitation 2
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2016
Construction:	Jan 2017
Project Completion: Aug 2021	

Project Description:

This multi-job project rehabilitates storm sewers located throughout the District. Storm sewer infrastructure to be rehabilitated is prioritized based on the criticality given to inspected sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as the repair of any offset pipe. Multiple jobs provide the annualized program to rehabilitate the storm sewer inventory which exhibits deteriorated conditions and is located under buildings.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	6,200,000
FY2012 Revised/FY2013 Approved Life Budget	6,200,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	6	21	71	91	76	484
Commitments Budget	0	0	0	0	0	140	2,010	2,100	1,950	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater Local Drainage
 Activity Group/Project Title: IE - Storm Sewer Rehabilitation 3
 Managing Department: Engineering and Technical Services **EPMC: EPMC3**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2019
Construction:	Jan 2020
Project Completion:	Aug 2022

Project Description:

This project rehabilitates storm sewers located throughout the District. Storm sewer infrastructure to be rehabilitated is prioritized based on the criticality given to inspected sewer segments, with priority given to infrastructure which transverses under existing buildings. Sewer infrastructure would be rehabilitated utilizing appropriate lining methods as well as the repair of any offset pipe. Multiple jobs provide the annualized program to rehabilitate the storm sewer inventory which exhibits deteriorated conditions and is located under buildings.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,200,000
FY2012 Revised/FY2013 Approved Life Budget	2,200,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	7	16	1,532
Commitments Budget	0	0	0	0	0	0	0	0	155	2,045	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: C1 - FY2001 - DSS Storm Sewer Project
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Sep 2002
Project Completion:	Oct 2011

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2001 for storm water infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	247,000
FY2012 Revised/FY2013 Approved Life Budget	247,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	165	3	0	0	0	0	0	0	0	0	0
Commitments Budget	247	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: C4 - FY2004- DSS Storm Sewer Project
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jun 2004
Project Completion:	Aug 2012

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2004 for storm water infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	497,000
FY2012 Revised/FY2013 Approved Life Budget	497,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	412	16	0	0	0	0	0	0	0	0	0
Commitments Budget	497	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: C6 - FY2006- DSS Storm Sewer Project
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jul 2005
Project Completion:	Aug 2012

Project Description:

This project was created as an annual program for planned projects by the Department of Sewer Services in FY2006 for storm water infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	497,000
FY2012 Revised/FY2013 Approved Life Budget	497,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	368	33	0	0	0	0	0	0	0	0	0
Commitments Budget	497	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: C7 - FY2007- DSS Storm Sewer Project ²
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Sep 2011
Project Completion:	Aug 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	497,000
FY2012 Revised/FY2013 Approved Life Budget	497,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	6	239	0	0	0	0	0	0	0	0	0
Commitments Budget	497	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

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

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: C8 - FY2008 - DSS Storm Sewer Project
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jun 2008
Project Completion:	Aug 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	497,000
FY2012 Revised/FY2013 Approved Life Budget	497,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	415	37	0	0	0	0	0	0	0	0	0
Commitments Budget	497	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: AO - FY2009 - DSS Storm Sewer Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Sep 2009
Project Completion:	Sep 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	497,000
FY2012 Revised/FY2013 Approved Life Budget	497,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	414	33	0	0	0	0	0	0	0	0	0
Commitments Budget	497	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: AN - FY2010 - DSS Storm Sewer Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2010
Project Completion:	Aug 2012

Project Description:

This project is for the FY2010 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	600,000
FY2012 Revised/FY2013 Approved Life Budget	600,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	495	41	0	0	0	0	0	0	0	0	0
Commitments Budget	600	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: BD - FY2011 - DSS Storm Sewer Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Jan 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	618,000
FY2012 Revised/FY2013 Approved Life Budget	618,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	44	190	68	0	0	0	0	0	0	0	0
Commitments Budget	618	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: CD - FY2012 - DSS Storm Water Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2012
Project Completion:	Jun 2013

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	637,000
FY2012 Revised/FY2013 Approved Life Budget	637,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	141	211	0	0	0	0	0	0	0	0
Commitments Budget	0	637	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: CN - FY2013 - DSS Stormwater Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2013
Project Completion:	Jun 2014

Project Description:

This project is for the FY2013 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	660,000
FY2012 Revised/FY2013 Approved Life Budget	660,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	173	259	0	0	0	0	0	0	0
Commitments Budget	0	0	660	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: D7 - FY2014 - DSS Stormwater Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2014
Project Completion:	Jun 2015

Project Description:

This project is for the FY2014 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	680,000
FY2012 Revised/FY2013 Approved Life Budget	680,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	209	270	0	0	0	0	0	0
Commitments Budget	0	0	0	680	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: DJ - FY2015 - DSS Stormwater Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2015
Project Completion:	Jun 2016

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	701,000
FY2012 Revised/FY2013 Approved Life Budget	701,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	193	250	0	0	0	0	0
Commitments Budget	0	0	0	0	701	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: DX - FY2016 - DSS Stormwater Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2016
Project Completion:	May 2017

Project Description:

This project is for the FY2016 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the stormwater sewer system. This project is needed to replace aged infrastructure to restore integrity and reliability of the stormwater sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	720,000
FY2012 Revised/FY2013 Approved Life Budget	720,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	262	198	0	0	0	0
Commitments Budget	0	0	0	0	0	720	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title:
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2017
Project Completion:	May 2018

Project Description:

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

Impact on Operations:

No significant O&M cost impact.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<input type="text" value="745,000"/>
FY2012 Revised/FY2013 Approved Life Budget	<input type="text" value="745,000"/>
Increase/(Decrease) to Approved Life Budget:	<input type="text" value="0"/>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	267	207	0	0	0
Commitments Budget	0	0	0	0	0	0	745	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: H5 - FY2018 - DSS Stormwater Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2018
Project Completion:	May 2019

Project Description:

This project is for the FY2018 annual program of planned projects by the Department of Sewer Services for the rehabilitation and improvement of the storm sewer system. Job numbers will be issued to identify the location of projects issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	770,000
FY2012 Revised/FY2013 Approved Life Budget	770,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	276	219	0	0
Commitments Budget	0	0	0	0	0	0	0	770	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater On-Going
 Activity Group/Project Title: HM - FY2019 - DSS Stormwater Projects
 Managing Department: Sewer Services **EPMC: EPMC3**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2019
Project Completion:	Feb 2020

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	795,000
FY2012 Revised/FY2013 Approved Life Budget	795,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	304	199	0
Commitments Budget	0	0	0	0	0	0	0	0	795	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: P1 - FY2000 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Aug 2011

Project Description:

This project was created as an annual program for planned District of Columbia Department of Transportation projects in FY2000 for stormwater infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	755,198
FY2012 Revised/FY2013 Approved Life Budget	755,198
Increase/(Decrease) to Approved Life Budget:	0

CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	183	0	0	0	0	0	0	0	0	0	0
Commitments Budget	755	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: P2 - FY2001 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Aug 2011

Project Description:

This project was created as an annual program for planned projects by the District of Columbia Department of Transportation in FY2001 for stormwater infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	713,955
FY2012 Revised/FY2013 Approved Life Budget	607,789
Increase/(Decrease) to Approved Life Budget:	-106,166

CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	583	0	0	0	0	0	0	0	0	0	0
Commitments Budget	608	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: P3 - FY2002 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Aug 2011

Project Description:
 This project was created as an annual program for planned projects by the Department of Transportation in FY2002 for stormwater infrastructure improvements. Job numbers will be issued to identify location of projects.

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	184,672
FY2012 Revised/FY2013 Approved Life Budget	119,639
Increase/(Decrease) to Approved Life Budget:	-65,033

CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	116	0	0	0	0	0	0	0	0	0	0
Commitments Budget	120	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program


Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: P4 - FY2003 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Aug 2011

Project Description:
 This project was created as an annual program for planned projects by the Department of Transportation in FY2003 for stormwater infrastructure improvements. Job numbers will be issued to identify location of projects.

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

Effective Funding by User (percent):

DC -		FY2011 Approved Life Budget	175,000
EPA/Fed -		FY2012 Revised/FY2013 Approved Life Budget	0
WSSC -		Increase/(Decrease) to Approved Life Budget:	-175,000
Fairfax -			
Loudoun/PI -			CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	0	0
Commitments Budget	0	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: P5 - FY2004 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Aug 2012

Project Description:
 This project was created as an annual program for planned projects by the Department of Transportation in FY2004 for stormwater infrastructure improvements. Job numbers will be issued to identify location of projects.

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	20,000
FY2012 Revised/FY2013 Approved Life Budget	20,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	1	0	0	0	0	0	0	0	0	0
Commitments Budget	20	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: P8 - FY2007 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Aug 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	155,000
FY2012 Revised/FY2013 Approved Life Budget	155,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	0	0
Commitments Budget	155	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: P9 - FY2008 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Aug 2012

Project Description:

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

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,000,000
FY2012 Revised/FY2013 Approved Life Budget	1,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	0	0
Commitments Budget	1,000	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: AR - FY2009 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Aug 2012

Project Description:

This project is for the FY2009 annual program of stormwater infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the District of Columbia Department of Transportation. This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	160,000
FY2012 Revised/FY2013 Approved Life Budget	160,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	0	0
Commitments Budget	160	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: B3 - FY2010 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Aug 2013

Project Description:

This project is for the FY2010 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	165,000
FY2012 Revised/FY2013 Approved Life Budget	165,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	1	8	0	0	0	0	0	0	0	0
Commitments Budget	0	165	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: BM - FY2011 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Aug 2014

Project Description:

This project is for the FY2011 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<u>170,000</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>170,000</u>
Increase/(Decrease) to Approved Life Budget:	<u>0</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	1	8	0	0	0	0	0	0	0
Commitments Budget	0	0	170	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: CB - FY2012 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Aug 2015

Project Description:

This project is for the FY2012 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	175,000
FY2012 Revised/FY2013 Approved Life Budget	175,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	1	8	0	0	0	0	0	0
Commitments Budget	0	0	0	175	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: CL - FY2013 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Aug 2016

Project Description:

This project is for the FY2013 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the storm water system. This project is needed to replace aged infrastructure to restore integrity and reliability of the storm sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	180,000
FY2012 Revised/FY2013 Approved Life Budget	180,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	1	8	0	0	0	0	0
Commitments Budget	0	0	0	0	180	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: D8 - FY2014 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Aug 2017

Project Description:

This project is for the FY2014 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the storm water system. This project is needed to replace aged infrastructure to restore integrity and reliability of the storm sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	185,000
FY2012 Revised/FY2013 Approved Life Budget	185,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	1	9	0	0	0	0
Commitments Budget	0	0	0	0	0	185	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: DK - FY2015 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC:** DETS
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Sep 2015

Project Description:

This project is for the FY2015 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the storm water system. This project is needed to replace aged infrastructure to restore integrity and reliability of the storm sewer system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	191,000
FY2012 Revised/FY2013 Approved Life Budget	191,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	10	0	0	0	0	0	0
Commitments Budget	0	0	0	0	191	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: DT - FY2016 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Sep 2016

Project Description:

This project is for the FY2016 annual program of storm water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Transportation. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<u>196,000</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>196,000</u>
Increase/(Decrease) to Approved Life Budget:	<u>0</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	9	0	0	0	0	0
Commitments Budget	0	0	0	0	0	196	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: FM - FY2017 DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC:** EPMC3
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Sep 2017

Project Description:
 This project is for the FY2017 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the storm water system.

Impact on Operations:
 No significant O&M cost impact.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	205,000
FY2012 Revised/FY2013 Approved Life Budget	205,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	9	0	0	0	0
Commitments Budget	0	0	0	0	0	0	205	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: H4 - FY2018 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2018

Project Description:

This project is for the FY2018 annual program of planned projects by the District Department of Transportation for the rehabilitation and improvement of the stormwater system.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	215,000
FY2012 Revised/FY2013 Approved Life Budget	215,000
Increase/(Decrease) to Approved Life Budget:	0

	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
Disbursements Budget	0	0	0	0	0	0	0	10	0	0	0
Commitments Budget	0	0	0	0	0	0	0	215	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: DDOT Stormwater
 Activity Group/Project Title: HP - FY2019 - DDOT Stormwater Projects
 Managing Department: DC Dept. of Transportation **EPMC: EPMC3**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Sep 2019

Project Description:

This project was created as an annual program for planned projects by the District of Columbia Department of Transportation in FY 2019 for stormwater infrastructure improvements where stormwater systems will need to be modified. Job numbers will be issued to identify different jobs within the project.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	220,000
FY2012 Revised/FY2013 Approved Life Budget	220,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	10	0	0
Commitments Budget	0	0	0	0	0	0	0	0	220	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater Research & Program Mgmt
 Activity Group/Project Title: AT - Stormwater Program Management
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Sep 2021

Project Description:

This project provides engineering program management services for the stormwater service area capital projects and design management services for the rehabilitation or replacement of 15 stormwater pumping stations. It also provides engineering services for condition assessment of the storm sewer system and development of conceptual design for the storm sewer system capital projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<u>10,630,190</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>10,630,190</u>
Increase/(Decrease) to Approved Life Budget:	<u>0</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	6,621	499	250	238	193	163	162	222	270	214	239
Commitments Budget	9,030	0	0	0	0	1,600	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Stormwater Service Area
 Program Title: Stormwater Trunk/Force Sewers
 Activity Group/Project Title: BO - Future Stormwater Projects
 Managing Department: Engineering and Technical Services **EPMC:** EPMC3
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2006
Construction:	Oct 2009
Project Completion: Sep 2015	

Project Description:

This project provides design and construction services for stormwater sewer interceptors, trunk sewers and force mains that require upgrades. Sewers rehabilitated by this project are defined by the major planning and condition assessment program underway for the stormwater sewer system. As the assessment of the storm sewer system progresses and specific rehabilitation needs are identified, jobs will be created under this project to remediate system problems.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 96.47%
 EPA/Fed - 3.53%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	18,605,000
FY2012 Revised/FY2013 Approved Life Budget	15,504,370
Increase/(Decrease) to Approved Life Budget:	-3,100,630

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	3,421	1,527	3,462	1,762	60	0	0	0	0	0	0
Commitments Budget	6,386	2,070	5,078	1,970	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY 2011 – 2020

SECTION VII

WATER SYSTEM SERVICE AREA

WATER

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

The water distribution system includes appurtenances necessary for proper system operation, inspection, and repair. DC Water's system includes approximately 1,300 miles of pipe and over 36,000 valves of various sizes. A variety of valve types allow flow control, prevent air entrapment, allow water main draining, permit flow in only one direction, and allow water transfer between service areas during emergencies. The system also includes approximately 9,000 hydrants in public space for water main system operational requirements and to support DC Fire and Emergency Services.

The lifetime budget for the Water Service Area (including Meter Replacement / AMR installation) is \$1.5 billion, an increase of \$52.4 million from last year's CIP. The water service area CIP includes a majority of the projects recommended in the 2009 Water Facilities Plan Update, which are designed to maintain an adequate and reliable potable water supply to customers, and fire protection.

Water System Facilities Planning

DC Water began work on its first Water System Facilities Plan in 1998 and completed it in September 2000. Initially, the focus of DC Water efforts was to make critical repairs to the water and wastewater infrastructure. As a priority related to the water system, DC Water addressed an Administrative Order and Consent Decree issued to its predecessor agency (WASUA) to implement improvements needed for water storage facility rehabilitation, cross-connection elimination and various operations-oriented projects. In September 2000, DC Water completed its first Water System Facilities Plan, which identified fourteen specific projects; a majority of which have been completed or are under construction.

In 2009, a Water Facilities Plan Update was completed, which recommended CIP projects through 2030 with a total combined budget that exceeds \$1 billion. The plan recommended \$640 million (in FY 2008 dollars) for the Water Pumping Stations, Water Storage Facilities, Water Distribution System and Miscellaneous projects.

In FY 2011, construction continued on a number of capital projects using funds appropriated through the American Recovery and Reinvestment Act (ARRA) These projects include Small Diameter Water Main Replacement 6 (N801), Large Valve Replacement 8 (BZ01), Small Diameter Water Main Replacement FY2010 (MX08/N802) and Fort Stanton Reservoir No.2 Joint Seals (FA01).

In addition, the following projects commenced construction in FY 2011:

- Rehabilitation and Upgrade of Fort Reno PS;
- Fire Hydrant Replacement Contract 6;

- Small Mains Contract 7;
- Cross-town Tunnel Rehabilitation;
- Large Valve Replacement 7; and
- 48" Internal Joint Seals Project

A partial listing of the projects that are currently planned for FY 2012 is set forth below:

Water Distribution

- AK01 - Fourth High Check Valve and WSSC Connections
- BZ03– Large Valve Replacements Contract 10
- FE01 – 20-in Low Service Main and PRV
- S501 and S503 – Large Diameter Water Main Internal Repairs
- GQ05 – Fire Hydrant replacement

Pumping Stations

- AY02 – System Pressure Sensors
- AY03 – 4th high west PRVs
- F801 – 16th and Alaska Pump Station Upgrades
- FH01 – Discharge Piping at Bryant Street Station
- M614 – Painting of the BSPS Pump Room
- JB01 – Warehouse and Shops Building Parapet Wall
- JB02 – BSPS Roof Improvement

Storage Facilities

- FA03 – Storage Facilities Upgrades II
- MA01 – St Elizabeth's Water Tank

In FY 2012, the Water Program will commence updating the 2009 water system facilities plan. The new revised Facilities Plan will be published in FY 2013 and outline recommendations for the water service infrastructure renewal needs through FY2035.

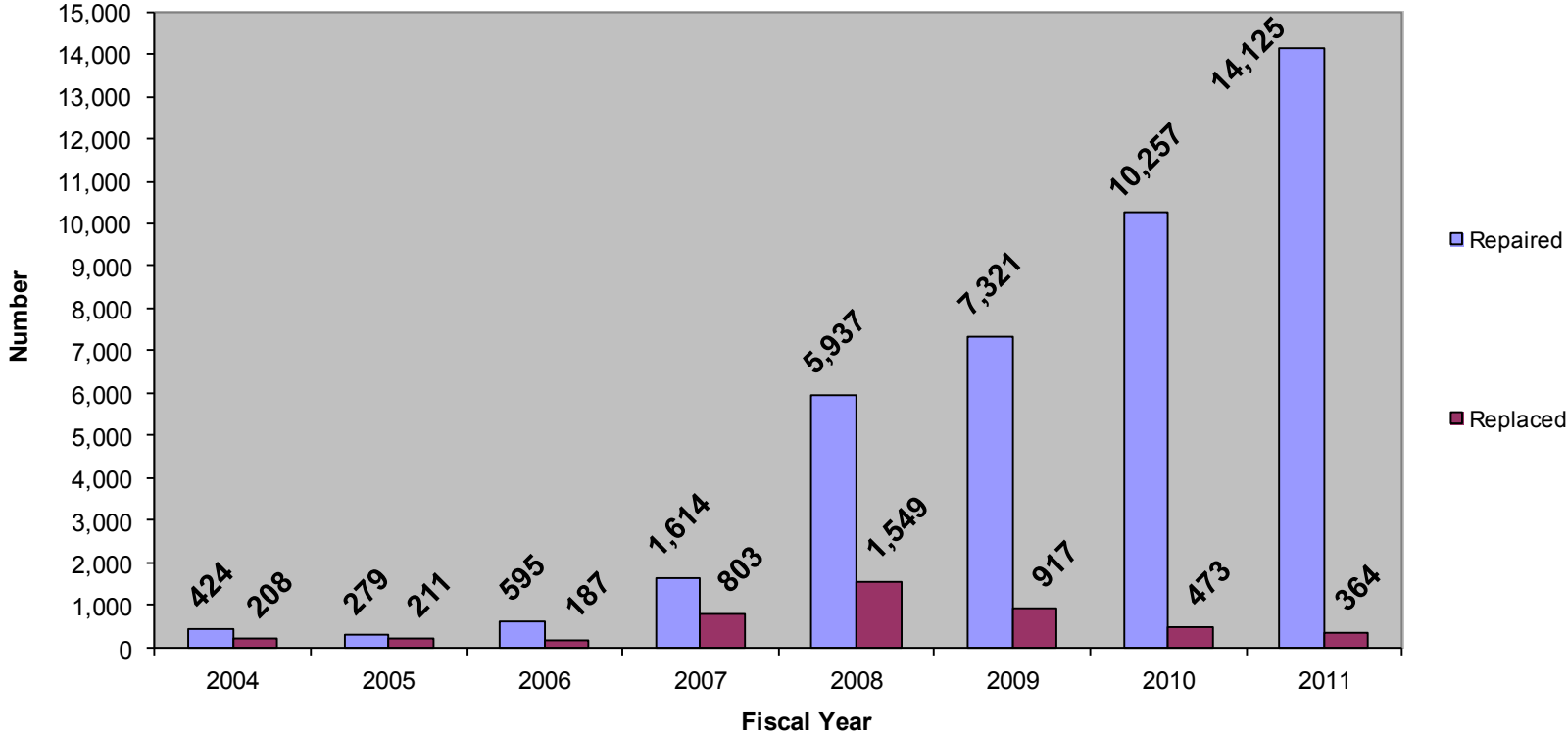
Water Distribution System – \$695.7 million

(project pages VII-9 to VII-48)

This program provides for rehabilitation, replacement or extension of the water distribution system through several projects. This year's water distribution system budget includes increases for a variety of water quality-related work, primarily in the small main area. Highlights of the work under this program by project category are:

- *Valve Replacements* - This involves replacing defective valves throughout the water distribution system. Operable valves are necessary to complete the annual flushing program, for routine and emergency system repairs, and for support of capital projects that require valve operation to isolate portions of the system. Eight contracts replacing 151 large valves (16-inch and larger) are either completed or under construction, and additional contracts to replace approximately 25 large valves annually are programmed into the 10-yr CIP.
- *Fire Hydrant Program* - Through FY 2011, over 4,700 hydrant replacements in public space were completed by DC Water as shown in the graph below. There are on-going discussions with the District (for updating the 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

Department of Water Services Fire Hydrant Repair and Replacement Report



* Life to date Fire Hydrants Repaired - 41,174

* Life to date Fire Hydrant Replaced - 4,712

In addition, repairs and maintenance are ongoing. As the cost is borne by the District of Columbia (DC) and not the rate payers, the proposal will be subject to review and acceptance by DC officials and the appropriate budget process. However, inclusion within the DC Water budget proposal will provide congressional contracting authority that will be required to move forward. A major highlight of this program has been both the significant replacement of outdated fire hydrants and the use of computer technology to geographically locate all public fire hydrants and provide public access to the current condition of the hydrants through the use of Google Earth.

- *Small Diameter Water Main Rehabilitation* - Work includes rehabilitating small diameter (12-inch diameter and smaller) water mains to improve system reliability as well as improve water pressure, maintain water quality and ensure adequate flows in the system. Construction is underway to replace small diameter mains in the new pressure zone east of the Anacostia River where higher pressures combined with older mains in this area makes replacement necessary. Additionally, a holistic approach to the water main rehabilitation program was implemented. The concept for this approach is, for a given block where the small diameter water main replacement is required DC Water will also assess all the necessary work to be done. For example, replacement of all valves and hydrants will be accomplished at the same time as required. The concept is to complete all needed improvements to a block at one time to minimize disruption and costs. Future fiscal year small diameter water main replacement projects will follow this holistic approach. In FY 2011, DC Water prioritized and selected over 8 miles of small mains for replacement, as part of the SDWMR program. Also, DC Water commenced the transition of completing designs with in-house staff in FY 2011. Currently, DC Water is on schedule to meet goal of 1% renewal starting construction in FY 2015.

Water On-Going Projects – \$117.5 million

(project pages VII-49 to VII-62)

The ongoing program includes small projects for extension of water mains to serve new development in the District of Columbia, repairing water main breaks, replacing valves and fire hydrants, replacing water service connections, and other minor water main rehabilitation work. Budgeted projects reflect the substantial costs of street 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 – \$161.4 million

(project pages VII-63 to VII-78)

This program includes several projects to rehabilitate or replace water-pumping stations in the system.

- The Fort Reno Pumping Station is being upgraded to improve pressure in the fourth high service area in the northwest quadrant of the District. This project includes the replacement of pump controls, three existing variable drives and electrical equipment. The improvements also include an emergency backup generator and two (2) remote pressure monitoring stations at critical locations in the 4th High West service area, which will improve system operations. Construction commenced in FY 2011 at a total project budget of \$11 million.

- A project to upgrade the 16th and Alaska Avenue Pumping Station is included in the CIP and provides for the installation of redundant suction and discharge headers; replacement of the electrical distribution equipment and controls; improvements to the ventilation system for cooling of the station and provisions for a second electric feeder. The total budget for this project is \$4.5 million. Construction is scheduled to commence in FY 2013.

DDOT Water Program – \$91.5million

(project pages VII-79 to VII-99)

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.

Water Storage Facilities – \$74.3 million

(project pages VII-100 to VII-104)

Studies have identified the need for several new storage facilities to support changing development patterns, to provide additional water pressure to certain areas of the District, and to provide emergency backup service. The most immediate need is for two million gallons of elevated storage tank in the southern portion of the Anacostia first high service area. In June 2010, DC Government approved the project under the special merit provision of the historic preservation regulations and design commenced. Coordination with District authorities to obtain additional approvals is on-going, and construction is scheduled to be completed in FY 2014. In addition, siting studies for the two new storage facilities are scheduled as follows: 5 million gallon reservoir in the 2nd high service area, (Project MR), and a 2 million gallon elevated storage tank in the 4th high service area, (Project MQ).

In coordination with the triennial cleaning & disinfection schedule, detailed inspection of each facility is completed with recommended rehabilitations completed from FY 2013 to FY 2015. Following a recommendation from the EPA sanitary survey, the installation of impermeable membranes to cover three buried underground finished water storage facilities was programmed into the CIP. This work will be constructed in coordination with the triennial cleaning & disinfection schedule of each facility beginning in 2019 and continuing through 2021, as approved by EPA.

Construction of the emergency rehabilitation of the Fort Stanton Reservoir #2 (Project FA) is on-going. The emergency work is required to stop the leakage at the reservoir, and repair the damage caused by the failure of the embankment and drainage system near the reservoir.

Water Projects Program- Management – \$47.6 million

(project pages VII-105 to VII-105)

This program provides engineering program management services for the water system capital improvements program, including assessing system needs, developing facilities plans and conceptual designs, and managing design consultants through the development of scope of work, cost estimates, task orders or agreements, and design document review. In FY 2012, the Water Program will commence updating the 2009 water system facilities plan. The new revised Facilities Plan will be published in FY 2013 and outline recommendations for the water service infrastructure renewal needs through FY 2035.

Meter Replacements / AMR – \$73.5 million

(project pages VII-107 to VII-108)

We are also in the process of upgrading the automated meter reading equipment. This planned upgrade is part of DC Water's preventative maintenance program for the Data Collection Units (DCUs), which collect approximately 260,000 meter readings per day and are an essential asset to our billing process. The upgrade allows DC Water to move to the current version of AMR software in addition to providing two-way communication between the meter transmitting units (MTUs) and the data collection units (DCUs). The original equipment provided for one-way communication. The AMR upgrade has been done in phases with completion scheduled for FY 2012. Also, the MTUs units are approaching the end of their useful life and the units will need to be replaced in the near future. Funding for replacement of the new MTUs is included in this year's CIP, commencing in FY 2015.

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title:
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project includes the installation of approximately 4,600 linear feet of 16-inch diameter water main along Michigan Avenue to connect the existing 16-inch Third High water main at Harewood Road, NE to the McMillan Water Treatment Plant (WTP). This project provides a looped main along Michigan Avenue improving the service reliability to the WTP and eliminates the dead end condition of the 16-inch main along Harewood Road.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget

FY2012 Revised/FY2013 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

DROPPED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget											
Commitments Budget											

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: AK - WSSC Interconnections
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	Dec 2008
Construction:	Apr 2012
Project Completion:	Sep 2013

Project Description:

This project entails the upgrade of 5 metered interconnections between DC Water and WSSC to improve water supply reliability by providing an alternative source of supply during emergency conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,566,736
FY2012 Revised/FY2013 Approved Life Budget	2,637,688
Increase/(Decrease) to Approved Life Budget:	70,952

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	813	282	918	0	0	0	0	0	0	0	0
Commitments Budget	955	1,683	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: BZ - Large Valve Replacement (Contract 08-09)
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Mar 2009
Construction:	Feb 2010
Project Completion:	Nov 2014

Project Description:

Replacement of approximately 60 broken large diameter valves under separate contracts through out the water distribution system. Replacement of inoperable valves will improve the reliability of the system by reducing the number of valves that would need to be closed under emergency conditions. Increasing the number of operable valves in the system will also reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

This project will improve valve operations thus increasing schedule efficiencies. O & M cost avoidance will be realized.

Effective Funding by User (percent):

DC - 83.46%
 EPA/Fed - 16.54%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	11,860,000
FY2012 Revised/FY2013 Approved Life Budget	12,072,857
Increase/(Decrease) to Approved Life Budget:	212,857

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,190	1,341	2,856	1,753	203	0	0	0	0	0	0
Commitments Budget	3,983	3,670	4,420	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: C9 - Large Diameter Water Mains 1
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2014
Construction:	Apr 2016
Project Completion:	Oct 2018

Project Description:

Replacement of 12,000 linear feet of 30-inch cast iron water main from the Georgetown Reservoirs to Washington Circle, NW is required, as a result of a pipe condition assessment. Installed in 1859, this pipe is one of the oldest transmission mains in the District and is located in MacArthur Boulevard, Canal Road, and M Street, NW. A section of this 30-inch cast iron pipe broke in December 2002, which resulted in low pressure in the First High Service Area because this main serves as a critical link between Dalecarlia and the First High Service Area.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	18,400,000
FY2012 Revised/FY2013 Approved Life Budget	18,400,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	128	510	1,165	6,274	4,702	320	0	0
Commitments Budget	0	0	0	300	1,370	16,730	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: D4 - Small Valve Replacements - 5
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2007
Construction:	Nov 2009
Project Completion:	Dec 2011

Project Description:

Replacement of broken critical small diameter valves at thirty five locations through out the water distribution system. Replacement of critical inoperable valves will improve the reliability of the system by reducing the number of valves that would need to be closed under emergency conditions. Increasing the number of operable valves in the system will also reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

This project realize O & M cost avoidance in future budgets.

Effective Funding by User (percent):

DC - 60.90%
 EPA/Fed - 39.10%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	1,166,132
FY2012 Revised/FY2013 Approved Life Budget	1,201,608
Increase/(Decrease) to Approved Life Budget:	35,476

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	720	0	0	0	0	0	0	0	0	0	0
Commitments Budget	1,202	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: DE - Small Diameter Water Main Rehab 12
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2015
Construction:	Sep 2016
Project Completion: Feb 2019	

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace deteriorated pipe, improve available fire flows and water quality.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	31,805,000
FY2012 Revised/FY2013 Approved Life Budget	31,805,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	508	1,525	7,187	10,720	2,866	0	0
Commitments Budget	0	0	0	0	2,610	29,195	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: DF - Rehab 24" Steel Main - Rock Creek
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2011
Construction:	Aug 2012
Project Completion: Jul 2014	

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 no material impact in the operating budget

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	966,132
FY2012 Revised/FY2013 Approved Life Budget	601,608
Increase/(Decrease) to Approved Life Budget:	-364,524

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	215	8	196	40	0	0	0	0	0	0	0
Commitments Budget	652	-50	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: DL - City Wide Fire Hydrant Program
 Managing Department: Water Services **EPMC: EPMC2**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jul 2007
Project Completion:	Nov 2013

Project Description:

This project provides funding for the replacement and upgrade of approximately 9,000 fire hydrants on behalf of The District government. It is expected that approximately 3000 broken and older model type fire hydrants will be replaced or rehabilitated under this project.

Impact on Operations:

New or rehabilitated hydrants will reduce the number of service calls required by operating crews. Since the maintenance cost of the hydrants is reimbursed by The DC government, there will be no impact on retail rate payers.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<u>25,539,718</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>25,539,718</u>
Increase/(Decrease) to Approved Life Budget:	<u>0</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	22,839	539	24	0	0	0	0	0	0	0	0
Commitments Budget	25,540	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: F1 - Small Diameter Water Main Rehab 13
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2016
Construction:	Sep 2017
Project Completion:	Feb 2020

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace deteriorated pipe, improve available fire flows and water quality.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	32,560,000
FY2012 Revised/FY2013 Approved Life Budget	32,560,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	526	1,562	7,475	11,043	2,918	0
Commitments Budget	0	0	0	0	0	2,670	29,890	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: F2 - Small Diameter Water Main Rehabilitation (14)
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2017
Construction:	Sep 2018
Project Completion: Feb 2021	

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	33,170,000
FY2012 Revised/FY2013 Approved Life Budget	33,170,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	531	1,611	7,628	11,223	3,746
Commitments Budget	0	0	0	0	0	0	2,720	30,450	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: F6 - Steel Water Mains Rehabilitation Phase I
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2010
Construction:	Apr 2012
Project Completion:	Jan 2015

Project Description:

This project is to evaluate, rehabilitate and/or install cathodic protection systems on high priority large diameter steel water mains, where there is a near term need to rehabilitate and/or install cathodic protection in order to mitigate the effects corrosion degradation.

Impact on Operations:

No significant O&M cost impact.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,340,000
FY2012 Revised/FY2013 Approved Life Budget	8,988,333
Increase/(Decrease) to Approved Life Budget:	648,333

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	173	712	2,444	2,279	423	0	0	0	0	0	0
Commitments Budget	661	4,168	4,160	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: FE - 20" Low Service Main & PRV
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2012
Construction:	Aug 2013
Project Completion:	Feb 2015

Project Description:

This project includes the installation of approximately 4,500 linear feet of 20-inch water main in the Low Service Area and a pressure reducing valve (PRV) between the 1st High and the Low Service Areas. The existing Low Service 20-inch main will be extended from the intersection of 17th and C Streets, NE to the intersection of Potomac Avenue, G Street and Kentucky Avenue, SE where it will connect to the existing Low Service 30-inch water main. The PRV between the 1st High and the Low Service Areas will also be located at the intersection of Potomac Avenue, G Street and Kentucky Avenue, SE.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	4,910,000
FY2012 Revised/FY2013 Approved Life Budget	4,910,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	75	275	2,246	701	0	0	0	0	0	0
Commitments Budget	0	400	4,510	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: FT - Steel Water Mains Rehabilitation Phase II
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2017
Construction:	Aug 2018
Project Completion:	Mar 2022

Project Description:

This project is to install cathodic protection (CP) systems or rehabilitate twenty-one (21) large diameter steel mains. There is a need of CP systems or rehabilitation for these large diameter steel mains in order to mitigate the effects corrosion degradation of these pipelines. This project includes an evaluation of these mains to determine the detailed scope of CP systems or rehabilitation required.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	38,500,000
FY2012 Revised/FY2013 Approved Life Budget	38,500,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	633	1,848	4,581	11,081	12,162
Commitments Budget	0	0	0	0	0	0	3,200	35,300	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title:
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2013
Construction:	Sep 2014
Project Completion:	Feb 2016

Project Description:

Project FU was combined with Project I8 - Large Valve Replacement Contracts 11-13. The \$830,000 budget of Project FU was transferred to Project I8 and Project FU was deleted from the CIP. Projects I8, IA and IB for Large Valve Replacements were expanded to allow for programmatic flexibility with respect to replacing existing valves, adding new valves, or installing specialized valves that will improve overall system performance and reliability.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<input type="text" value="830,000"/>
FY2012 Revised/FY2013 Approved Life Budget	<input type="text" value="0"/>
Increase/(Decrease) to Approved Life Budget:	<input type="text" value="-830,000"/>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	0	0
Commitments Budget	0	-830	70	760	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: GQ - Fire Hydrant Replacement Program – Phase II
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Board Policy, DC Water's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2011
Construction:	Nov 2010
Project Completion:	May 2017

Project Description:

This project provides funding for the replacement and upgrade of fire hydrants in the District. It is expected that approximately 2,700 broken and older model type fire hydrants will be replaced and 2,700 will be upgraded under this project if accepted by The District of Columbia under the October 2007 Memorandum of Understanding. This program is expected to be totally reimbursed by The District Government and will not impact retail rate payers.

Impact on Operations:

There will be no significant impacts on operational costs.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	29,600,000
FY2012 Revised/FY2013 Approved Life Budget	29,635,476
Increase/(Decrease) to Approved Life Budget:	35,476

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,250	2,167	3,349	4,611	4,203	4,009	1,689	0	0	0	0
Commitments Budget	6,018	2,459	5,311	5,252	5,252	5,344	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: GR - Small Diameter Water Main Rehab. 15
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2018
Construction:	Sep 2019
Project Completion:	Feb 2022

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	32,000,000
FY2012 Revised/FY2013 Approved Life Budget	32,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	522	1,567	7,352	17,205
Commitments Budget	0	0	0	0	0	0	0	2,630	29,370	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: GU - Crosstown Water Main Rehabilitation
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2009
Construction:	Aug 2011
Project Completion:	Aug 2013

Project Description:

This project is for the rehabilitation of a portion of the Crosstown Water Main which is currently leaking and out of service since December 19, 2008. The leak surfaced through Rock Creek Parkway and on the bank of Rock Creek in Rock Creek Park in the vicinity of 25th and N Streets NW, and was first reported to DC Water by the National Park Service on December 4, 2008.

Impact on Operations:

DWS will have to operate for a few hours on a regular basis on the tunnel section of the Crosstown Water Main to flush the section and avoid water quality problems. Depending on the chlorine residual this operation may have to be done on a weekly basis.

Effective Funding by User (percent):

DC - 61.95%
 EPA/Fed - 38.05%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	<u>12,400,933</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>12,613,790</u>
Increase/(Decrease) to Approved Life Budget:	<u>212,857</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,979	3,660	1,266	0	0	0	0	0	0	0	0
Commitments Budget	12,614	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: GX - Large Dia. Water Main Repl. II
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	Apr 2018
Construction:	Sep 2019
Project Completion:	Feb 2022

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%



FY2011 Approved Life Budget	20,000,000
FY2012 Revised/FY2013 Approved Life Budget	20,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	306	923	4,513	10,574
Commitments Budget	0	0	0	0	0	0	0	1,600	18,400	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: HX - Small Diameter Water Main Rehabilitation 16
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2019
Construction:	Sep 2020
Project Completion:	Feb 2023

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	33,500,000
FY2012 Revised/FY2013 Approved Life Budget	33,500,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	539	1,601	27,400
Commitments Budget	0	0	0	0	0	0	0	0	2,820	30,680	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: l8 - Large Valve Replacement (Contract 11-13)
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	May 2012
Construction:	Sep 2013
Project Completion:	Sep 2017

Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	16,870,000
FY2012 Revised/FY2013 Approved Life Budget	17,700,000
Increase/(Decrease) to Approved Life Budget:	830,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	38	227	1,538	3,213	3,155	1,515	0	0	0	0
Commitments Budget	0	450	5,540	6,410	5,300	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: IA - Large Valve Replacement (Contract 14-16)
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	May 2015
Construction:	Sep 2016
Project Completion:	Sep 2020

Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	18,390,000
FY2012 Revised/FY2013 Approved Life Budget	18,390,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	43	233	1,685	3,297	3,203	1,686	0
Commitments Budget	0	0	0	0	500	5,970	6,140	5,780	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: IB - Large Valve Replacement (Contract 17-19)
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	May 2018
Construction:	Sep 2019
Project Completion:	Sep 2023

Project Description:

This project includes the replacement of existing, or installation of new large diameter valves of varying types under separate contracts throughout the water distribution system. Replacement of inoperable valves and installation of new valves will improve system reliability, improve system hydraulics and reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	20,130,000
FY2012 Revised/FY2013 Approved Life Budget	20,130,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	48	263	1,875	11,268
Commitments Budget	0	0	0	0	0	0	0	550	6,530	6,720	6,330

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: J7 - Small Diameter Water Main Rehabilitation 17
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2020
Construction:	Sep 2021
Project Completion:	Feb 2024

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. Also, included are the elimination of dead end pipelines in the system, replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	
FY2012 Revised/FY2013 Approved Life Budget	36,250,000
Increase/(Decrease) to Approved Life Budget:	36,250,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	570	31,994
Commitments Budget	0	0	0	0	0	0	0	0	0	2,980	33,270

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: MK - 877A1 - 24" Wtrmain Ft. Stanton Res to MLK AVE
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2002
Construction:	Sep 2007
Project Completion:	May 2012

Project Description:

This project includes the installation of approximately 5,300 linear feet of 24-inch diameter water main connecting the 20-inch diameter main along MLK Jr. Avenue to the Fort Stanton reservoirs. This project will provide an alternate feed to the Fort Stanton Reservoirs and proposed First High South Low Lift Pumping Station, improving the overall reliability of the Anacostia First High service area.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	18,091,298
FY2012 Revised/FY2013 Approved Life Budget	16,676,969
Increase/(Decrease) to Approved Life Budget:	-1,414,329

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	16,035	2	0	0	0	0	0	0	0	0	0
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	16,677	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: MT - Small Diameter Watermain Rehab. (01)
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 2003
Construction:	Sep 2005
Project Completion:	Aug 2012

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	12,771,115
FY2012 Revised/FY2013 Approved Life Budget	11,653,488
Increase/(Decrease) to Approved Life Budget:	-1,117,627

CLOSED

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	11,280	0	0	0	0	0	0	0	0	0	0
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	11,653	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: MU - Small Diameter Watermain Rehab. (02)
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2005
Construction:	Jul 2008
Project Completion:	Dec 2011

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	14,923,862
FY2012 Revised/FY2013 Approved Life Budget	14,977,076
Increase/(Decrease) to Approved Life Budget:	53,214

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	11,829	708	0	0	0	0	0	0	0	0	0
Commitments Budget	14,977	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: MV - Small Diameter Watermain Rehab. (03)
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	May 2006
Construction:	Mar 2009
Project Completion:	Jan 2012

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

DC - 44.55%
 EPA/Fed - 55.45%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	15,413,649
FY2012 Revised/FY2013 Approved Life Budget	15,466,863
Increase/(Decrease) to Approved Life Budget:	53,214

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	11,718	2	0	0	0	0	0	0	0	0	0
Commitments Budget	15,467	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: MW - Small Diameter Watermain Rehab. (04)
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2008
Construction:	Oct 2007
Project Completion:	Jun 2012

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

DC - 71.93%
 EPA/Fed - 28.07%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	7,555,120
FY2012 Revised/FY2013 Approved Life Budget	7,626,072
Increase/(Decrease) to Approved Life Budget:	70,952

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	4,584	285	0	0	0	0	0	0	0	0	0
Commitments Budget	7,626	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: MX - Small Diameter Watermain Rehab. (05)
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2008
Construction:	Oct 2008
Project Completion: Sep 2014	

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

DC - 62.21%
 EPA/Fed - 37.79%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	13,067,216
FY2012 Revised/FY2013 Approved Life Budget	13,138,168
Increase/(Decrease) to Approved Life Budget:	70,952

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,740	3,226	1,986	970	0	0	0	0	0	0	0
Commitments Budget	10,347	2,791	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: MY - Elim. Dead Ends (Contract 3 and 4)
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2003
Construction:	Oct 2005
Project Completion:	Jun 2012

Project Description:

These are the third and fourth of four contracts to eliminate the potential for stagnant water at dead ends by looping of the water distribution network or by adding a fire hydrant at the dead end to allow flushing of the pipeline.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,529,952
FY2012 Revised/FY2013 Approved Life Budget	7,693,453
Increase/(Decrease) to Approved Life Budget:	-836,499

CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	7,427	0	0	0	0	0	0	0	0	0	0
Commitments Budget	7,693	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: N8 - Small Diameter Watermain Rehab. (06)
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2009
Construction:	Jan 2010
Project Completion:	Sep 2012

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

DC - 41.36%
 EPA/Fed - 58.64%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	13,000,000
FY2012 Revised/FY2013 Approved Life Budget	13,070,952
Increase/(Decrease) to Approved Life Budget:	70,952

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	5,350	3,378	0	0	0	0	0	0	0	0	0
Commitments Budget	13,071	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: N9 - Small Diameter Watermain Rehab. (07)
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2010
Construction:	Dec 2011
Project Completion:	Jun 2014

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

DC - 38.89%
 EPA/Fed - 61.11%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	18,000,000
FY2012 Revised/FY2013 Approved Life Budget	18,248,332
Increase/(Decrease) to Approved Life Budget:	248,332

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	809	2,241	7,297	2,757	0	0	0	0	0	0	0
Commitments Budget	1,748	16,500	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: NA - 863A1 - Clean & Line 20" 4th High Wtrmain
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Nov 2003
Construction:	Mar 2009
Project Completion:	Aug 2012

Project Description:

This project is to install approximately 2,000 linear feet of 20-inch diameter water main in the 4th High Service Area, to relocate portions of the existing 20-inch cast iron water main from private properties to public space.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	4,454,330
FY2012 Revised/FY2013 Approved Life Budget	4,507,544
Increase/(Decrease) to Approved Life Budget:	53,214

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,855	7	0	0	0	0	0	0	0	0	0
Commitments Budget	4,508	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: O0 - Small Diameter Watermain Rehab. (08)
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2011
Construction:	Mar 2013
Project Completion:	Aug 2015

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	18,425,000
FY2012 Revised/FY2013 Approved Life Budget	18,425,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	805	1,598	6,588	3,924	0	0	0	0	0	0
Commitments Budget	1,510	0	16,915	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: O1 - Small Diameter Watermain Rehab. (09)
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2012
Construction:	Sep 2013
Project Completion:	Feb 2016

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	23,700,000
FY2012 Revised/FY2013 Approved Life Budget	23,700,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	375	1,181	5,249	7,833	2,087	0	0	0	0	0
Commitments Budget	0	1,950	21,750	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: O2 - Small Diameter Watermain Rehab. (10)
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2013
Construction:	Sep 2014
Project Completion:	Feb 2017

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	28,450,000
FY2012 Revised/FY2013 Approved Life Budget	28,450,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	476	1,340	6,379	9,460	2,510	0	0	0	0
Commitments Budget	0	0	2,340	26,110	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: O3 - Small Diameter Watermain Rehab. (11)
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2014
Construction:	Sep 2015
Project Completion:	Feb 2018

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

Replacement of aging infrastructure will result in less future maintenance and O & M cost avoidance.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	31,205,000
FY2012 Revised/FY2013 Approved Life Budget	31,205,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	491	1,496	7,080	10,338	2,786	0	0	0
Commitments Budget	0	0	0	2,560	28,645	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: QM - Small Valve Replacements - 4
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2002
Construction:	Jul 2004
Project Completion:	Aug 2013

Project Description:

This project includes the replacement of approximately 258, 12-inch and smaller, inoperable distribution valves. The replacement of these inoperable valves will improve the reliability of the system by limiting the number of valves that need to be closed under emergency conditions and limiting the number of customers that would otherwise lose water service. This project will also improve the effectiveness of the DWS flushing program.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 43.27%
 EPA/Fed - 56.73%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	<u>3,050,262</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>3,050,262</u>
Increase/(Decrease) to Approved Life Budget:	<u>0</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,794	18	13	0	0	0	0	0	0	0	0
Commitments Budget	3,050	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: S3 - Large Valve Replacement (Contract 03-07)
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 1999
Construction:	Jan 2004
Project Completion:	Aug 2014

Project Description:

This project replaces approximately 100 inoperable large diameter valves throughout the distribution system. This project includes four separate valve replacement contracts. Replacement of inoperable valves will improve the reliability of the system by reducing the number of valves that would need to be closed under emergency conditions. Increasing the number of operable valves in the system will also reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 60.74%
 EPA/Fed - 39.26%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	22,852,835
FY2012 Revised/FY2013 Approved Life Budget	22,906,049
Increase/(Decrease) to Approved Life Budget:	53,214

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	16,747	1,609	654	0	0	0	0	0	0	0	0
Commitments Budget	22,906	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Distribution Systems
 Activity Group/Project Title: S5 - WDSC6 - Lg.Dia.Wtrmain Int. Repairs
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2010
Construction:	Mar 2011
Project Completion:	
	Jun 2014

Project Description:

This project includes the installation of internal pipe joint repairs to approximately 50,000 linear feet of large diameter water mains with a high frequency of joint leakage. This project also includes the cleaning and lining of approximately 5,000 linear feet of 20-inch cast iron pipe prior to the installation of internal joint seals. This project will eliminate the costly repairs and need to temporarily shutdown these mains to undertake the repairs associated with joint leaks.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	14,106,322
FY2012 Revised/FY2013 Approved Life Budget	14,319,179
Increase/(Decrease) to Approved Life Budget:	212,857

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,879	1,545	3,644	1,818	0	0	0	0	0	0	0
Commitments Budget	5,391	4,510	4,418	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title:
 Managing Department: Water Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project is for the FY2003 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget

FY2012 Revised/FY2013 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

DROPPED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget											
Commitments Budget											

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: AI - FY2008 - DWS Water Projects
 Managing Department: Water Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	May 2008
Project Completion:	Sep 2011

Project Description:

This project is for the FY2008 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system.

Impact on Operations:

This project will result in cost avoidance to future O & M budgets and improved customer service.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	6,967,611
FY2012 Revised/FY2013 Approved Life Budget	6,967,611
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	6,819	0	0	0	0	0	0	0	0	0	0
Commitments Budget	6,968	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: AQ - FY2009 - DWS Water Projects
 Managing Department: Water Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Apr 2009
Project Completion:	Dec 2011

Project Description:

This project is for the FY2009 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to 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%



FY2011 Approved Life Budget	7,922,869
FY2012 Revised/FY2013 Approved Life Budget	7,922,869
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	7,689	0	0	0	0	0	0	0	0	0	0
Commitments Budget	7,923	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: AF - FY2010 - DWS Water Projects
 Managing Department: Water Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Nov 2009
Project Completion:	May 2012

Project Description:

This project is for the FY2010 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

This project will result in cost avoidance to future O & M budgets and improved customer service.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,560,000
FY2012 Revised/FY2013 Approved Life Budget	8,772,856
Increase/(Decrease) to Approved Life Budget:	212,856

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	8,334	197	0	0	0	0	0	0	0	0	0
Commitments Budget	8,773	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: BE - FY2011 - DWS Water Projects
 Managing Department: Water Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Oct 2010
Project Completion:	Aug 2012

Project Description:

This project is for the FY2011 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

This project will result in cost avoidance to future O & M budgets and improved customer service.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,450,000
FY2012 Revised/FY2013 Approved Life Budget	11,150,000
Increase/(Decrease) to Approved Life Budget:	2,700,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	5,243	3,305	0	0	0	0	0	0	0	0	0
Commitments Budget	11,150	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: CC - FY2012 - DWS Water Projects
 Managing Department: Water Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jul 2012
Project Completion:	Jul 2013

Project Description:

This project is for the FY2012 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

This project will result in cost avoidance to future O & M budgets and improved customer service.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,083,000
FY2012 Revised/FY2013 Approved Life Budget	8,083,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	4,737	1,927	0	0	0	0	0	0	0	0
Commitments Budget	0	8,083	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: CP - FY2013 - DWS Water Projects
 Managing Department: Water Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jul 2013
Project Completion:	Jul 2014

Project Description:

This project is for the FY2013 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects

Impact on Operations:

This project will result in cost avoidance to future O & M budgets and improved customer service.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,673,000
FY2012 Revised/FY2013 Approved Life Budget	8,673,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	4,754	1,874	0	0	0	0	0	0	0
Commitments Budget	0	0	8,673	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: D5 - FY2014 - DWS Water Projects
 Managing Department: Water Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jul 2014
Project Completion:	Jul 2015

Project Description:

This project is for the FY2014 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects

Impact on Operations:

This project will result in cost avoidance to future O & M budgets and improved customer service.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,935,000
FY2012 Revised/FY2013 Approved Life Budget	8,935,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	4,120	1,961	0	0	0	0	0	0
Commitments Budget	0	0	0	8,935	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: DG - FY2015 - DWS Water Projects
 Managing Department: Water Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jul 2015
Project Completion:	Jun 2016

Project Description:

This project is for the FY2015 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects

Impact on Operations:

This project will result in cost avoidance to future O & M budgets and improved customer service.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	9,180,000
FY2012 Revised/FY2013 Approved Life Budget	9,180,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	4,226	2,063	0	0	0	0	0
Commitments Budget	0	0	0	0	9,180	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: DY - FY2016 - DWS Water Projects
 Managing Department: Water Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jul 2016
Project Completion:	Jun 2017

Project Description:

This project is for the FY2016 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects

Impact on Operations:

This project will result in cost avoidance to future O & M budgets and improved customer service.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	9,295,000
FY2012 Revised/FY2013 Approved Life Budget	9,295,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	4,301	2,001	0	0	0	0
Commitments Budget	0	0	0	0	0	9,295	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: FK - FY2017 - DWS Water Projects
 Managing Department: Water Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2017
Project Completion:	Feb 2018

Project Description:

This project is for the FY2017 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects

Impact on Operations:

This project will result in cost avoidance to future O & M budgets and improved customer service.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	9,412,000
FY2012 Revised/FY2013 Approved Life Budget	9,412,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	5,507	894	0	0	0
Commitments Budget	0	0	0	0	0	0	9,412	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: GS - FY2018 - DWS Water Projects
 Managing Department: Water Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2018
Project Completion:	Feb 2019

Project Description:

This project is for the FY2018 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<u>9,535,000</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>9,535,000</u>
Increase/(Decrease) to Approved Life Budget:	<u>0</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	5,653	900	0	0
Commitments Budget	0	0	0	0	0	0	0	9,535	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title:
 Managing Department: Water Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Dec 2018
Project Completion:	Dec 2019

Project Description:

This project is for the FY2019 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<input type="text" value="9,660,000"/>
FY2012 Revised/FY2013 Approved Life Budget	<input type="text" value="9,660,000"/>
Increase/(Decrease) to Approved Life Budget:	<input type="text" value="0"/>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	6,259	444	0
Commitments Budget	0	0	0	0	0	0	0	0	9,660	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water On-Going Projects
 Activity Group/Project Title: JA - FY2020 - DWS Water Projects
 Managing Department: Engineering and Technical Services **EPMC: DETS**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Dec 2019
Project Completion:	Dec 2020

Project Description:

This project is for the FY2020 annual program of planned projects by the Department of Water Services for the rehabilitation and improvement of the water distribution system. This project is needed to replace aged infrastructure to restore integrity and reliability of the water distribution system. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<input type="text"/>
FY2012 Revised/FY2013 Approved Life Budget	9,955,000
Increase/(Decrease) to Approved Life Budget:	9,955,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	6,406	568
Commitments Budget	0	0	0	0	0	0	0	0	0	9,955	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: AY - Upgrades to Ft. Reno Pumping Station
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2009
Construction:	May 2011
Project Completion:	Oct 2014

Project Description:

This project includes the replacement of pump controls, three existing variable frequency drives, electrical switchgear and motor control centers, along with upgrades to the SCADA system at Fort Reno Pumping Station. The improvements also include the installation of: a surge suppression system at the Fort Reno Pumping Station; an altitude valve on Fort Reno Tank No. 2; installation of redundant instrumentation; security system upgrades; and 28 remote pressure monitoring stations at critical locations in the system to allow operators to monitor pressures in the distribution system. The main benefit of this project is increased pressures and improved system reliability supplying water to the 4th High Service Area west of Rock Creek Park.

Impact on Operations:

This project will have no material impact on the operating budget, but will improve system reliability and customer service.

Effective Funding by User (percent):

DC - 71.69%
 EPA/Fed - 28.31%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	10,807,294
FY2012 Revised/FY2013 Approved Life Budget	11,020,151
Increase/(Decrease) to Approved Life Budget:	212,857

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,893	1,188	1,919	1,325	44	0	0	0	0	0	0
Commitments Budget	7,875	1,775	1,370	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: DU - Water System Laboratory Facilities
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2011
Construction:	May 2013
Project Completion:	Oct 2014

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%



FY2011 Approved Life Budget	<u>616,131</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>633,869</u>
Increase/(Decrease) to Approved Life Budget:	<u>17,738</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	176	13	44	192	12	0	0	0	0	0	0
Commitments Budget	184	60	390	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: F8 - 16th & Alaska Avenue Pumping Station Upgrades
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jun 2011
Construction:	Nov 2012
Project Completion:	May 2014

Project Description:

This project provides upgrades to the 16th Street and Alaska Avenue Pumping Station to increase reliability and serviceability. Upgrades include: installation of a second suction and discharge headers; new variable frequency drive (VFD) on the existing fourth constant speed pump; replacement of existing variable frequency drives (VFDs) with new solid state equipment; replacement of existing instrumentation and controls with PLC based soft logic controls; installation of redundant instrumentation; security system upgrades; improvements to ventilation system for cooling of the station; and the provision of a second electric feeder to the pumping station.

Impact on Operations:

No significant O&M cost impact.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	4,380,000
FY2012 Revised/FY2013 Approved Life Budget	4,486,428
Increase/(Decrease) to Approved Life Budget:	106,428

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	102	115	1,255	942	0	0	0	0	0	0	0
Commitments Budget	536	0	3,950	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: FC - Water Fac Instrumentation Upgrades
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2011
Construction:	Jan 2013
Project Completion:	Jul 2014

Project Description:

Project FC was combined with Project FA - Water Storage Facility Upgrades to facilitate the preparation of contract documents, as the electrical upgrades proposed under project FA can be aligned with the instrumentation upgrades work in project FC. The \$660,000 budget of Project FC was transferred to Project FA and Project FC was deleted from the CIP.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	660,000
FY2012 Revised/FY2013 Approved Life Budget	0
Increase/(Decrease) to Approved Life Budget:	-660,000

CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	0	0
Commitments Budget	90	-660	570	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: FD - Water Fac Security System Upgrades
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2011
Construction:	Jan 2013
Project Completion:	Jul 2016

Project Description:

This project is to upgrade security systems at the following facilities: Bryant Street Pumping Station, Soldiers Home Reservoir, Brentwood Reservoir, Anacostia Tank No. 1 (Boulevard Tank), Anacostia Tank No. 2 (Good Hope Tank) and Fort Stanton Reservoirs Site.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,880,000
FY2012 Revised/FY2013 Approved Life Budget	1,915,476
Increase/(Decrease) to Approved Life Budget:	35,476

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	34	6	76	403	447	222	0	0	0	0	0
Commitments Budget	35	120	1,760	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: FH - Discharge Piping Bryant Street Pumping Station
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2009
Construction:	Apr 2012
Project Completion:	Oct 2015

Project Description:

This project provides for the replacement of six discharge pipes from the Bryant Street Pumping Station that are highly corroded. The discharge piping will be replaced from the cone valves inside the station to a point on Bryant Street away from the station site, to reduce the probability of a catastrophic pipe break next to the station wall and foundation.

Impact on Operations:

No significant O&M cost impact.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	12,940,000
FY2012 Revised/FY2013 Approved Life Budget	13,188,332
Increase/(Decrease) to Approved Life Budget:	248,332

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	770	299	1,801	3,414	1,891	51	0	0	0	0	0
Commitments Budget	953	12,236	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: FJ - Parking Ramp Rehabilitation – Bryant Street PS
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jul 2009
Construction:	Apr 2010
Project Completion:	Aug 2012

Project Description:
 This project is for the rehabilitation of the parking deck bridge ramp connecting to the rooftop parking area over the Meter Shop and Warehouse building that is severely deteriorated

Impact on Operations:
 No significant O&M cost impact.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	420,000
FY2012 Revised/FY2013 Approved Life Budget	396,542
Increase/(Decrease) to Approved Life Budget:	-23,458

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	388	0	0	0	0	0	0	0	0	0	0
Commitments Budget	397	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: HA - DWS Water Pumping Project
 Managing Department: Water Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Sep 2015

Project Description:
 Annual program for the upgrade and replacement of large motors and pumps in the Water Service area

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	1,560,000
FY2012 Revised/FY2013 Approved Life Budget	1,560,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	130	326	145	186	189	0	0	0	0	0	0
Commitments Budget	520	260	260	260	260	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: HD - Conversion of Anacostia PS to Customer Service
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2011
Construction:	Nov 2011
Project Completion:	Jan 2013

Project Description:

This project will relocate the customer service group which is currently located at a commercial office building at 810 First Street NW, in downtown, Washington, DC, with an annual cost of the rent of approximately \$900,000 to \$1,000,000. The old Anacostia Pump Station is vacant and unused, having been replaced by a more modern Pump Station on the other end of the site. Renovation cost for converting this old, unused structure will pay for itself in six years.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	5,980,500
FY2012 Revised/FY2013 Approved Life Budget	5,980,500
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	114	2,287	358	0	0	0	0	0	0	0	0
Commitments Budget	833	5,147	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: HE - New Parking Structure & Building Modications @ Bryant St PS
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2016
Construction:	Feb 2017
Project Completion:	Aug 2018

Project Description:

This project will construction a parking deck at the top of McMillian Drive, over the existing surface parking lot to address the lack of sufficient parking and accommodate the addition of new, large service trucks and personnel. Bryant Street Pump Station office areas and adjacent meter/warehouse building to be converted as the main location for consolidated Water Services and Sewer Services departments. This consolidation will allow for the cross-training of all supervisory and field personnel; consolidation of administrative groups into one central location and will allow DC Water to create three field service area locations to better serve its customers. Work to include adaptive re-use of all current office space in main pump station building to house all administrative personnel from sewer services and water services; creation of a Central Sector Water and Sewer Investigation and Repair Satellite Crew; reorganization of meter/warehouse building to receive water quality personnel currently located at Ft Reno; reorganization of meter services storage and office areas and redesign of warehouse space.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	13,546,000
FY2012 Revised/FY2013 Approved Life Budget	13,546,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	0	0	0	0	904	2,522	5,834	0	0	0
Commitments Budget	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
	0	0	0	0	0	2,060	11,486	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: HF - New Maintenance Facility at Fort Reno
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2016
Construction:	Aug 2017
Project Completion:	Jul 2018

Project Description:

This project will demolish existing structures at Fort Reno to construct a necessary building to create a new satellite site for location of a new Water and Sewer Investigation, and Repair Satellite Crew (Western Sector) facility. In addition to demolition, the work will include the construction of a new 3,000 s.f. one-story building to accommodate supervisory offices, field crew lockers and meeting room, storage of job-related materials; and storage of two large vacuum trucks, which are required to be housed inside a heated building during cold weather.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	2,966,000
FY2012 Revised/FY2013 Approved Life Budget	2,966,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	20	646	1,228	0	0	0
Commitments Budget	0	0	0	0	0	359	2,607	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: HV - Bryant St Pump Station - Spill Header Flow Control
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2013
Construction:	Sep 2014
Project Completion:	Feb 2016

Project Description:

This project is to install seven actuated spillover pressure regulating valves (PRVs) with flowmeter capabilities to replace the existing manually operated PRVs that control spillover flow into the low service area. Also, this project includes the installation flow meters to more accurately track water pumping from this pumping station.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	960,000
FY2012 Revised/FY2013 Approved Life Budget	1,360,000
Increase/(Decrease) to Approved Life Budget:	400,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	15	64	604	176	0	0	0	0	0
Commitments Budget	0	0	115	1,245	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: JB - Bryant Street PS Improvements - Phase II
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2012
Construction:	May 2013
Project Completion:	Jan 2015

Project Description:

This project removes, reconstructs and structurally reinforces the top portions of the walls at the Warehouse and Shops building on the Bryant Street Pump Station site. Also, this project includes repair or replacement of select structural roof members, windows, gutters, flashing, sealant, roofing slate and masonry facade at the Bryant Street PS building.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget

FY2012 Revised/FY2013 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

	2,800,000
	2,800,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	32	177	1,295	182	0	0	0	0	0	0
Commitments Budget	0	280	2,520	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: JJ - Bryant Street PS Improvements - Phase III
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Apr 2020
Construction:	Sep 2021
Project Completion:	Apr 2023

Project Description:

This project removes and replaces the slate roof on the Bryant Street PS building that was originally installed in the 1900s. This project also includes the replacement of the parking deck wearing surface and membrane on the Warehouse and Shops building at the Bryant Street PS site.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	
FY2012 Revised/FY2013 Approved Life Budget	6,100,000
Increase/(Decrease) to Approved Life Budget:	6,100,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	84	5,178
Commitments Budget	0	0	0	0	0	0	0	0	0	510	5,590

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: M6 - WPFA1- Rehab. Bryant St. Pump Sta.
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 1999
Construction:	Mar 2002
Project Completion:	Sep 2013

Project Description:

This project is to rehabilitate and upgrade the Bryant Street Pumping Station and the warehouse and shops building to meet current code requirements and maintain the reliability of the water distribution system. Project includes refurbishing 11 high lift pumps and replacing 11 electric motors mechanically coupled to the pumps; architectural improvements to the building; complete replacement of the heating, cooling and ventilating equipment; site improvements, dewatering, hydraulic loops; replacement of water mains at the site; and cathodic protection for a 48-inch steel water main. Also included in this project is the SCADA for the water distribution system installed by DC Water IT services.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 70.32%
 EPA/Fed - 29.68%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	62,455,925
FY2012 Revised/FY2013 Approved Life Budget	62,704,257
Increase/(Decrease) to Approved Life Budget:	248,332

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	58,394	909	465	0	0	0	0	0	0	0	0
Commitments Budget	60,370	2,335	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Pumping Facilities
 Activity Group/Project Title: M7 - WPFA3 - Replacement of Anacostia Pump Sta.
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: High Profile, Good Neighbor Policy

Phase	Start Date
Design:	Apr 2004
Construction:	Mar 2007
Project Completion:	Oct 2014

Project Description:

This project is to replace the 85 year old Anacostia Pumping Station to meet code requirements, add pumps for the new Anacostia First High South Service Area and maintain the reliability of the Anacostia 1st and 2nd High Service Area distribution system. It includes the installation of 3,000 feet of 30-inch water main to link the Anacostia Pumping Station to the Anacostia 1st High South Service Area. The new Pumping Station will have a capacity of 60 MGD and will be constructed on the same site as the original Pumping Station, which will remain in service until the new facility is completed and operational.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 46.20%
 EPA/Fed - 53.80%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	32,536,830
FY2012 Revised/FY2013 Approved Life Budget	32,714,210
Increase/(Decrease) to Approved Life Budget:	177,380

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	30,808	153	19	98	6	0	0	0	0	0	0
Commitments Budget	32,494	25	195	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: R1 - FY2000 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project is for the FY2000 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget
 FY2012 Revised/FY2013 Approved Life Budget
 Increase/(Decrease) to Approved Life Budget:

DROPPED

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: R2 - FY2001 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project is for the FY2001 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget

FY2012 Revised/FY2013 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

DROPPED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget											
Commitments Budget											

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: R3 - FY2002 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project is for the FY2002 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget

FY2012 Revised/FY2013 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

DROPPED

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: R4 - FY2003 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC:**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This project is for the FY2003 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget:
 FY2012 Revised/FY2013 Approved Life Budget:
 Increase/(Decrease) to Approved Life Budget:

DROPPED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget											
Commitments Budget											

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: R5 - FY2004 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project is for the FY2004 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget
 FY2012 Revised/FY2013 Approved Life Budget
 Increase/(Decrease) to Approved Life Budget:

DROPPED

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: R6 - FY2005 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project is for the FY2005 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget
 FY2012 Revised/FY2013 Approved Life Budget
 Increase/(Decrease) to Approved Life Budget:

DROPPED

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: R7 - FY2006 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: EPMC2**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project is for the FY2006 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget

FY2012 Revised/FY2013 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

DROPPED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget											
Commitments Budget											

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: R8 - FY2007 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: EPMC2**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project is for the FY2007 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget

FY2012 Revised/FY2013 Approved Life Budget

Increase/(Decrease) to Approved Life Budget:

DROPPED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget											
Commitments Budget											

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: R9 - FY2008 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: EPMC2**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project is for the FY2008 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget
 FY2012 Revised/FY2013 Approved Life Budget
 Increase/(Decrease) to Approved Life Budget:

DROPPED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget											
Commitments Budget											

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: AS - FY2009 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2011

Project Description:

This project is for the FY2009 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and save DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	92,152
FY2012 Revised/FY2013 Approved Life Budget	92,152
Increase/(Decrease) to Approved Life Budget:	0

CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	88	0	0	0	0	0	0	0	0	0	0
Commitments Budget	92	0	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: B0 - FY2010 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: EPMC2**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2014

Project Description:

This project is for the FY2010 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost. Budget was transferred from other projects to provide a consolidated activity area from which to fund FY 2010 MOU settlement.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	17,171,132
FY2012 Revised/FY2013 Approved Life Budget	17,171,132
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	11,949	1,322	311	392	0	0	0	0	0	0	0
Commitments Budget	16,190	0	981	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: BN - FY2011 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Mar 2014

Project Description:

This project is for the FY2011 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,650,000
FY2012 Revised/FY2013 Approved Life Budget	8,650,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,093	1,796	1,702	538	0	0	0	0	0	0	0
Commitments Budget	7,930	720	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: CJ - FY2012 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2014

Project Description:

This project is for the FY2012 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	6,275,000
FY2012 Revised/FY2013 Approved Life Budget	6,275,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	884	878	1,325	0	0	0	0	0	0	0
Commitments Budget	0	6,275	0	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: CM - FY2013 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2013

Project Description:

This project is for the FY2013 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost

Impact on Operations:

The project will result in increased operations and maintenance costs related to the tunnel, pumping station and various diversion structures. Additional operations and maintenance costs will also be incurred for monitoring the completed facilities to assess performance of the CSO controls against predictions established as part of LTCP development.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	6,000,000
FY2012 Revised/FY2013 Approved Life Budget	6,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	2,722	0	0	0	0	0	0	0	0
Commitments Budget	0	0	6,000	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: D9 - FY2014 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2014

Project Description:

This project is for the FY2014 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	6,300,000
FY2012 Revised/FY2013 Approved Life Budget	6,300,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	4,328	0	0	0	0	0	0	0
Commitments Budget	0	0	0	6,300	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: DH - FY2015 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2015

Project Description:

This project is for the FY2015 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<u>6,600,000</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>6,600,000</u>
Increase/(Decrease) to Approved Life Budget:	<u>0</u>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	4,616	0	0	0	0	0	0
Commitments Budget	0	0	0	0	6,600	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: DV - FY2016 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2016

Project Description:

This project is for the FY2016 annual program of water infrastructure projects that are coordinated with street rehabilitation or other construction work performed by the Department of Public Works. This coordination minimizes public inconvenience caused by construction work and saves DC Water the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	7,000,000
FY2012 Revised/FY2013 Approved Life Budget	7,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	4,906	0	0	0	0	0
Commitments Budget	0	0	0	0	0	7,000	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title:
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2017

Project Description:

This project is for the FY2017 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

Impact on Operations:

No significant O&M cost impact.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<input type="text" value="7,300,000"/>
FY2012 Revised/FY2013 Approved Life Budget	<input type="text" value="7,300,000"/>
Increase/(Decrease) to Approved Life Budget:	<input type="text" value="0"/>

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	5,126	0	0	0	0
Commitments Budget	0	0	0	0	0	0	7,300	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: GT - FY2018 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2018

Project Description:

This project is for the FY2018 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	7,750,000
FY2012 Revised/FY2013 Approved Life Budget	7,750,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	5,730	0	0	0
Commitments Budget	0	0	0	0	0	0	0	7,750	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: HZ - FY2019 - DDOT Water Projects
 Managing Department: DC Dept. of Transportation **EPMC:** DETS
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2019

Project Description:

This project is for the FY2019 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	8,000,000
FY2012 Revised/FY2013 Approved Life Budget	8,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	5,808	0	0
Commitments Budget	0	0	0	0	0	0	0	0	8,000	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: DDOT Water Projects
 Activity Group/Project Title: J8 - FY2020 - DDOT Water Projects
 Managing Department: Engineering and Technical Services **EPMC: DETS**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2020

Project Description:

This project is for the FY2020 annual program of water infrastructure jobs that are coordinated with street rehabilitation or other construction work performed by the District Department of Transportation (DDOT). This project is needed to minimize public inconvenience caused by construction work and to save DC Water the paving cost.

Impact on Operations:

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

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	
FY2012 Revised/FY2013 Approved Life Budget	10,400,000
Increase/(Decrease) to Approved Life Budget:	10,400,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	0	7,857	0
Commitments Budget	0	0	0	0	0	0	0	0	0	10,400	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Storage Facilities
 Activity Group/Project Title: FA - Water Storage Facility Upgrades
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2008
Construction:	Jan 2010
Project Completion:	Feb 2021

Project Description:

This project includes replacing the expansion joint material within the Fort Stanton Reservoir No. 2 concrete floor slab to minimize the current leakage and repairing the damage caused by an embankment failure near Fort Stanton Reservoir No. 2. The budget increase is due to increased scope of work which includes installation of impermeable membranes over three underground water storage reservoirs, that was approved by EPA, and the installation of the membrane in the Soldier's Home Reservoir as recommended in the approved Water System Facilities Plan Update (June 2009).

Impact on Operations:

This project will reduce water loss, thus slowing the growth in water purchase costs.

Effective Funding by User (percent):

DC - 92.77%
 EPA/Fed - 7.23%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	20,240,000
FY2012 Revised/FY2013 Approved Life Budget	22,512,098
Increase/(Decrease) to Approved Life Budget:	2,272,098

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,991	1,231	1,743	981	721	398	570	1,608	3,083	1,693	906
Commitments Budget	4,647	2,770	1,535	1,920	0	2,015	9,625	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Storage Facilities
 Activity Group/Project Title: HW - Rehabilitation of Elevated Water Tanks
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2019
Construction:	Sep 2020
Project Completion:	Feb 2024

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%



FY2011 Approved Life Budget	7,000,000
FY2012 Revised/FY2013 Approved Life Budget	7,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	0	0	0	0	0	0	0	109	305	5,804
Commitments Budget	0	0	0	0	0	0	0	0	580	6,420	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Storage Facilities
 Activity Group/Project Title: MA - St. Elizabeth Water Tank
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: High Profile, Good Neighbor Policy

<u>Phase</u>	<u>Start Date</u>
Design:	Nov 2010
Construction:	Jan 2013
Project Completion:	Sep 2015

Project Description:

The project includes the construction of a 2.0 million gallon elevated water storage tank. The new storage tank will provide additional potable water storage for the Anacostia 1st High South service area, increasing pressures to the higher elevation areas and improving fire protection in the distribution system served by this storage tank. St. Elizabeth's Hospital has agreed to allow the tank to be located on the Hospital complex as this new facility will improve the reliability of the Hospital's water supply system. The budget increase is to fund additional required enhancements to the tank exterior and other mitigation measurements to construct the proposed water storage tank in the St. Elizabeth's complex.

Impact on Operations:

New tank will require periodic (10 to 15 year) maintenance involving painting.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	21,481,184
FY2012 Revised/FY2013 Approved Life Budget	21,658,564
Increase/(Decrease) to Approved Life Budget:	177,380

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2,098	801	2,366	6,209	3,639	0	0	0	0	0	0
Commitments Budget	3,111	798	17,750	0	0	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Storage Facilities
 Activity Group/Project Title: MQ - 878A1 - 2MG 4th High Storage Tank
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	Jun 2015
Construction:	Nov 2016
Project Completion:	Aug 2018

Project Description:

This project includes the siting and feasibility study, design and construction for the future construction of a 2.0 million gallon storage tank to supply the 4th High Service Area on the west side of Rock Creek Park. This area does not have any usable storage and all water supply comes from the Fort Reno Pumping Station. The objective of the storage tank is to provide a source of supply should there be a failure of the pumping station, and provide storage capacity to improve the reliability of the water supply to this portion of the 4th High Service Area.

Impact on Operations:

New elevated water storage tank will require periodic painting (10 to 15 years) causing an increase on the operating budget.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	7,915,558
FY2012 Revised/FY2013 Approved Life Budget	7,915,558
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	185	0	0	55	127	313	1,971	2,514	0	0	0
Commitments Budget	191	0	0	324	600	0	6,800	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Storage Facilities
 Activity Group/Project Title: MR - 5MG 2nd High Reservoir
 Managing Department: Engineering and Technical Services **EPMC:** EPMC2
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2013
Construction:	Mar 2015
Project Completion: Mar 2017	

Project Description:

This project includes the siting and feasibility study, design and construction of a 5.0 million gallon water storage reservoir in the 2nd High Service Area east of Rock Creek Park. The reservoir will address storage deficiency and improve system reliability within the 2nd High service area located in northwest and northeast sections north of Florida Ave and Rhode Island Ave and south of Missouri Ave. The existing Van Ness reservoir (Washington Aqueduct facility) has capacity to supply 65% of the average daily usage in the 2nd High Service Area. The additional storage will provide flexibility to undertake routine maintenance of the existing and proposed reservoirs. In addition, a second reservoir in the area will allow taking one of the reservoirs out of service without having to pump into a closed system.

Impact on Operations:

New potable water reservoir will require maintenance causing some increase in the operating budget.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	15,225,000
FY2012 Revised/FY2013 Approved Life Budget	15,225,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	92	52	112	616	1,262	6,236	1,723	0	0	0	0
Commitments Budget	95	205	0	1,105	13,820	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Service Area Program Mgmt
 Activity Group/Project Title: ME - Water System Program Management Services
 Managing Department: Engineering and Technical Services **EPMC: EPMC2**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	
Project Completion:	Apr 2020

Project Description:

This project is to provide engineering program management services for the water system capital improvements program (CIP), to develop a comprehensive water distribution system hydraulic model and run model simulations for evaluation of capital improvement alternatives; to perform pipe condition assessments of pipelines; to assess the potable water storage and pumping needs; to investigate alternatives to eliminate low water pressures; improve water quality in the distribution system; provide reliable and adequate fire protection; to perform conceptual design of proposed capital projects; and to develop a comprehensive facilities plan for incorporation into the capital improvements program. It also includes developing scopes of work, preparing cost estimates, negotiating task orders and reviewing design submittals for the implementation of the capital improvement program.

Impact on Operations:

The impacts to operations are identified with each project. There are no impacts to operations from program management.

Effective Funding by User (percent):

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



FY2011 Approved Life Budget	<u>51,106,826</u>
FY2012 Revised/FY2013 Approved Life Budget	<u>47,559,220</u>
Increase/(Decrease) to Approved Life Budget:	<u>-3,547,606</u>

Disbursements Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	6,774	4,109	4,081	3,242	3,870	3,672	3,669	3,726	3,748	2,175	0
Commitments Budget	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
	22,859	0	0	0	24,700	0	0	0	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Water Lead Program
 Activity Group/Project Title: **BW - Lead Service Replacement Program**
 Managing Department: Water Services **EPMC: EPMC6**
Priority: Board Policy, DC Water's commitment to outside agencies

Phase	Start Date
Design:	Aug 2004
Construction:	Dec 2004
Project Completion:	Sep 2026

Project Description:

Replacement of approximately 30,050 lead water service lines with copper piping throughout the water distribution system. The Lead Service Replacement Program started in FY2004 and will continue in conjunction with scheduled water main replacement and DDOT road work (new FY2009 policy). This project replaces lead service lines within Public Space and offers the property owner the option to replace the lead service on private property at cost.

Impact on Operations:

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

Effective Funding by User (percent):

DC - 93.15%
 EPA/Fed - 6.85%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2011 Approved Life Budget	191,000,000
FY2012 Revised/FY2013 Approved Life Budget	191,040,000
Increase/(Decrease) to Approved Life Budget:	40,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	130,772	4,801	2,372	2,077	2,246	2,414	2,528	2,627	0	0	0
Commitments Budget	148,434	8,645	4,966	5,277	5,402	5,881	6,147	6,288	0	0	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Metering
 Activity Group/Project Title: **EM1 Future Meter Replacements**
 Managing Department: Customer Service **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

Project to fund ongoing meter and related equipment replacements and upgrades beyond the AMR program. This Project does not include meters being replaced as part of the Lead service line replacement program. In prior years this project was shown in the AMR budget.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

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



FY 2012 Approved Life Budget	19,321,254
FY 2013 Approved Life Budget	32,421,628
Increase/(Decrease) to Approved Life Budget:	13,100,374

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	6,092	2,876	1,790	1,332	3,166	3,205	3,385	3,330	3,774	3,472	
Commitments Budget	6,092	2,876	1,790	1,332	3,166	3,205	3,385	3,330	3,774	3,472	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Metering
 Activity Group/Project Title: **EM2 Automated Meter Reading Project**
 Managing Department: Customer Service **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	3/4/2002
Project Completion:	

Project Description:

DC Water is replacing all meters with meters that automatically transmit consumption data via radio and cellular technology. This has improved the accuracy of meter reads to over 99.9 percent, and the labor needed for meter reading has been substantially reduced. By the end of FY 2008 a substantial amount of this project has been completed (approximately 120,000 meters had been installed, or 98.9% of the project). This project will be completed in FY 2012.

Impact on Operations:

The cost of a single meter read will be reduced from approximately \$3 in FY 2002 to approximately \$1.13 when the program is fully implemented.

Funding by User (percent):

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



FY 2012 Approved Life Budget	41,031,000
FY 2013 Approved Life Budget	41,112,878
Increase/(Decrease) to Approved Life Budget:	81,878

	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
Disbursements Budget	40,913	200	0	0	0	0	0	0	0	0	
Commitments Budget	40,913	200	0	0	0	0	0	0	0	0	

(projected disbursements do not include contingencies)

(dollars in thousands)



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY **2011 – 2020**

SECTION VIII

WASHINGTON AQUEDUCT

WASHINGTON AQUEDUCT

The Washington Aqueduct, managed by the U.S. Army Corps of Engineers, provides wholesale water treatment services to DC Water and its partners in Northern Virginia, Arlington County and Falls Church. DC Water purchases approximately 73.34 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan treatment plants, and thus is responsible for 73.34 percent of the Aqueduct's operating and capital costs. Under federal legislation and a memorandum of understanding enacted in 1997, DC Water and its Northern Virginia partners have a much greater role in oversight of the Aqueduct's operations and its capital improvement program.

The proposed lifetime budget for DC Water's share of Washington Aqueduct projects totals \$203 million.

The Aqueduct CIP is broken into seven primary areas with specific Projects under each area:

Basin Waste Recovery/Residuals Disposal - \$94.9 Million

(project pages VIII-5)

The residual project is the single largest project in the Aqueduct's CIP. In 2003, the EPA issued a revised NPDES permit to the Aqueduct and entered into a Federal Facilities Compliance Agreement (the federal agency equivalent of an Administrative Order) that requires the Aqueduct to have a new process in operation by Dec 31, 2010; because of schedule delays the Aqueduct sought and EPA granted a time extension for the completion of this project. The Aqueduct selected a process to meet the Compliance Agreement, which dewateres the residuals on site and trucks them off-site for disposal. The project is currently 98% complete and the facility is being started-up in stages. All aspects of the new facility are projected to be operational by March 2012.

Dalecarlia Pumping Station Improvements - \$13.4 Million

(project pages VIII-6)

Beginning in FY2012, the Aqueduct will start a series of initiatives at Dalecarlia Pumping Station aimed at modernizing and upgrading the facility. These initiatives include: fire protection system improvements (FY 2013); building renovation (FY - FY 2012); overhead crane replacements (FY 2014 - FY 2016) elevator replacements (FY 2014 - FY 2016); mechanical upgrades (FY 2016- FY 2018); SCADA upgrades (FY 2017 - FY 2019); valve and piping replacement (FY 2018 - FY 2020).

Cabin John Bridge Repairs - \$.9 Million

(project pages VIII-7)

Scheduled in FY 2015 through FY 2017 are future improvements including parapet and additional roadway repairs. The most recent improvements to the bridge were completed in FY 2001.

McMillan Water Treatment Plant Improvements - \$ 37.9 Million

(project pages VIII-8)

The immediate focus, in this area will be on current projects including the transformer/switchgear building renovation, fire protection system improvements, chemical building renovations, east shaft pumping station pumping station renovation and sample line replacement. Major projects include: sedimentation improvements (FY 2012 - FY 2013);fire protection system improvements (FY2013);transformer/switchgear building renovation (FY 2012-FY 2013);east shaft pumping station renovation (FY 2012- FY 2013); boat dock/chemical storage building renovation (FY 2014 - FY 2016); McMillan building renovation ph2 (FY 2014 – FY 2016)chemical building renovations (FY 2016 - FY 2018); clearwell maintenance & improvements - north (FY 2013 - FY 2014; FY 2020); clearwell maintenance & improvements – south (FY 2016 – FY 2017); GIS system (FY 2017 – FY 2019); roof replacements (FY 2016 - FY 2018); SCADA upgrade (FY 2017 -FY 2019); instrumentation improvements (FY 2015, FY2020); process improvements (FY 2017 – FY 2019); EASA building renovation (FY 2017 – FY 2019) ; McMillan building renovations ph3 (FY 2020)security improvements (FY 2020);and roadway repairs (FY 2018 – FY 2020).

Appurtenant Transmission & Storage Facility - \$43.1 Million

(project pages VIII-9)

This project area covers improvements to the Aqueduct’s major transmission mains, storage facilities and outlying structures. Current major projects include: Little Falls Pumping Station motor control upgrades and reservoir maintenance & improvements - 1st high. Future projects include: Little Falls Pumping Station HVAC Upgrades (FY2013 – FY 2015); reservoir maintenance & improvements – 2nd & 3rd high (FY 2017 – FY 2018, FY 2015 – FY 2016); transmission main improvements (FY2013 – FY 2015);city tunnel repairs (FY 2020); conduit repairs (FY 2016 – FY 2020); cross connection structure upgrade (FY2015 – FY 2017); great falls intake building improvements (FY 2016 – FY 2018); Little Falls Pumping Station crane overhaul (FY 2014 - FY 2016); SCADA upgrades (FY 2017 – FY 2019); Champlain street building renovation (FY 2020); Rock Creek Blow-Off Valve Replacements (FY 2018 – FY 2020);Sluice Gate Replacements starts in FY 2020; and Warehouse No. 8 Improvements (FY 2015 – FY 2016).

Dalecarlia Water Treatment Plant Improvements - \$65.5 Million

(project pages VIII-10)

Dalecarlia WTP will continue to improve its infrastructure with current projects including the sample line replacements, Maintenance Building Renovation and Fire Protection System Improvements. Future projects include: visitors center exhibits (FY 2014 – FY 2016);administration building improvements (FY 2015 - FY 2017); basin no. 3 & no. 4 flocculation/sedimentation improvements (FY2018 - FY 2020); carbon facility tank renovations (FY 2017 -FY 2019); chemical building electrical upgrades (FY 2013 - FY 2015); clearwell maintenance & improvements – 15 & 30 MG (FY 2014 – FY 2015, FY 2018 – FY 2019); east filter building renovation phase II (FY 2013- FY 2015); GIS System (FY 2017 - FY 2019); intake building renovation (FY 2014 – FY 2016); maintenance building renovation (FY 2013 - FY 2015); roadway improvements (FY 2017 - FY 2019); roof replacements (FY 2016 - FY 2018); SCADA Upgrades (FY 2017 – FY 2019); south connection building renovation (FY 2015 - FY 2016); wash water tank renovations (FY 2018 - FY 2019); west filter building improvements (FY 2015 - FY 2017); west filter building improvements (FY 2015

– FY 2017); fuel line replacements (FY 2015 – FY 2016); process improvements (FY 2020); dalecarlia instrumentation improvements (FY 2016)and security improvements Ph III improvements will start in FY 2020.

Alternate Treatment Methods - \$2.8 Million

(project pages VIII-11)

In FY2015 Aqueduct will begin the 30 MG clearwell mixing improvements project, while future projects include Georgetown mixing improvements starts in FY 2020.

Financing of Aqueduct Capital Projects

The U.S. Army Corps of Engineers in accordance with Federal procurement regulations require DC Water to remit cash in an amount equal to the total project cost in advance of advertising contracts, and these funds are transferred immediately to a Corps/U.S. Treasury account to be drawn down by Washington Aqueduct during the execution of the project through completion with no interest to DC Water. Over the years, extensive discussions with the U.S. Office of Management and Budget (OMB) and the Corps resulted in a proposal in the President’s FY2006 and FY2007 budgets that would allow Aqueduct customers to deposit funds for any projects required by their NPDES permit (including the residuals project) to a separate escrow account, allowing the Aqueduct customers to retain interest on these funds. The proposal was submitted in May 2006 to the Senate and House. During FY 2006, the Corps briefed the Senate Environment and Public Works committee staff and in conjunction with DC Water briefed the Senate Homeland Security and Government Affairs committee staff. Additionally DC Water and Washington Aqueduct staff provided DC Delegate Norton’s office with the Administration’s proposal. Neither of the Senate committees acted on the proposal.

We continue to pursue other options that would be more favorable to DC Water, including transferring dollars on a phased basis, utilizing taxable bonds, taxable commercial paper, or providing the Corps with a bank line of credit. In the past, some of these options have not been viewed favorably by the U.S. Treasury, but we will continue to educate and work with Congressional staff, federal agencies and the Corps on this critical issue.

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Washington Aqueduct
 Program Title: Washington Aqueduct
 Activity Group/Project Title: **WAD121 Basin Waste Recovery**
 Managing Department: **EPMC:**
Priority: Federal Facilities Compliance Agreement

Phase	Start Date
Design:	
Construction:	10/1/2007
Project Completion:	10/1/2011

Project Description:

Under the Aqueduct's NPDES permit and a related FFCA (the federal agency equivalent of an administrative order), the Aqueduct is required to remove 85 percent of incoming sediments, rather than periodically discharging them to the Potomac River. The FFCA requires that the new process be in place by Dec. 31, 2010; because of schedule delays the Aqueduct is seeking time extension on the completion of this project. The Aqueduct selected a process to meet the Compliance Agreement, which dewateres the residual on site and trucks them off-site for disposal. The project is currently 98% complete and the facility is being started-up in stages. All aspects of the new facility are projected to be operational by March 2012.

Impact on Operations:

The estimated increase to the Washington Aqueduct Operating budget due to the Residual Facilities is in the range of \$2.2 to \$4.0 million. We anticipate future cost increases in areas of personnel, building maintenance, chemicals, electricity and contract disposal. The major portion of the increase will be in the areas of chemical use, electrical consumption and contract trucking for disposal. Funding is included in FY 2012.

Funding by User (percent):

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



FY 2012 Approved Life Budget	86,481,590
FY 2013 Approved Life Budget	94,906,321
Increase/(Decrease) to Approved Life Budget:	8,424,731

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	94,906										
Commitments Budget	94,906										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Washington Aqueduct
 Program Title: Washington Aqueduct
 Activity Group/Project Title: **WAD122 Dalecarlia Pumping Station**
 Managing Department: **EPMC:**
Priority: Good Engineering Practices

Phase	Start Date
Design:	
Construction:	10/1/2010
Project Completion:	10/1/2017

Project Description:

The Dalecarlia Pumping Station was built over forty years ago and beginning in FY2012, the Aqueduct will start a series of initiatives at Dalecarlia Pumping Station aimed at modernizing and upgrading the facility. These initiatives include: fire protection system improvements (FY 2013); building renovation (FY 2011 - FY 2012); overhead crane replacements (FY 2014 - FY 2016) elevator replacements (FY 2014 - FY 2016); mechanical upgrades (FY 2016- FY 2018); SCADA upgrades (FY 2017 - FY 2019) and valve and piping replacement (FY 2018 - FY 2020).

Impact on Operations:

Improvements to the Dalecarlia pumping station are not expected to have significant impact on operating costs.

Funding by User (percent):

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



FY 2012 Approved Life Budget	7,559,511
FY 2013 Approved Life Budget	13,415,549
Increase/(Decrease) to Approved Life Budget:	5,856,038

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	5,605	1,687	147	293	477	953	440	1,173	807	1,834	
Commitments Budget	5,605	1,687	147	293	477	953	440	1,173	807	1,834	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Washington Aqueduct
 Program Title: Washington Aqueduct
 Activity Group/Project Title: **WAD123 Cabin John Bridge**
 Managing Department: **EPMC:**
Priority: Good Engineering Practices

Phase	Start Date
Design:	
Construction:	10/1/2010
Project Completion:	10/1/2015

Project Description:

This project includes roadway and parapet repairs to the historic Cabin John Bridge. The bridge is over 140 years old and carries a nine foot conduit that runs from Great Falls to the Dalecarlia Reservoir. The most recent improvements to the bridge were completed in 2001. Future improvements scheduled for FY 2015 through FY 2017 are additional roadway and parapet repairs.

Impact on Operations:

Improvements to the Cabin John Bridge are not expected to have a significant impact on operating costs.

Funding by User (percent):

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



FY 2012 Approved Life Budget	921,625
FY 2013 Approved Life Budget	916,750
Increase/(Decrease) to Approved Life Budget:	-4,875

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget					147	183	587				
Commitments Budget					147	183	587				

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Washington Aqueduct
 Program Title: Washington Aqueduct
 Activity Group/Project Title: **WAD126 McMillian WTP Improvements**
 Managing Department: **EPMC:**
Priority: Good Engineering Practices

Phase	Start Date
Design:	
Construction:	10/1/2007
Project Completion:	10/1/2017

Project Description:

The 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, chemical building renovations, east shaft pumping station pumping station renovation and sample line replacement. Major projects include: sedimentation improvements (FY 2012 - FY 2013); fire protection system improvements (FY2013); transformer/switchgear building renovation (FY 2012-FY 2013); east shaft pumping station renovation (FY 2012- FY 2013); boat dock/chemical storage building renovation (FY 2014 - FY 2016); mcmillan building renovation ph2 (FY 2014 – FY 2016) chemical building renovations (FY 2016 - FY 2018); clearwell maintenance & improvements - north (FY 2013 - FY 2014; FY 2020); clearwell maintenance & improvements – south (FY 2016 – FY 2017); GIS system (FY 2017 – FY 2019); roof replacements (FY 2016 - FY 2018); SCADA upgrade (FY 2017 -FY 2019); instrumentation improvements (FY 2015, FY2020); process improvements (FY 2017 – FY 2019); EASA building renovation (FY 2017 – FY 2019) ; mcmillan building renovations ph3 (FY 2020) security improvements (FY 2020); and roadway repairs (FY 2018 – FY 2020).

Impact on Operations:

Improvements to the McMillian WTP are not expected to have a significant impact on operating costs.

Funding by User (percent):

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



FY 2012 Approved Life Budget	28,033,651
FY 2013 Approved Life Budget	37,931,778
Increase/(Decrease) to Approved Life Budget:	9,898,127

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	16,597	2,384	6,637	1,173	748	1,173	1,870	2,714	3,630	1,005	
Commitments Budget	16,897	2,384	6,637	1,173	748	1,173	1,870	2,714	3,630	1,005	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Washington Aqueduct
 Program Title: Washington Aqueduct
 Activity Group/Project Title: **WAD127 Appurtenant Transmission and Storage Facilities**
 Managing Department: **EPMC:**
Priority: Good Engineering Practices

Phase	Start Date
Design:	
Construction:	10/1/2010
Project Completion:	10/1/2017

Project Description:

Raw water is taken from Great Falls on the Potomac River into two raw water conduits. Raw water is also taken at the Little Falls Pumping Station on the Potomac. Both Discharge into the Dalecarlia Reservoir. This project area covers improvements to the Aqueduct's major transmission mains, storage facilities and outlying structures. Current major projects include: Little Falls Pumping Station motor control upgrades and reservoir maintenance & improvements - 1st high. Future projects include: Little Falls Pumping Station HVAC Upgrades (FY2013 – FY 2015); reservoir maintenance & improvements – 2nd & 3rd high (FY 2017 – FY 2018, FY 2015 – FY 2016); transmission main improvements (FY2013 – FY 2015); city tunnel repairs (FY 2020); conduit repairs (FY 2016 – FY 2020); cross connection structure upgrade (FY2015 – FY 2017); great falls intake building improvements (FY 2016 – FY 2018); Little Falls Pumping Station crane overhaul (FY 2014 - FY 2016); SCADA upgrades (FY 2017 – FY 2019); Champlain street building renovation (FY 2020); Rock Creek Blow-Off Valve Replacements (FY 2018 – FY 2020); Sluice Gate Replacements starts in FY 2020; and Warehouse No. 8 Improvements (FY 2015 – FY 2016).

Impact on Operations:

Improvements to the appurtenant transmission and storage facility are not expected to have a significant impact on operating costs.

Funding by User (percent):

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



FY 2012 Approved Life Budget	33,479,065
FY 2013 Approved Life Budget	43,074,617
Increase/(Decrease) to Approved Life Budget:	9,595,552

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	12,565	6,344	1,063	2,384	2,090	3,337	4,144	4,254	1,430	5,464	
Commitments Budget	12,565	6,344	1,063	2,384	2,090	3,337	4,144	4,254	1,430	5,464	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Washington Aqueduct
 Program Title: Washington Aqueduct
 Activity Group/Project Title: **WAD128 Dalecarlia WTP improvements**
 Managing Department: **EPMC:**
Priority: Good Engineering Practices

Phase	Start Date
Design:	
Construction:	10/1/2007
Project Completion:	10/1/2017

Project Description:

The existing rapid-sand filtration Dalecarlia Water Treatment Plant was built in 1928, with significant improvements made over time, bringing total plant capacity to 220 MGD. Dalecarlia WTP will continue to improve its infrastructure with current projects including the sample line replacements, Maintenance Building Renovation and Fire Protection System Improvements. Future projects include: visitors center exhibits (FY 2014 – FY 2016); administration building improvements (FY 2015 - FY 2017); basin no. 3 & no. 4 flocculation/sedimentation improvements (FY 2018 - FY 2020); carbon facility tank renovations (FY 2017 -FY 2019); chemical building electrical upgrades (FY 2013 - FY 2015); clearwell maintenance & improvements – 15 & 30 MG (FY 2014 – FY 2015, FY 2018 – FY 2019); east filter building renovation phase II (FY 2013- FY 2015); GIS System (FY 2017 - FY 2019); intake building renovation (FY 2014 – FY 2016); maintenance building renovation (FY 2013 - FY 2015); roadway improvements (FY 2017 - FY 2019); roof replacements (FY 2016 - FY 2018); SCADA Upgrades (FY 2017 – FY 2019); south connection building renovation (FY 2015 - FY 2016); wash water tank renovations (FY 2018 - FY 2019); west filter building improvements (FY 2015 - FY 2017); west filter building improvements (FY 2015 – FY 2017); fuel line replacements (FY 2015 – FY 2016); process improvements (FY 2020); dalecarlia instrumentation improvements (FY 2016)and security improvements Ph III improvements will start in FY 2020.

Impact on Operations:

Improvements to the Dalecarlia WTP are not expected to have a significant impact on operating costs

Funding by User (percent):

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



FY 2012 Approved Life Budget	44,849,953
FY 2013 Approved Life Budget	65,518,590
Increase/(Decrease) to Approved Life Budget:	20,668,637

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	30,275		2,750	6,894	7,407	5,156	4,547	2,750	4,455	1,283	
Commitments Budget	30,275		2,750	6,894	7,407	5,156	4,547	2,750	4,455	1,283	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Washington Aqueduct
 Program Title: Washington Aqueduct
 Activity Group/Project Title: **WAD130 Alternate Treatment Methods**
 Managing Department: **EPMC:**
Priority: Good Engineering Practices

Phase	Start Date
Design:	
Construction:	10/1/2008
Project Completion:	10/1/2017

Project Description:

The Aqueduct undertakes various studies and pilot projects to optimize plant treatment and model the potential impact of future regulatory changes on plant operations. In FY2015 Aqueduct will begin the 30 MG clearwell mixing improvements project, while future projects include Georgetown mixing improvements starts in FY 2020.

Impact on Operations:

Depending on study results and application to existing and future treatment methods, operating costs could increase or decrease.

Funding by User (percent):

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



FY 2012 Approved Life Budget	1,812,395
FY 2013 Approved Life Budget	2,795,515
Increase/(Decrease) to Approved Life Budget:	983,120

	Pre FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Post FY 2020
Disbursements Budget	1,915				147	477				257	
Commitments Budget	1,915				147	477				257	

(projected disbursements do not include contingencies)

(dollars in thousands)



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

CAPITAL IMPROVEMENT PROGRAM

APPROVED FY **2011 – 2020**

SECTION IX

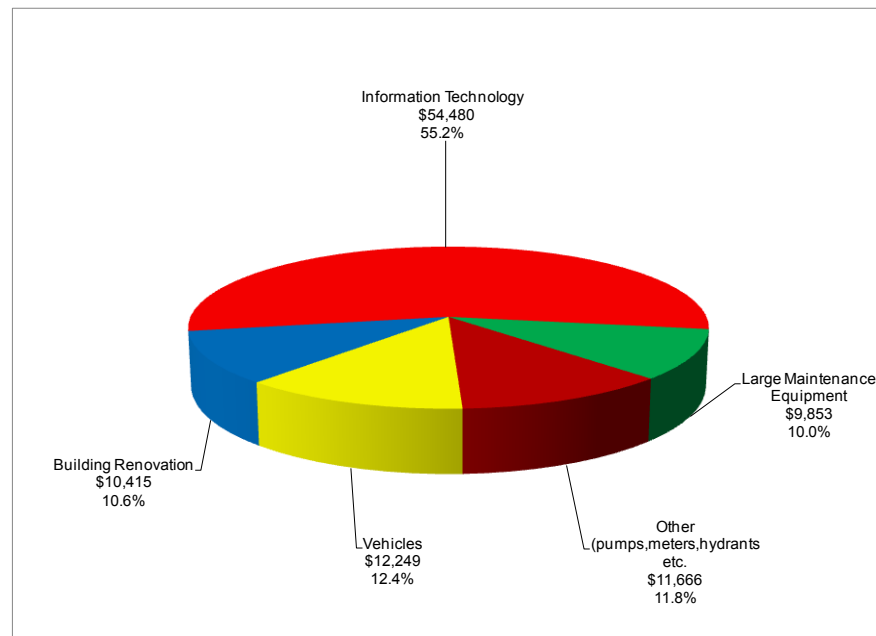
CAPITAL EQUIPMENT

CAPITAL EQUIPMENT

DC Water's Capital Equipment disbursements budget totals approximately \$98.6 million for FY 2011 – FY 2020 plan, a decrease of approximately \$5.3 million compared to the last ten-year plan. Approximately fifty-five percent of spending in the capital equipment area is on major information technology projects, including the document management system (budget of \$3.2 million) and the asset management system (budget of \$6.6 million). DC Water continues its commitment to scheduled replacement of its vehicle fleet with a budget of \$12.2 million, representing more than twelve percent of the Capital Equipment disbursement budget. Finally, maintenance of large equipment totals \$9.8 million, or ten percent of the ten-year plan. Other equipment including hydrant and valve equipment necessary for the maintenance of the District's public fire system totals \$11.6 million.

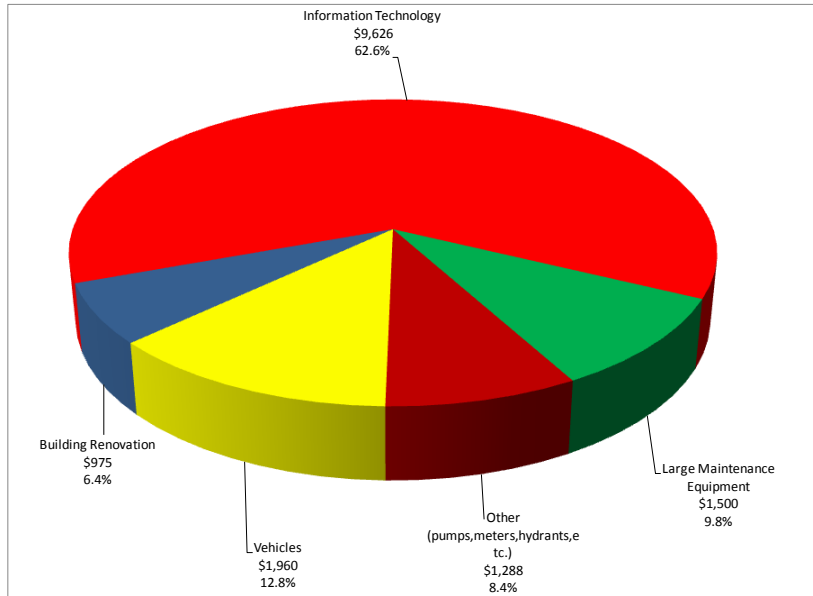
The revised FY 2012 budget at \$15.3 million is \$1.2 million more than the FY 2012 approved budget. This variance is primarily attributable to increases in disbursement budgets for Information Technology.

CAPITAL EQUIPMENT DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES FY 2011 – FY 2020 (\$ in 000's)

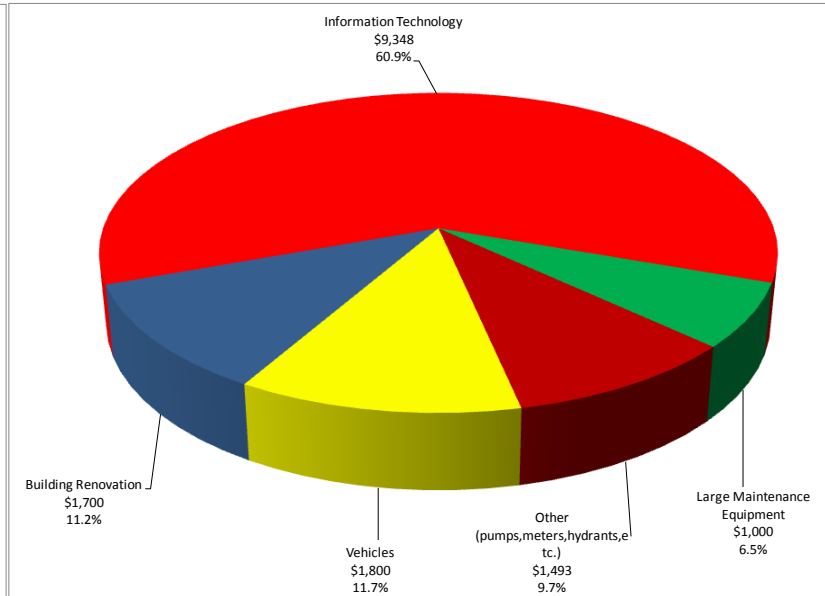


CAPITAL EQUIPMENT DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES
FY 2012 Revised vs. FY 2013 Approved
 (\$ in 000's)

FY 2012 Revised



FY 2013 Approved



FY 2012 Revised = \$15,349
 FY 2013 Approved = \$15,341

Equipment Purchases

Equipment purchases are made by the Departments of Wastewater Treatment, Water Services, Sewer Services, Customer Service, Fleet Management, Facilities, Security, Information Technology, and Maintenance Services. Amounts shown below are 10-year disbursement totals.

Department of Wastewater Treatment - \$1.0 million

Capital equipment expenditures for this department are for laboratory equipment purchases to maintain a certified laboratory.

Department of Water Services - \$7.6 million

The Department of Water Services is responsible for replacing deteriorated or damaged fire hydrants, water system valves, and system appurtenances. These purchases are separate from Capital Improvement Program activities for the systematic replacement of valves; rather they are for interim replacement of these items as individual needs are encountered by field crews. Activities in the FY 2012 revised and FY 2013 proposed budgets largely remain the same as those carried out by the department in previous years for fire hydrant and Water service replacements.

Department of Sewer Services - \$3.0 million

This department is responsible for replacing catch basins, manhole covers and frames, and rehabilitating regulators and outfall gates. The FY 2011 - 2020 budget plan reflects a major thrust for buying Flow Meter Sensors, Catch Basin Tops and Sewer Cleaning and Repair Equipment. Both a Skimmer Boat and TV for Jet Machine (Used for videoing the conditions of the sewer) will be purchased in fiscal year 2013.

Department of Fleet Management - \$12.2 million

A major emphasis is placed on coordinating equipment purchases with the realigned needs of the Authority as Internal Improvement Plans are implemented. Over the past years, Fleet has focused efforts on the medium size equipment such as heavy duty trucks to ensure that the critical equipment necessary to support the organizations responsibilities is available and in good, safe working order. This year's budget focuses on replacing many of the infrastructure vehicles within the organization with more fuel efficient and environmental friendly vehicles (alternative fuel, electric, natural gas, and hybrid) including ¾ ton pickup trucks, mid-size extended cab pickup trucks, ¾ ton cargo vans, and crew utility vehicles.

Department of Facilities and Security - \$10.4 million

Capital equipment activities for this department include HVAC system and plumbing maintenance at various locations, fencing, landscaping, and fire suppression and detection systems. This year's budget primary focus will be on furniture and fixtures, HVAC at various locations, facilities improvements.

Department of Maintenance Services - \$8.9 million

This department is responsible for rehabilitating and replacing large process equipment throughout the Authority, including pumps, screens, variable frequency drives, and large motors. A major emphasis has been placed on major pump rebuild/replacement at locations inside and outside of blue plains. Additionally, funding will focus on large electric motor purchase and the rebuild/replacement of centrifuges.

Department of Sewer and Water Pumping - \$0.9 million

This department is responsible for rehabilitating and replacing large process equipment outside of Blue Plains plant, including pumps, screens, variable frequency drives, and large motors. A major emphasis has been placed on the High Priority Rehab Program over the past several years, which ensures that large equipment will function properly until its scheduled replacement in the Capital Improvement Program.

Department of Information Technology - \$54 million

At DC Water, we focus all of our technology initiatives on improving both the quality of services we provide to our customers and organizational effectiveness. Our technology achievements have situated us at the same table with numerous multi-national organizations and governmental entities providing truth to the statement that DC Water is a world class organization. Our work during FY 2011 as well as our investments in technology over the next several years is further evidence of our commitment.

Technology Strategic Plan – We continue to focus on the development and implementation of a brand new and updated Information Technology Strategic Plan. This Plan will outline a vision for the delivery of Information Technology services at DC Water, and a methodology for prioritization of all technology projects (which includes an assessment of cost savings and productivity growth). Information Technology investments include those that focus on improvements in information security, infrastructure and the use of Information Technology throughout DC Water to improve the delivery of services to our customers and operational efficiency.

Website Enhancements – Continuing to build on the past success of our website, www.dcwater.com, multiple enhancements were implemented during FY 2011. DC Water implemented a new version control system that assists with development. This software is also being utilized by other IT groups in support of their development. We updated our web servers and recovery strategy to ensure uptime. We are also leveraging social media via Twitter and Facebook to better communicate DC Water’s messages in emergency situations as well as ongoing community outreach. To embrace our mobile audience we’re updating the “Report A Problem” functionality. The updated feature will allow uploading of images and geo-location details to assist in reporting issues customers find around DC. Lastly, we’re in the early stages of implementing a content management system to replace our existing website. This change will allow for direct content control by DC Water employees streamlining the publishing process and direct posting to social media website with one action.

Interactive Voice Response – DC Water’s enhanced Interactive Voice Response system (IVR) provides our customers with multiple tools related to communication with the Authority, including the ability to pay their bill or report a problem. During the FY 11 Town Hall Calling campaign, the IVR system placed almost 40,000 phone calls and successfully reached 81% of targeted residents. In 2011, we had 315 attendees vs. 120 in 2010. Of all referral methods (ex. IVR, email, Facebook), IVR was the top method. Based on the success of the initiative, IT is looking to bring other calling campaigns in-house. This will result in a cost-savings (and higher efficiency) for DC water. The DC Water High Usage Notification Application (HUNA) has generated over 27,000 notifications for high water usage since being implemented in January 2006. These notifications have allowed customers to find unknown household leaks and other sources of high usage such as a sprinkler system that was accidentally left running or a ruptured washing machine hose.

DC Water has made the following enhancements to HUNA to provide customers with even more valuable information to help save water and money:

- Customers can now receive notifications via text message in addition to email and telephone calls.
- Customers can set high usage notifications to multiple phone numbers, email addresses, and text messages.
- Customers will be identified and notified on the first day after we receive meter reads for an evaluation period, rather than the second day.
- The high usage threshold has been lowered by 40%, which allows DC Water to identify nearly twice as many instances of high usage.
- The program now incorporates eight calling windows throughout the day to allow us the greatest opportunity to reach our customers in case their phone line is busy or unavailable when we first attempt to reach them.

IBM Watson Research (ADAM Project) - In FY 2010, the Authority and International Business Machines Corporation (IBM) embarked on a “first-of-a-kind” (FOAK) collaborative research project entitled “Analytics Driven Asset Management” (ADAM) which leverages Automated Meter Reading (AMR) and Maximo infrastructure asset data along with IBM’s analytics tools to perform advanced trending and analysis of data. Over the course of the last two years in the first phase of the project, personnel from the Authority have collaborated with IBM to develop several beta products consisting of:

- Enhanced Work Management using Route Optimization to allow DC Water to plan, schedule and execute work more efficiently;
- Predictive Maintenance Analytics to identify trends and patterns regarding assets that can be acted on;

- Water Usage Analytics, again, to identify trends and patterns regarding water usage that can be acted on to identify meter anomalies leading to re-capturing lost revenue and avoiding future revenue loss.

The focus of the current phase of the project concerns analyzing data to determine the correlation between water distribution system operations and water main breaks with the goal being to adjust standard operating procedures to reduce the likelihood of operations causing main breaks. The other initiative of this phase is using the tool to model and evaluate different customer rate case scenarios based on consumption trends such as high seasonal use. The current project phase will span the later part of FY11 through FY12.

Total Enterprise Asset Management System – During FY 2011, we continued to meet the expanding asset and work management needs of the Authority through implementing additional solutions using Maximo. In FY 2012, we intend to build on the foundation laid last year to bring a number of projects to fruition to benefit the Authority.

Department of Facilities and Security (DFS) Maximo Enhancements Project - this is a multi-phased project focused on configuring Maximo to better support DFS. This includes developing a new work order tracking screen tailored to DFS needs; developing reports and custom KPI dashboards to assist with managing the work and assessing performance; implementing new work management processes to increase efficiencies; and implementing a new service request process to allow designated personnel to enter requests for services directly into the system. In FY11, we completed deployment of Phases 1, 2 and 3 which consisted of developing a new work order tracking screen, developing reports and KPI dashboards and implementing new work management processes. Phase 4 which consists of enhancements to the work management processes and implementing the new Maximo Service Request application is planned for October 2012.

Sewers Under Buildings Project - in support of the Departments of Engineering and Technical Services and Consumer Services' "Sewers Under Building Project", developed and implemented a custom application in Maximo to accommodate tracking mailings to affected customers and the communications with customers regarding the inspection and potential refurbishment of sewer mains that are installed under privately-owned buildings. This project was completed in FY11.

Fleet Information Management System Implementation Project - DC Water is in the process of procuring a Fleet Information Management System that will allow the Fleet Department to better manage the maintenance and repair that it performs on DC Water's vehicles and equipment. Services provided by IT include requirements/RFP development and project management of the business process validation, product configuration, testing, training and implementation. The contract award is expected in early FY12 and completion of implementation is expected within FY 2012.

Enhanced Water/Sewer Pumping Branch Operation and Maintenance Project - as part of DC Water's initiative to increase the reliability of its water and sewer pumping equipment, this project aims to improve managerial processes that support the operation and maintenance of water and sewer pump stations. This will be achieved through fostering a lifecycle asset management approach to collect and manage data on assets using Maximo and executing a comprehensive program that uses Maximo to generate, execute and report work that is performed on assets and that uses Maximo to provide information that allows staff to assess the condition of assets and make informed decisions regarding their disposition.

Enterprise GIS - The Enterprise GIS, based on ESRI technology, is a key component to complement the Computerized Asset and Maintenance Management System, Maximo. Once integrated, these systems provide DC Water with a robust Enterprise Asset Management information management system.

The “end-state” vision for the TEAMS – GIS can be summarized as:

- A single enterprise Geographical Information System (GIS) that is capable of servicing every DC Water department and at organizational level.
- A Common GIS architecture: common data models, access methods, and attributes and data that supports customer service, work order management, CIP, Hydraulic modeling, public relations, legislative responses, finance and administration, etc.
- Business processes that support life-cycle management of our assets and cartographic data for accuracy, integrity, control, and standardization.

This project is now at the System and Data Maintenance, Update and Support phase and we are currently planning the future GIS Integrations and Vertical Applications. Some of the currently identified activities are:

- Upgrade to ArcGIS 10.1 to allow more advanced server side capability.
- Enhance the Maximo-GIS integration
- Implement quality assurance and productivity enhancement tools for the information maintenance of the water and wastewater networks
- Continue the deployment of GIS data in support of the Field Service Management project
- Support of AMR upgrade
- Integration with the leak detection effort
- SCADA Integration
- Integrate the CIP project information and integration with Envista
- Integration of Engineering Document Management (Livelihood) in GIS
- Integration with the Hydraulic Model

Enterprise Records and Document Management System (ERDMS) – In FY 2008, the Authority initiated enterprise implementation of the ERDMS, a robust life-cycle content management system that enables effective and efficient management of documents and records at DC Water. This increases operational efficiency of the customer responsiveness by improving the accessibility and reliability of critical operational documents and facilitating the transition from paper to electronic documents. Documents and records in the system are maintained securely, protected from accidental destruction, and provide detailed audit trails for all activities.

- In FY 2011 our largest initiative was a major upgrade of the EDM System, providing usability enhancements and new tools and functionality to better support business processes; and ensuring system compatibility with planned Authority infrastructure upgrades.
- In FY 2011 we successfully went live with the Permit Application Document Library, a single secure repository for all Permit Application related documents. The Library, integrated with the PATS-Maximo Permit Application System, enables quick and easy search and retrieval of documents submitted or generated in support of permit applications, as well as providing protecting the safety, security and integrity of the loaded documents. Additionally, electronic plan review tools available in the system will enable efficiencies in the permit review process.

- The Engineering Library continued to be a focus in FY 2011. As DC Water construction activity continues to increase, the availability and accessibility to all interested parties of Design, Construction and Operation and Maintenance documents is increasingly important. We worked closely with the departments to load documents and improve the document capture process, and continued with ongoing expansion of the Library to cover all systems.

Information Security Program – IT continues to improve and implement a new IT security initiative, to govern IT’s and other major program efforts using a business driven methodology. Based on the Authority’s risk tolerance, the business environment (including market sector and organizational characteristics), mission priorities, strategic goals, critical business functions, and the information assets that support our day-to-day operations are analyzed to identify key relationships, dependencies, and priorities. Significant risk associated with our information assets are documented together with appropriate countermeasures considering established standards and best practice. To support transparency and accountability, the plan enables management to trace all risk management recommendations back to threats, vulnerabilities, and ultimately key business drivers. Additionally, IT revised our recommended information security policy directives for review and ratification by executive management. The revised Information Security Strategic Plan (2011-2016) was developed to define the Authority’s long-term plan for managing risk cost effectively to meet the challenges of the evolving business environment the changing threat landscape.

People are the most important element of a successful Information Security Program. Thus, we developed the Security Awareness Plan as the tactical plan to build and maintain relationships for integrating awareness into the Authority’s management culture, and to provide a central point of contact for guidance and oversight for all information security matters. Client computers are, by definition, the point at which people interact with our information assets. They provide access to applications, data, and services that support our day to day operations. Ensuring the reliability and dependability of these computers will influence how efficiently and effectively users are able perform their duties. Unfortunately, client computers are generally neglected when it comes to appropriate risk management; the majority of security incidents are directly attributable to lax client security. To ensure the Authority is protected appropriately, we developed the Computer Security Improvement Plan to implement a comprehensive solution for our client computers.

Field Service Management System (Mobile Computing) – DC Water has had as an organizational goal to deploy mobile work management technology to support its field operations maintenance and repair efforts. The objective is to provide access to accurate and timely GIS data and engineering documents, and integration with the service/work order management systems.

In addition to mobilizing the enterprise applications such as GIS and Maximo, we are able to leverage some integrated technologies that are being used to secure the physical and information assets such as Radio Frequency Identification (RFID) now used for tracking and monitoring numerous fixed and mobile assets throughout the DC Water facilities. This same technology that is tracking fleet assets will also allow us to link fleet vehicles to computing assets such as laptops and other expensive equipment items like generators. Built-in on-board diagnostic monitoring will allow fleet personnel to monitor various vehicle operating conditions while they are out on the road. The on-board GPS will allow DC Water to efficiently manage the field resources using optimized routing, intelligent location-based dispatch and facilitate asset identification in the field.

Since 2008, the communication infrastructure was installed in 116 vehicles. The goal is to continue equipping vehicles as we move forward in this project to reach the planned target of approximately 160+ vehicles where mobility solutions would have a positive ROI. The project has currently identified 14 business areas that have the potential to benefit from this technology. Funding will be used to continue the implementation process of the Field Service Management with some of the key planned activities being:

- Continue to deploy the technology to the remaining business based on strong business drivers to ensure that the technology will provide value once implemented; In FY 2012, IT will focus on water and sewer investigation, water system repairs, meter operations initially then we will be looking at plant and pumping station equipment preventive and corrective maintenance activities; inspection of new water and sewer infrastructure installations; and inventory management functions such as material issuances, returns, transfers and inventory physical counts.
- Collaborate with HR to develop and implement a training program for the field personnel to ensure they have the skill needed to fully use this technology;
- Continue work with the other initiatives (Asset Management, eCIS Service Order Scheduling, ADAM, AMR, etc) to ensure the best information is made available to the field personnel;
- Implement a holistic support strategy for Field Service Management;
- Design and implementation of administrative applications in On Board Real Time Vehicle Diagnostics, RFID Tracking and Inventory Control and similar capabilities;
- Implement a coordinated process with Fleet to ensure that vehicles are equipped with the technology as they are being acquired or replaced;
- Continue to enhance the tools deployed to the crews based on feedback obtained through FOTAG.

Telephone System Enhancement – In FY 2011, DC Water completed the implementation of three major telephone enhancement projects: Desktop Faxing for Customer Service Department, Agent Call Recording/Coaching and Unified Messaging. Desktop Faxing ensured that agents and other Customer Service staff operate efficiently in managing customer's requests by eliminating paper and working with faxes in electronic format. Desktop faxing also is a proven step toward Green Initiative for the Authority. Agent Call Recording/Coaching is providing Managers and Supervisors at Customer Service Department ability to monitor Customer/Agent calls and then evaluate their performance with both real-time and archived data. Coaching module is a valuable workforce management tool for improving and training agents, resulting in higher customer satisfaction experience. Unified Messaging system is an enhanced voice mail system allowing future integration of email, voicemail and fax.

For FY 2012, further enhancement projects are planned. These include expansion of Desktop Faxing to the entire organization, upgrade of core telephone applications, implementation of unified communications and providing key departments with complete telephone mobility.

Radios – \$2.0 million

The Authority's plant radio system is currently using a single channel analog system that for practical purposes has reached the end of its usable life. During FY 2012 IT will upgrade and modernize our radio network mainly serving Blue Plains Advanced Wastewater Treatment Plant (WWTP). This undertaking will consider options to integrate and extend communications interoperability from the Blue Plains WWTP to the District's 800 MHz radio network, employed by DC Water for wide area radio communications throughout the District, and to integrate the radio network to DC Water's advanced IP Phone system.

Enterprise Resource Planner (ERP) System – \$2.7 million

Over the past 10 years, DC Water's business processes and business needs have matured to a level to begin evaluating an organization-wide Enterprise Resource Planning (ERP) system. The first stages of an ERP are an environment assessment with a focus on DC Water's customer information system. Advantages gained with the implementation of an ERP system is complete **visibility** into all the important processes across various departments of an organization, automatic and coherent work-flow from one department / function to another to ensure smooth transition of processes and a unified reporting system to analyze the statistics, numbers, status in real time, across the departments.

Automated Meter Reading (AMR) – \$1.4 million

DC Water completed upgrading its AMR System in 2011. This project was part of DC Water's long term initiative to institute full and redundant gathering of data for customer billing, review business processes for potential improvements and/or re-engineering, and provide enhanced reporting. The intent was to gather data throughout DC Water Customer Area and consistently provide that data to DC Water Customer Service and to the end customers.

This upgrade provided DC Water with the following benefits:

- Enabled DC Water to use the latest technology available in Automated Meter Reading (AMR) System
- Second generation Data Collector Units (DCU II) that are capable of transmitting every 15 minutes, enabling DC Water to collect reads in real time and use those reads to bill its customers
- New user interface that has readings, consumptions and transmissions features that were not available in the older version of AMR System. This enables DC Water's Customer Service to provide better assistance to the end customers.
- Enhance capabilities in terms of management, tamper and diagnostic reporting.
- New communication architecture by moving from analog phone lines to IP based communications
- Data integration with DC Water's High Usage Notification Alert (HUNA) System, AMR Graph and GIS/AMR Dashboard.
- New billing interface that provides reads in real time and also a list various KPI's in terms of number of readings available through AMR System v/s Manual Systems per billing batch or cycle(s).

DC Water continues to make enhancements to its upgraded AMR System to support its commitments to its customers by providing efficiencies in the cost of services and in the provision of information concerning water use.

Supervisory Control and Data Acquisition (SCADA) – \$1.8 million

In FY 2007, the Authority embarked on an initiative to replace its 20 years old Data Acquisition (DAQ) SCADA. Our main objectives were to address reliability concerns, improve operational efficiency and securing sensitive data.

IT has successfully completed the implementation of a State-of-the -Art SCADA solutions supported by a unique and innovative self healing, fault tolerant, media independent and highly secure architecture for real time transmission of command and control data. The Authority can control and monitor all remote nodes without compromising security. DC Water was selected for the CIO 100 award based on First-of-Its-Kind communication and control network infrastructure to support Supervisory Control and Data Acquisition (SCADA) system.

In FY 2012, we plan to further add quality assured data points in order to support the business integration of SCADA and the Enterprise. One of the most critical undertakings are to implement remote citywide pressure and flow monitoring system which will give the business a tool for avoiding water main breaks as well as minimize outfalls from storm water. Another initiative during FY 2012 is that we will upgrade the SCADA system platform and utilize full virtualization. This will improve the support and management of the system as well as preparing for future additions and upgrades. By implementing Change Control Management software we can get full control of all our PLC's with tracking, securing and reporting deviations from the original.

Energy Management Information System – \$.3 million

DC Water is deploying an energy management initiative, including a full system audit, which is “developing a plan to implement cost- effective energy savings measures for its facilities and identify carbon footprint reduction opportunities”. Successful implementation and management of the defined information system will allow DC Water the ability to better manage total energy use, as well as identify and implement operational strategies that will control load factors, peak load needs and reduce inefficiencies. Ready access to the data also allows DC Water an ability to adjust amounts and timing of energy use to conserve electricity as well as costs. Additionally, DC Water may use the information system to coordinate with energy providers to arrange improved purchasing and rate schedules.

SCADA – MAXIMO Integration (CBM) – \$.3 million

A conditional based approach to asset maintenance where we are able to detect health degradation in our equipment. The machine learning module will monitor data from assets and create a virtual signature of normal operation. If it deviates from the norm, it will automatically create a MAXIMO work order for Maintenance to follow up on. In 2012 IT, in collaboration with the business units, will plans to implement the CMB production system. This system will significantly improve our asset total life cycle as several system health parameters are monitored on a 24/7 basis. We will convert all paper based inspection rounds into a computerized system where the operator is guided by a step by step approach using a handheld computer. The system can generate a MAXIMO work order based on the current conditions and it has a transparent interface to DC Water assets.

Valve Identification – \$.5 million

DC Water has approximately 44,000 valves in the system and the inventory is moving into the MAXIMO work order system so they can be better tracked. This program will identify how the valves will be marked in the field (RFID, Bar Code) and develop a process to get the updated information into the MAXIMO work order system. In FY 2012 IT will work with business units to develop an interface to display all pertinent valve

information on the GIS system. Water Services staff should be able to look at the GIS map and determine the current position of the valve, number of turns, right or left hand operation, the date installed and a unique identifier so field crews can easily locate the valve in the street. This program should also produce a shut plan of valves that need to be shut to isolate a water main in an emergency situation. The GIS map should be able to display graphically the valves that will be operated and track the position throughout the outage. The program should also graphically identify all the broken valves in the system. This will enable DC Water with up to date information on valve position, the number of times a valve was operated and be able to place crews at valve locations to better support system operations. The program will also reduce the time necessary to produce a shut plan for a water main break. The valve identification program will result in better valve coordination and shorter outages for our customers.

Customer Information and Billing System – \$.5 million

The Customer Information Billing system was implemented in June 2001. Continued updates and enhancements to the system are scheduled throughout the life of the 10-year disbursement plan.

Redundant Data Center – \$1.8 million

In keeping with the Information Technology Strategic Plan, DC Water has been creating a Redundant Data Center. This facility, complete with uninterrupted power supply and system backup capability, when completed, will provide the ability to seamlessly transition without data loss and with minimal down time. IT will utilize virtualization technology to consolidate physical servers and reduce licensing cost. The above will also promote efficient energy usage through reduced power consumption.

Network System Renewal – \$5.0 million

A 4-year replacement plan has been developed for Network infrastructure equipment, as well as Intel servers and Enterprise SUN servers for Asset Management, GIS, Document management. The following upgrades will take place to support this plan: Purchase additional servers to further standardize server technology, Cisco core upgrade, upgrade backbone routers, access switches, and log monitoring products and consulting services for technology implementation.

Notes:

1. Capital equipment is defined by a purchase price greater than \$5,000 and an item that has a useful life of more than three years, or will extend the life of an asset by more than three years. Capital equipment expenditures fall into two broad categories: equipment purchases and ongoing projects. Purchases include items such as fire hydrants, catch basin components, water meters, vehicles, and computers. Budgets for equipment purchases are closed out at the end of each fiscal year. Ongoing projects extend over multiple years and are largely technology-related.

2. On the project pages that follow, lifetime budgets prior to FY 2011 reflect only FY 2010 actual disbursements, for projects of an 'on-going' nature, such as Desktop Replacements, High Priority Rehab, and vehicle purchases. On 'One-time' projects such as Asset Management, Document Management, and the Redundant Data Center, the disbursements reflect all of the spending on the effort since it began, while the Commitment budget reflects all of the anticipated spending required to complete the project and place it into service. Additionally, out year budgets show only spending expected through FY 2019. This is due to the generally annual nature of purchases and projects occurring in the Capital Equipment service area of DC Water's capital program.

FY 2011 - FY 2020 CAPITAL EQUIPMENT BUDGET
DISBURSEMENTS BASIS
(\$ in 000's)

Equipment Type	Owner-Dept.	FY 2011	FY 2012 Revised	FY 2013 Approved	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total FY '11 -'20	Project Sheet Ref.	Project Sheet Budget
<u>Wastewater Treatment</u>														
Wastewater Maximo	WWT	\$503	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$503	ED8	\$503
Lab Equipment for new Laboratory	WWT	-	285	275	-	-	-	-	-	-	0	560	ED9	\$560
Total		\$503	\$285	\$275	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,063		
<u>Water Services</u>														
Water Service Replacement	DWS	\$168	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$2,508	EA2	\$2,508
System Valve Replacements	DWS	137	225	225	225	225	225	225	225	225	225	2,162	EW1	\$2,162
Fire Hydrant Replacements	DWS	214	290	300	300	300	300	300	300	300	300	2,904	EX8	\$2,904
Total		\$519	\$775	\$785	\$785	\$785	\$785	\$785	\$785	\$785	\$785	\$7,574		
<u>Sewer Services</u>														
Sewer Pipes/Fittings	DSS	\$20	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$290	EA4	
Sewer Inspection Equipment	DSS	-	-	-	40	-	-	-	-	-	-	40	EA4	
Manhole Covers/Frames	DSS	22	33	33	33	33	33	33	33	33	33	319	EA4	
Regulator and Gate Rehabilitation	DSS	7	10	10	10	10	10	10	10	10	10	97	EA4	
Sewer Cleaning and Repair Equipment	DSS	36	55	55	55	55	55	55	55	55	55	531	EA4	
Portable Pumps	DSS	10	15	75	20	20	20	20	20	20	20	240	EA4	
Flow Meters/Sensor Replacements	DSS	16	25	50	75	75	75	75	100	100	100	691	EA4	
Catch Basin Tops/Frames/Covers	DSS	39	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	579	EA4	
Safety Equipment (<i>shoring</i>)	DSS	13	-	-	10	-	-	-	-	10	\$10	43	EA4	\$2,830
100 W Emergency Generator & Load Center	DSS	79	-	-	-	-	-	-	-	-	-	79	ES4	\$79
TV for Jet Machine	DSS	-	-	60	-	-	-	-	-	-	-	60	EG5	\$60
Skimmer boat dock piles	DSS	-	-	60	-	-	-	-	-	-	-	60	EG6	\$60
Total		\$242	\$228	\$433	\$333	\$283	\$283	\$283	\$308	\$318	\$318	\$3,029		
<u>Fleet Management</u>														
Vehicles	FLEET	\$789	\$1,960	\$1,800	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$12,249	EB6	\$12,249
Total		\$789	\$1,960	\$1,800	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$12,249		
<u>Facilities and Security</u>														
HVAC at Various Locations	FACILITIE	\$169	\$225	\$250	\$160	\$160	\$160	\$160	\$160	\$160	\$160	\$1,764	EF3	\$1,764
Photocopier Purchase	FACILITIE	34	100	300	90	90	90	90	90	90	90	1,064	EF5	\$1,064
Authority-wide fire suppress/detection	FACILITIE	2	125	125	100	100	100	100	100	100	100	952	EF7	\$952
Elevator -various locations	FACILITIE	-	-	300	50	50	50	50	50	50	50	650	EF8	\$650
Plumbing at Various Locations	FACILITIE	51	50	50	10	10	10	10	10	10	10	221	EX6	

FY 2011 - FY 2020 CAPITAL EQUIPMENT BUDGET
DISBURSEMENTS BASIS
(\$ in 000's)

Equipment Type	Owner-Dept.	FY 2011	FY 2012 Revised	FY 2013 Approved	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total FY '11 -'20	Project Sheet Ref.	Project Sheet Budget
Furniture and Fixtures	FACILITIE	895	200	200	150	150	150	150	150	150	150	2,345	EX6	
Facilities Improvements	FACILITIE	202	200	250	250	250	250	250	250	250	250	2,402	EX6	
Signage	FACILITIE	-	-	25	-	-	-	-	-	-	-	25	EX6	
Rollup Doors	FACILITIE	61	50	100	50	50	50	50	50	50	50	561	EX6	
Authority-wide Fencing	FACILITIE	25	25	50	25	25	25	25	25	25	25	275	EX6	\$5,829
Roofing	FACILITIE	-	-	50	-	-	-	-	-	-	-	50	EG7	\$50
Security- Miscellaneous	FACILITIE	-	-	-	15	15	15	15	15	15	15	105	EG8	\$105
Total		\$1,440	975	1,700	900	900	900	900	900	900	900	\$10,415		
Information Technology														
Desktop Replacements	I.T.	\$709	\$500	\$500	\$500	\$565	\$500	\$500	\$500	\$500	\$500	\$5,274	EA6	\$5,274
Cable Renewal	I.T.	60	160	160	160	175	175	175	175	175	175	1,590	EA7	\$1,590
Telephone System Renewal/Replacement	I.T.	286	300	100	100	300	100	100	300	100	100	1,786	EA8	\$1,786
Software Applications/Licenses	I.T.	233	150	150	150	150	150	150	150	150	150	1,583	EB1	\$1,583
Messaging (Email) Services	I.T.	-	50	50	50	200	50	50	200	50	50	750	EB2	\$750
Windows 2003 Migration/ Upgrade	I.T.	63	30	30	30	30	30	30	30	30	30	333	EB3	\$333
Radios	I.T.	46	900	575	316	30	30	30	30	30	30	2,017	EB4	\$2,017
Redundant Data Center	I.T.	210	200	200	200	210	450	200	60	60	60	1,850	EB8	\$1,850
Network System Renewal	I.T.	817	400	400	400	700	400	400	700	400	400	5,017	EC4	\$5,017
Audio Visual System - IT	I.T.	36	10	10	50	25	30	60	60	60	60	401	EC6	\$401
Interactive Voice Response	CUSTOMER	1	75	75	75	75	75	75	75	75	75	676	EC7	\$676
SQL Upgrade	I.T.	2	85	10	10	10	10	10	10	10	10	167	EG1	\$167
Enterprise File System Archiving	I.T.	123	143	100	150	10	10	150	10	10	10	716	EG2	\$716
Network Storage System Renewal	I.T.	-	200	300	525	375	125	125	125	125	125	2,025	EG3	\$2,025
ERP System	I.T.	-	500	1,500	700	-	-	-	-	-	-	2,700	EG4	\$2,700
AMR Enhancements	CUSTOMER	363	250	100	100	100	100	100	100	100	100	1,413	EM5	\$1,413
E Contract/Procurement Mgt System	PROCURE	-	200	200	200	50	50	50	-	-	-	750	EP3	\$750
Network Systems Security	I.T.	178	100	50	30	50	30	50	30	50	50	618	ET1	\$618
Intranet	I.T.	224	225	150	75	100	75	75	75	75	75	1,149	ET2	\$1,149
Handheld Inventory	I.T.	102	100	50	50	50	50	50	50	50	50	602	ET5	\$602
Enterprise Backup Solution	I.T.	9	100	100	300	250	100	100	100	100	100	1,259	ET7	\$1,259
Video Conferencing	I.T.	-	10	10	30	10	10	10	10	10	10	110	ET8	\$110
Field Services Mgmt System (Automated Dis	I.T.	319	275	275	225	125	50	50	50	50	50	1,469	ET9	\$1,469
Web-Site Development	I.T.	82	175	175	150	75	75	75	75	75	75	1,032	EX7	\$1,032
Financial Management System	FINANCE	493	190	150	200	-	-	-	-	-	-	1,033	EZ1	\$1,033
Customer Information & Billing System	CUSTOMER	-	350	100	87	-	-	-	-	-	-	537	EZ2	\$537
Payroll/HR System	FINANCE	21	30	30	30	30	30	30	30	30	30	291	EZ4	\$291
Document Management System	I.T.	534	575	600	550	275	100	300	100	100	100	3,234	EZ8	\$3,234
Asset Management System (Maximo +GIS)	I.T.	1,239	1,350	1,578	1,578	85	85	85	85	85	85	6,255	EZ9	
Fleet Management System-	FLEET	177	50	-	50	100	-	-	-	-	-	377	EZ9	\$6,632

FY 2011 - FY 2020 CAPITAL EQUIPMENT BUDGET
DISBURSEMENTS BASIS
(\$ in 000's)

Equipment Type	Owner-Dept.	FY 2011	FY 2012 Revised	FY 2013 Approved	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total FY '11 -'20	Project Sheet Ref.	Project Sheet Budget	
Oracle Upgrade	I.T.	-	70	70	70	100	70	-	100	-	-	480	EY5	\$480	
AutoCAD	DETS	22	-	-	-	-	-	-	-	-	-	22	EO1	\$22	
AutoCAD Lite	DETS	19	-	-	-	-	-	-	-	-	-	19	EO2	\$19	
CIP Planner	DETS	80	-	-	-	-	-	-	-	-	-	80	EO3	\$80	
IBM Watson Research	I.T.	-	250	250	-	-	-	-	-	-	-	500	EO5	\$500	
Optimization- Pilot: Daily Fleet Operations-	FLEET	-	150	-	100	-	-	-	-	-	-	250	EO6	\$250	
Water and Sewer SCADA	DETS	105	375	200	150	100	150	150	300	150	150	1,830	EO7	\$1,830	
Board e-book	Board Sec	3	-	-	-	-	-	-	-	-	-	3	EO8	\$3	
Permits Relocation	I.T.	70	60	-	-	-	-	-	-	-	-	130	EO9	\$130	
Energy Management	DETS	73	150	150	-	-	-	-	-	-	-	373	EQ1	\$373	
MAXIMO SCADA Integration	I.T.	41	150	150	-	-	-	-	-	-	-	341	EK1	\$341	
CS-Leak Detection	CUSTOMER	-	100	50	-	-	-	-	-	-	-	150	EK2	\$150	
Safety System-	FACILITIE	-	100	100	-	-	-	-	-	-	-	200	EK3	\$200	
Performance Dashboard	I.T.	-	150	275	375	100	-	-	-	-	-	900	EK4	\$900	
Civil 3D	DETS	-	-	-	-	-	100	100	25	25	25	275	EK5	\$275	
Valve Identification Program	DWS	-	150	150	200	50	-	-	-	-	-	550	EG9	\$550	
SCADA upgrade- Phase II	DWS	-	100	100	150	300	-	-	-	-	-	650	EH3	\$650	
Unified Communication	I.T.	-	-	75	150	300	-	-	-	-	-	525	EH4	\$525	
Budget Tool	FINANCE	-	88	-	-	-	-	-	-	-	-	88	EH5	\$88	
Time & Attendance Clocks	FINANCE	-	50	50	-	-	-	-	-	-	-	100	EH6	\$100	
Total		\$6,740	\$9,626	\$9,348	\$8,266	\$5,105	\$3,210	\$3,280	\$3,555	\$2,675	\$2,675	\$54,480			
			9,626	9,348	8,266	5,105	3,210	3,280	3,555	2,675	2675				
<u>Maintenance Services</u>															
Major Pump Rebuild/Replacement	MAINTENAN	\$129	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$2,829	EC1	\$2,829	
Large Electric Motors	MAINTENAN	215	200	200	200	200	200	200	200	200	200	2,015	EC2	\$2,015	
High Priority Rehab Program	MAINTENAN	-	500	-	-	-	-	-	-	-	-	500	EC3	\$500	
Centrifuge Rebuild / Replace	MAINTENAN	-	400	400	400	400	400	400	400	400	400	3,600	EM4	\$3,600	
Total		\$345	\$1,400	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$900	\$8,945			
<u>Sewer and Water Pumping</u>															
Major Pump Rebuild/Replacement	Sewer and W	\$0	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	900	EI1	\$900	
Large Electric Motors	Sewer and W	8	-	-	-	-	-	-	-	-	-	8	EI2	\$8	
Total		\$8	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$908			
Total Capital Equipment		\$10,585	\$15,349	\$15,341	\$12,384	\$9,173	\$7,278	\$7,348	\$7,648	\$6,778	\$6,778	\$98,662	10585		

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EA2 Water Service Replacement**
 Managing Department: Water Services **EPMC:**
Priority: Good Utility Practice
 Project Description:
 Annual maintenance of main and water service lines
Impact on Operations:
 This project will have no effect on the operating budget.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

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



FY 2012 Approved Budget	2,436,000
FY 2013 Approved Budget	2,508,000
Increase/(Decrease) to Approved Budget:	72,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	168	260	260	260	260	260	260	260	260	260	
Commitments Budget	168	260	260	260	260	260	260	260	260	260	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EA4 Sewer Service Utility Equipment**
 Managing Department: Sewer Services **EPMC:**
Priority: Good Utility Practice
 Project Description:
 Annual rehab and replacement of catch basins, and manholes.
Impact on Operations:
 This project will have no effect on the operating budget.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	2,814,000
FY 2013 Approved Budget	2,830,000
Increase/(Decrease) to Approved Budget:	16,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	163	228	313	333	283	283	283	308	318	318	
Commitments Budget	163	228	313	333	283	283	283	308	318	318	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EA6 Desktop Replacements**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Life Cycle Management)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annual replacement of computer equipment according to three-year plan, including physically securing these assets.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	5,674,000
FY 2013 Approved Budget	5,274,000
Increase/(Decrease) to Approved Budget:	-400,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	709	500	500	500	565	500	500	500	500	500	
Commitments Budget	709	500	500	500	565	500	500	500	500	500	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EA7 Cable Renewal**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Life Cycle Management)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annual program for upgrading copper and fiber infrastructure.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	1,683,000
FY 2013 Approved Budget	1,590,000
Increase/(Decrease) to Approved Budget:	-93,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	60	160	160	160	175	175	175	175	175	175	
Commitments Budget	60	160	160	160	175	175	175	175	175	175	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EA8 Telephone System Renewal**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Life Cycle Management)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Implementation of next generation telephone system and annual purchase of equipment and enhancements.

Impact on Operations:
 Ongoing maintenance renewal and system support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	2,039,000
FY 2013 Approved Budget	1,786,000
Increase/(Decrease) to Approved Budget:	-253,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	286	300	100	100	300	100	100	300	100	100	
Commitments Budget	286	300	100	100	300	100	100	300	100	100	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EB1 Software Applications/Licenses**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Software Compliance Management)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annual software license purchases to ensure compliance with applications needs, usage and standardization.

Impact on Operations:
 Ongoing annual maintenance renewal cost.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	1,415,000
FY 2013 Approved Budget	1,583,000
Increase/(Decrease) to Approved Budget:	168,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	233	150	150	150	150	150	150	150	150	150	
Commitments Budget	233	150	150	150	150	150	150	150	150	150	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EB2 Messaging Services**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice
 Project Description:
 Enhancements to current version of e-mail system and future upgrades.
Impact on Operations:
 Ongoing annual maintenance renewal and technical support.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	826,000
FY 2013 Approved Budget	750,000
Increase/(Decrease) to Approved Budget:	-76,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	50	50	50	200	50	50	200	50	50	
Commitments Budget	0	50	50	50	200	50	50	200	50	50	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EB3 Windows Migration**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice
 Project Description:
 Windows server migration/upgrade based on 4-year life cycle.
Impact on Operations:
 Ongoing annual maintenance renewal and technical support.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	510,000
FY 2013 Approved Budget	333,000
Increase/(Decrease) to Approved Budget:	-177,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	63	30	30	30	30	30	30	30	30	30	
Commitments Budget	63	30	30	30	30	30	30	30	30	30	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EB4 Radios**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Life Cycle Management)
 Project Description:
 Radio system upgrade to next generation digital radio system and annual system enhancements.
Impact on Operations:
 Ongoing annual maintenance renewal and City-Wide radio fee.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	2,161,000
FY 2013 Approved Budget	2,017,000
Increase/(Decrease) to Approved Budget:	-144,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	46	900	575	316	30	30	30	30	30	30	
Commitments Budget	46	900	575	316	30	30	30	30	30	30	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EB6 Vehicle Purchases**
 Managing Department: Fleet Services **EPMC:**
Priority: Good Utility Practice
 Project Description:
 Annually occurring DC Water-wide vehicle and equipment purchases.
Impact on Operations:
 Newer vehicles should result in lower operating costs.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	11,863,000
FY 2013 Approved Budget	12,249,000
Increase/(Decrease) to Approved Budget:	386,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	789	1,960	1,800	1,100	1,100	1,100	1,100	1,100	1,100	1,100	
Commitments Budget	789	1,960	1,800	1,100	1,100	1,100	1,100	1,100	1,100	1,100	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EB8 Redundant Data Center**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Disater Recovery/Business Continuity)
 Project Description:
 Implementation of plan to ensure data redundancy for DC Water's mission critical systems.
Impact on Operations:
 Ongoing annual maintenance renewal and system support.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	1,973,000
FY 2013 Approved Budget	1,850,000
Increase/(Decrease) to Approved Budget:	-123,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	210	200	200	200	210	450	200	60	60	60	
Commitments Budget	210	200	200	200	210	450	200	60	60	60	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EC1 Pump Repair and Replacement**
 Managing Department: Maintenance Services **EPMC:**
Priority: Good Utility Practice
 Project Description:
 Annual program for the repair and replacement of major pumps at Blue Plains.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

In addition to addressing problems which arise during the year, FY10 will include rebuilds of Spent Wash Water Pumps, High Pressure Reclaimed Effluent Pumps, and Filter Influent Pumps. FY10 will include replacement of the Nitrification Return Sludge Pumps.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	3,195,000
FY 2013 Approved Budget	2,829,000
Increase/(Decrease) to Approved Budget:	-366,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	129	300	300	300	300	300	300	300	300	300	
Commitments Budget	129	300	300	300	300	300	300	300	300	300	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EC2 Large Electric Motors**
 Managing Department: Maintenance Services **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

Large motors periodically need to be completely rebuilt or replaced at DC Water facilities to maintain process systems and meet permit compliance. Repairs planned for FY 2010 include: Eddy Current Drivess, Filter Influent Pump Motors, Grit Pump Motors, Westfalia Centrifuge Motor, Spent Wash Water Pump Motor and Nitrification return Sludge Pump Motors.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	2,100,000
FY 2013 Approved Budget	2,015,000
Increase/(Decrease) to Approved Budget:	-85,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	215	200	200	200	200	200	200	200	200	200	
Commitments Budget	215	200	200	200	200	200	200	200	200	200	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EC3 High Priority Rehab Program**
 Managing Department: Maintenance Services **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

Major rebuild/replacement of critical process equipment at Blue Plains is needed in order to maintain permit compliance and provide water service to customers. Equipment includes, but is not limited to; Backflow Preventers, Rotamat Screens (Degrit), Dual Purpose Sedimentation Basin Gates, Gravity Thickener Collector, VFD's for Secondary Pumping and replace hanger bearing in solids processing conveyors.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	0
FY 2013 Approved Budget	500,000
Increase/(Decrease) to Approved Budget:	500,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		500									
Commitments Budget		500									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EC4 Network System Renewal**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Life Cycle Management)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Ongoing replacement of servers as they reach the end of useful life and go out of maintenance.

Impact on Operations:
 Ongoing annual maintenance renewal and system support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	6,530,000
FY 2013 Approved Budget	5,017,000
Increase/(Decrease) to Approved Budget:	-1,513,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	817	400	400	400	700	400	400	700	400	400	
Commitments Budget	817	400	400	400	700	400	400	700	400	400	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EC6 Audio Video System**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Life Cycle Mangement)
 Project Description:
 Audio video system upgrades, primarily for Boardroom, to accommodate technology changes.
Impact on Operations:
 Ongoing annual maintenance renewal and system support.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	444,000
FY 2013 Approved Budget	401,000
Increase/(Decrease) to Approved Budget:	-43,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	36	10	10	50	25	30	60	60	60	60	
Commitments Budget	36	10	10	50	25	30	60	60	60	60	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EC7 Interactive Voice Response**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Life Cycle Mangement)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Upgrade of current electronic voice response system that allows outbound calling, call recording, and computer and telephone integration.

Impact on Operations:
 Ongoing annual maintenance renewal and system support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	704,000
FY 2013 Approved Budget	676,000
Increase/(Decrease) to Approved Budget:	-28,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1	75	75	75	75	75	75	75	75	75	
Commitments Budget	1	75	75	75	75	75	75	75	75	75	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **ED8 Wastewater Maximo**
 Managing Department: Wastewater Treatment **EPMC:**
Priority: Good Utility Practice
 Project Description:
 This project will be used as a start up for Wastewater Treatment Maximo
Impact on Operations:
 This project will have no effect on the operating budget.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC -
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	486,000
FY 2013 Approved Budget	503,000
Increase/(Decrease) to Approved Budget:	17,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	503										0
Commitments Budget	503										0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **ED9 Lab Equipment for New Laboratory**
 Managing Department: Wastewater Treatment **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This project will be used to purchased lab equipment for DCWater's new laboratory.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	0
FY 2013 Approved Budget	560,000
Increase/(Decrease) to Approved Budget:	560,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		285	275								0
Commitments Budget		285	275								0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EF3 HVAC at Various Locations**
 Managing Department: Facilities and Security **EPMC:**
Priority: Good Utility Practice
 Project Description:
 Annual program to repair and replace HVAC equipment within DC Water.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Facilities maintains the heating, ventilation and air conditioning of both manned and un-manned structures within the purview of the DC Water system, much of which is necessary to ensure optimal operating conditions for the equipment maintained therein.

This program covers HVAC equipment which requires repairs or replacements outside of the normal renovation cycles of the structures in which they are located.

Impact on Operations:

This project will have no impact on the operating budget

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	1,725,000
FY 2013 Approved Budget	1,764,000
Increase/(Decrease) to Approved Budget:	39,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	169	225	250	160	160	160	160	160	160	160	
Commitments Budget	169	225	250	160	160	160	160	160	160	160	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EF5 Photocopier Purchase**
 Managing Department: Facilities and Security **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This project provides annual funding for the assessment and replacements of copier equipment.

Impact on Operations:
 This project will have no impact on operating budget

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	2,475,000
FY 2013 Approved Budget	1,064,000
Increase/(Decrease) to Approved Budget:	-1,411,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	34	100	300	90	90	90	90	90	90	90	
Commitments Budget	34	100	300	90	90	90	90	90	90	90	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EF7 Authority-wide fire suppression/detection**
 Managing Department: Facilities and Security **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This project will provide near-term, critical improvements to fire suppression systems in certain DC Water facilities.

Impact on Operations:
 This project will have no effect on the operating budget

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	250,000
FY 2013 Approved Budget	952,000
Increase/(Decrease) to Approved Budget:	702,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2	125	125	100	100	100	100	100	100	100	
Commitments Budget	2	125	125	100	100	100	100	100	100	100	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EF8 Elevator Repairs**
 Managing Department: Facilities and Security **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

One-time project to repair all elevators within the DC Water system that are in need of repair, but which are not within the purview of identified periodic renovation projects.

Impact on Operations:

This project will have no impact on operating budget

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	600,000
FY 2013 Approved Budget	650,000
Increase/(Decrease) to Approved Budget:	50,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget			300	50	50	50	50	50	50	50	
Commitments Budget			300	50	50	50	50	50	50	50	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EG1 SQL Update**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Life Cycle Management)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 SQL server upgrade from SQL server 2000 to SQL server 2005.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	445,000
FY 2013 Approved Budget	167,000
Increase/(Decrease) to Approved Budget:	-278,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	2	85	10	10	10	10	10	10	10	10	
Commitments Budget	2	85	10	10	10	10	10	10	10	10	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EG2 Enterprise File System Archiving**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice
 Project Description:
 Enterprise archival system for shared files.
Impact on Operations:
 Ongoing annual maintenance and system technical support.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

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



FY 2012 Approved Budget	804,000
FY 2013 Approved Budget	716,000
Increase/(Decrease) to Approved Budget:	-88,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	123	143	100	150	10	10	150	10	10	10	
Commitments Budget	123	143	100	150	10	10	150	10	10	10	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EG3 Network Storage System Renewal**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Life Cycle Management)
 Project Description:
 Enterprise centralized storage data system
Impact on Operations:
 Ongoing annual maintenance and system support.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

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



FY 2012 Approved Budget	2,283,000
FY 2013 Approved Budget	2,025,000
Increase/(Decrease) to Approved Budget:	-258,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	0	200	300	525	375	125	125	125	125	125	
Commitments Budget	0	200	300	525	375	125	125	125	125	125	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EG4 ERP System**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Review of financial management system for potential upgrades/replacements and customer information system and convergence

Impact on Operations:
 Ongoing annual maintenance and system support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	3,163,000
FY 2013 Approved Budget	2,700,000
Increase/(Decrease) to Approved Budget:	-463,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		500	1,500	700							
Commitments Budget		500	1,500	700							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EG5 TV for Jet Machine**
 Managing Department: Sewer Services **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This projects will be used to purchase TV's for Department of Sewer Service Jet Machines.

Impact on Operations:
 This project will decrease need for seperated crew, thus increasing operations productivity.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	<input type="text" value="0"/>
FY 2013 Approved Budget	<input type="text" value="60,000"/>
Increase/(Decrease) to Approved Budget:	<input type="text" value="60,000"/>

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget			60								0
Commitments Budget			60								0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EG6 Skimmer Boat Dock Piles**
 Managing Department: Sewer Services **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This projects will be used to purchase dock piles for DC Water skimmer boats.

Impact on Operations:
 This project will have no effect on the operating budget

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	<input type="text" value="0"/>
FY 2013 Approved Budget	<input type="text" value="60,000"/>
Increase/(Decrease) to Approved Budget:	<input type="text" value="60,000"/>

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget			60								0
Commitments Budget			60								0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EG7 Roofing**
 Managing Department: Facilities and Security **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This project will be used to replace all gutter seams on East Side, Bryant Street Main Pumping Station

Impact on Operations:
 Failure to implement will result in interior building damage, with the possibility of catastrophic electrical failures caused by unexpected leaks.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	<input type="text" value="0"/>
FY 2013 Approved Budget	<input type="text" value="50,000"/>
Increase/(Decrease) to Approved Budget:	<input type="text" value="50,000"/>

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget			50								0
Commitments Budget			50								0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EG8 Security- Miscellaneous**
 Managing Department: Facilities and Security **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This project is for Security Enhancements throughout DC Water. Specifically, surveillance and access control equipment needed on major facilities due to chronic property loss.

Impact on Operations:
 Failure to implement will allow for continuous property loss at several known problem locations potentially resulting in significant dollar value loss and possibly impacting DC Water operations by delaying repairs due to insufficient supplies caused by theft/property loss.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	<input type="text" value="0"/>
FY 2013 Approved Budget	<input type="text" value="105,000"/>
Increase/(Decrease) to Approved Budget:	<input type="text" value="105,000"/>

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget				15	15	15	15	15	15	15	0
Commitments Budget				15	15	15	15	15	15	15	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EG9 Valve Identification Program**
 Managing Department: Water Services **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

DC Water has approximately 44,000 valves in the system and the inventory is moving into the MAXIMO work order system so they can be better tracked. This program will identify how the valves will be marked in the field (RFID, Bar Code...) and develop a process to get the updated information into the MAXIMO work order system. This program will also develop an interface to display all pertinent valve information on the GIS system. The valve identification program will result in better valve coordination and shorter outages for our customers.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	0
FY 2013 Approved Budget	550,000
Increase/(Decrease) to Approved Budget:	550,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		150	150	200	50						0
Commitments Budget		150	150	200	50						0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EH3 SCADA Upgrade - Phase II**
 Managing Department: Water Services **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

SCADA embarks on one of its most critical undertakings; to implement remote citywide pressure and flow monitoring system which will give the business a tool for avoiding water main breaks as well as minimize outfalls from storm water. Another important initiative during FY2012 is that we will upgrade the SCADA system platform and utilize full virtualization. This will improve the support and management of the system as well as preparing for future additions and upgrades. SCADA will also implement a conditional based approach to asset maintenance where we are able to detect health degradation in our equipment.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	<input type="text" value="0"/>
FY 2013 Approved Budget	<input type="text" value="650,000"/>
Increase/(Decrease) to Approved Budget:	<input type="text" value="650,000"/>

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		100	100	150	300						0
Commitments Budget		100	100	150	300						0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EH4 Unified Communication**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

Unified communication is to enhance employees' interaction by leveraging all communication means. DC Water plans to use Instant Communication Suite (ICS) to provide unified messaging, audio and data conferencing, personal routing, instant messaging, sophisticated Softphone capabilities, universal directory access, and presence information. Unified Communications initiative will allow unification to enable a mobile workforce. This will set the foundation for remote user access of voice mails and set the starting point to facilitate a remote customer billing workforce. This will also integrate with the enterprise messaging system.

Impact on Operations:

This Project will have no effect on the operating budget, but will improve operations, communications and efficiency.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	0
FY 2013 Approved Budget	525,000
Increase/(Decrease) to Approved Budget:	525,000

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget			75	150	300						0
Commitments Budget			75	150	300						0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EH5 Budget Tool**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This project will be used to enhance the budgeting process and reporting analysis. This tool will be utilized as a supplement to the existing financial software system.

Impact on Operations:
 This project will have no effect on the operating budget, but will increase financial analytical capabilities.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	<input type="text" value="0"/>
FY 2013 Approved Budget	<input type="text" value="88,000"/>
Increase/(Decrease) to Approved Budget:	<input type="text" value="88,000"/>

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		88									0
Commitments Budget		88									0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EH6 Time & Attendance Clocks**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice
 Project Description:
 Scheduled Time Clock Replacement Program
Impact on Operations:
 This project will have no effect on the operating budget

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	<input type="text" value="0"/>
FY 2013 Approved Budget	<input type="text" value="100,000"/>
Increase/(Decrease) to Approved Budget:	<input type="text" value="100,000"/>

NEW

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		50	50								0
Commitments Budget		50	50								0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EI1 Major Pump Rebuild/Replacement**
 Managing Department: Sewer and Water Pumping **EPMC:**
Priority: Good Utility Practice
 Project Description:
 Annual program for the repair and replacement of Major Pumps at Blue Plains.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

In addition to addressing problems which arise during the year, FY10 will include rebuilds of Spent Wash Water Pumps, High Pressure Reclaimed Effluent Pumps, and Filter Influent Pumps. FY10 will include replacement of the Nitrification Return Sludge Pumps.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

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



FY 2012 Approved Budget	900,000
FY 2013 Approved Budget	900,000
Increase/(Decrease) to Approved Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		100	100	100	100	100	100	100	100	100	
Commitments Budget		100	100	100	100	100	100	100	100	100	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EI2 Large Electric Motors**
 Managing Department: Sewer and Water Pumping **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

Large motors periodically need to be completely rebuilt or replaced at DC Water facilities to maintain process systems and meet permit compliance. Repairs planned for FY 2010 include: Eddy Current Drivess, Filter Influent Pump Motors, Grit Pump Motors, Westfalia Centrifuge Motor, Spent Wash Water Pump Motor and Nitrification return Sludge Pump Motors.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC -
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	25,000
FY 2013 Approved Budget	8,000
Increase/(Decrease) to Approved Budget:	-17,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	8										
Commitments Budget	8										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EK1 MAXIMO SCADA Integration**
 Managing Department: Information Technology **EPMC:**

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Priority:

Project Description:

This project will expand SCADA non-connected assets such as rain gauge, potomac interceptor to Maximo and move away from paper based inspections to e-inspections

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	400,000
FY 2013 Approved Budget	341,000
Increase/(Decrease) to Approved Budget:	-59,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	41	150	150								0
Commitments Budget	41	150	150								0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EK2 CS-Leak Detection**
 Managing Department: Information Technology **EPMC:**

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Priority:

Project Description:

This is a pilot project and the objective of this project is to assess the feasibility of a leak detection system tied in some way into a network for correlation analysis and reporting

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

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



FY 2012 Approved Budget	150,000
FY 2013 Approved Budget	150,000
Increase/(Decrease) to Approved Budget:	0

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		100	50								0
Commitments Budget		100	50								0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EK3 Safety System**
 Managing Department: Information Technology **EPMC:**

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Priority:

Project Description:

This project will make system accessible to all DC Water employees and contractors to easily report workplace safety incidents, observations, and track issue resolution status.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	100,000
FY 2013 Approved Budget	200,000
Increase/(Decrease) to Approved Budget:	100,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		100	100								0
Commitments Budget		100	100								0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EK4 Performance Dashboard**
 Managing Department: Information Technology **EPMC:**

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Priority:

Project Description:

In an effort to support transparency as well as overall organizational efficiency, this project is to support a dashboard view for executive staff as well as DC Water personnel into the successful resolution of key process indicators over time. Targeting first Authority wide measures, eventually this solution will allow individual departments to expose their activities and data points for success of meeting defined goals.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	50,000
FY 2013 Approved Budget	900,000
Increase/(Decrease) to Approved Budget:	850,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		150	275	375	100						0
Commitments Budget		150	275	375	100						0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EK5 Civil 3D**
 Managing Department: Information Technology **EPMC:**

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Priority:

Project Description:

This is a software used to create and edit engineering drawings used in design and construction of DC Water projects. Users include both design and construction team members. The project is intended to primarily support the Engineering Department needs and will be managed by the department.

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	503,000
FY 2013 Approved Budget	275,000
Increase/(Decrease) to Approved Budget:	-228,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget						100	100	25	25	25	0
Commitments Budget						100	100	25	25	25	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EM4 Centrifuge Repair and Replacement**
 Managing Department: Maintenance Services **EPMC:**

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Priority:

Project Description:
 Repair and replacement of Centrifuges at Blue Plains.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	3,200,000
FY 2013 Approved Budget	3,600,000
Increase/(Decrease) to Approved Budget:	400,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		400	400	400	400	400	400	400	400	400	
Commitments Budget		400	400	400	400	400	400	400	400	400	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Water Service Area
 Program Title: Metering
 Activity Group/Project Title: **EM5 AMR System Enhancements**
 Managing Department: Customer Service **EPMC:**
Priority: IT Best Practice (Life Cycle Management)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Project designed to update and maintain the 64 rooftop mounted Data Collection Units (DCU) that receive meter readings.

Impact on Operations:
 Ongoing annual maintenance and system support.

Funding by User (percent):

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



FY 2012 Approved Budget	1,984,000
FY 2013 Approved Budget	1,413,000
Increase/(Decrease) to Approved Budget:	-571,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	363	250	100	100	100	100	100	100	100	100	
Commitments Budget	363	250	100	100	100	100	100	100	100	100	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EO1 AutoCAD**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This is software used to create and edit engineering drawings used in design and construction of DC Water projects.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	35,000
FY 2013 Approved Budget	22
Increase/(Decrease) to Approved Budget:	-34,978

CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	22										0
Commitments Budget	22										0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EO2 AutoCAD**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This is software used to create and edit engineering drawings in the field as record documents for construction.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	41,000
FY 2013 Approved Budget	19
Increase/(Decrease) to Approved Budget:	-40,981

CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	19										0
Commitments Budget	19										0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EO3 CIP Planner**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This software is used by DETS to manage the DIP's elements, time, cost and contract management.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	214,000
FY 2013 Approved Budget	80
Increase/(Decrease) to Approved Budget:	-213,920

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	80										0
Commitments Budget	80										0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EO5 IBM Watson Research**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project is a collaboration between DC WATER and IBM with the goal of developing and applying data analytics technology to DC WATER Maximo data (work orders, asser defect reports, meter readings, etc) and other data (SCADA, etc).

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	519,000
FY 2013 Approved Budget	500,000
Increase/(Decrease) to Approved Budget:	-19,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		250	250								0
Commitments Budget		250	250								0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EO6 Optimization-Pilot: Daily Fleet**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This proposed project consist of acquiring, configuring and implementing technology that would build on top of existing DC Water Enterprise Systems, extending the Geographical Information System (GIS) currently in place at DC Water to optimize routes and schedules of the Authority's maintenance, customer service and inspection crews.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

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



FY 2012 Approved Budget	188,000
FY 2013 Approved Budget	250,000
Increase/(Decrease) to Approved Budget:	62,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		150		100							0
Commitments Budget		150		100							0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EO7 Water and Sewer SCADA**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

In 2007 DC Water started SCADA project to support the business needs and improve operational efficiencies. A detailed plan for the system upkeep in line with technology advancements & replacing end of life equipment will be outlined. Equipment upgrade include communications and other ancillary devices.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

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



FY 2012 Approved Budget	2,013,000
FY 2013 Approved Budget	1,830,000
Increase/(Decrease) to Approved Budget:	-183,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	105	375	200	150	100	150	150	300	150	150	0
Commitments Budget	105	375	200	150	100	150	150	300	150	150	0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EO8 Board e-book**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice
 Project Description:
 This project will convert the current print media to eBook format.
Impact on Operations:
 This project will have no effect on the operating budget.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	80,000
FY 2013 Approved Budget	3
Increase/(Decrease) to Approved Budget:	-79,997

CLOSED

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	3										0
Commitments Budget	3										0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EO9 Permits Relocation**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This project will be utilized to facilitate the PERMITS department co-location with DC Regulatory Administration.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

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



FY 2012 Approved Budget	118,000
FY 2013 Approved Budget	130,000
Increase/(Decrease) to Approved Budget:	12,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	70	60									0
Commitments Budget	70	60									0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EP3 E Contract**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

Procurement is in need of streamlined computer-based Procurement sourcing and Contract maintenance functionality. Solution options are being investigated to identify a recommendation.

Impact on Operations:

This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	563,000
FY 2013 Approved Budget	750,000
Increase/(Decrease) to Approved Budget:	187,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		200	200	200	50	50	50				
Commitments Budget		200	200	200	50	50	50				

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EQ1 Energy Management**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This Project will be to develop a plan to implement cost-effective energy savings measures for its facilities and identify carbon footprint reduction opportunities.

Impact on Operations:
 This project will result in operating efficiencies.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	550,000
FY 2013 Approved Budget	373,000
Increase/(Decrease) to Approved Budget:	-177,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	73	150	150								0
Commitments Budget	73	150	150								0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **ES4 100W Emergency Generator & Load Center**
 Managing Department: **EPMC:**

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Priority:

Project Description:

This project will simulate conditions that the generator will face, therefore ensuring their availability during storm events

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

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



FY 2012 Approved Budget	120,000
FY 2013 Approved Budget	79,000
Increase/(Decrease) to Approved Budget:	-41,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	79										
Commitments Budget	79										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **ET1 Network Systems Security**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice (Information Security)
 Project Description:
 Additional measures to secure the network entry points for all DC Water systems.
Impact on Operations:
 Ongoing technical support will be required to support I.T. security.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	699,000
FY 2013 Approved Budget	618,000
Increase/(Decrease) to Approved Budget:	-81,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	178	100	50	30	50	30	50	30	50	50	
Commitments Budget	178	100	50	30	50	30	50	30	50	50	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **ET2 Intranet**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice
 Project Description:
 User needs analysis and enhanced inter-departmental document sharing.
Impact on Operations:
 Ongoing annual system support.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	1,166,000
FY 2013 Approved Budget	1,149,000
Increase/(Decrease) to Approved Budget:	-17,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	224	225	150	75	100	75	75	75	75	75	
Commitments Budget	224	225	150	75	100	75	75	75	75	75	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **ET5 Handheld Inventory**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	10/1/2005
Construction:	10/1/2006
Project Completion:	9/30/2010

Project Description:
 Provides real-time information and technical control, reducing paperwork and automating basic inventory processes.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	653,000
FY 2013 Approved Budget	602,000
Increase/(Decrease) to Approved Budget:	-51,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	102	100	50	50	50	50	50	50	50	50	
Commitments Budget	102	100	50	50	50	50	50	50	50	50	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **ET7 Enterprise Backup Solution**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Periodic assessment and upgrade of entity-wide backup solutions which support the computer systems within DC Water.

Impact on Operations:
 Ongoing annual maintenance and system support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	2,154,000
FY 2013 Approved Budget	1,259,000
Increase/(Decrease) to Approved Budget:	-895,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	9	100	100	300	250	100	100	100	100	100	
Commitments Budget	9	100	100	300	250	100	100	100	100	100	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **ET8 Video Conferencing**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice
 Project Description:
 Creation and maintenance of Video conferencing functionality at DC Water.
Impact on Operations:
 Ongoing annual maintenance support.

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	581,000
FY 2013 Approved Budget	110,000
Increase/(Decrease) to Approved Budget:	-471,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		10	10	30	10	10	10	10	10	10	
Commitments Budget		10	10	30	10	10	10	10	10	10	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **ET9 Field Services Management System**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Efficiency motivated effort to install computers in DC Water service vehicles, to streamline reporting, outstanding issue, and ticket closing efforts by field staff. Also, provide ability to assign priority jobs to crews in the field via the onboard computers, instead of relying on radio functionality.

Impact on Operations:
 Ongoing annual maintenance and system support.

Funding by User (percent):

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



FY 2012 Approved Budget	1,959,000
FY 2013 Approved Budget	1,469,000
Increase/(Decrease) to Approved Budget:	-490,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	319	275	275	225	125	50	50	50	50	50	
Commitments Budget	319	275	275	225	125	50	50	50	50	50	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EW1 System Valve Replacement**
 Managing Department: Water Services **EPMC:**
Priority: Good Utility Practice
 Project Description:
 Annual program for system valve replacement.
Impact on Operations:
 This project will have no effect on the operating budget

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Funding by User (percent):

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



FY 2012 Approved Budget	2,133,000
FY 2013 Approved Budget	2,162,000
Increase/(Decrease) to Approved Budget:	29,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	137	225	225	225	225	225	225	225	225	225	
Commitments Budget	137	225	225	225	225	225	225	225	225	225	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EX6 Facilities Improvements**
 Managing Department: Facilities and Security **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annual program for maintenance of DC Water-wide facilities including HVAC replacement, elevator rehabs, plumbing, fencing and signage.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	6,017,000
FY 2013 Approved Budget	5,829,000
Increase/(Decrease) to Approved Budget:	-188,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,234	525	675	485	485	485	485	485	485	485	
Commitments Budget	1,234	525	675	485	485	485	485	485	485	485	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EX7 Web Site Development**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice
 Project Description:
 Ongoing Website & Enhancements
Impact on Operations:
 Ongoing annual system support.

Phase	Start Date
Design:	
Construction:	4/1/2001
Project Completion:	09/30/2003

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	1,285,000
FY 2013 Approved Budget	1,032,000
Increase/(Decrease) to Approved Budget:	-253,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	82	175	175	150	75	75	75	75	75	75	
Commitments Budget	82	175	175	150	75	75	75	75	75	75	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EX8 Fire Hydrant Replacement**
 Managing Department: Water Services **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annually occurring fire hydrant, valve, and service line rehab and replacement. Also, Lab Equipment and Flow Monitors and Water Service Replacement.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

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



FY 2012 Approved Budget	2,916,000
FY 2013 Approved Budget	2,897,000
Increase/(Decrease) to Approved Budget:	-19,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	214	290	300	300	300	300	300	300	300	300	
Commitments Budget	214	290	300	300	300	300	300	300	300	300	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EY5 Oracle Upgrade**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Upgrade existing Oracle database environment to latest Oracle database environment; required for compatibility with existing and future Enterprise Application at DC Water.

Impact on Operations:
 Ongoing annual license maintenance cost.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	675,000
FY 2013 Approved Budget	480,000
Increase/(Decrease) to Approved Budget:	-195,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		70	70	70	100	70		100			0
Commitments Budget		70	70	70	100	70		100			0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EZ1 Financial Management System**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice

Phase	Start Date
Design:	
Construction:	10/1/2002
Project Completion:	9/30/2010

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 assesment 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.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	951,000
FY 2013 Approved Budget	1,033,000
Increase/(Decrease) to Approved Budget:	82,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	493	190	150	200							
Commitments Budget	493	190	150	200							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EZ2 Customer Information & Billing System**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	10/1/2000
Project Completion:	9/30/2012

Project Description:

This budget provides for ongoing system enhancements to provide new services to customers including automatic notification of high usage patterns, summary billing for customers with multiple accounts and new functionality to track lead service line replacement.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

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



FY 2012 Approved Budget	515,000
FY 2013 Approved Budget	537,000
Increase/(Decrease) to Approved Budget:	22,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget		350	100	87							
Commitments Budget		350	100	87							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EZ4 Payroll/HR System**
 Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Swipe card entry enhancement to payroll system and employee remote access to individual payroll information.

Impact on Operations:

This project will have no effect on the operating budget, however, due to ongoing system enhancements, the capital budget will maintain budgeted dollars.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	384,000
FY 2013 Approved Budget	291,000
Increase/(Decrease) to Approved Budget:	-93,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	21	30	30	30	30	30	30	30	30	30	
Commitments Budget	21	30	30	30	30	30	30	30	30	30	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EZ8 Document Management System**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	10/1/2002
Construction:	
Project Completion:	9/30/2011

Project Description:

This project will provide a centralized electronic source for all critical DC Water documents, allowing for better sharing among departments and transfer of information to future DC Water employees.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	3,668,000
FY 2013 Approved Budget	3,234,000
Increase/(Decrease) to Approved Budget:	-434,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	534	575	600	550	275	100	300	100	100	100	
Commitments Budget	534	575	600	550	275	100	300	100	100	100	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
 FY 2011 - 2020 Capital Improvement Program

Service Area Title: Capital Equipment
 Program Title: Capital Equipment
 Activity Group/Project Title: **EZ9 Water/Sewer Asset Management System/Fleet**
 Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	10/1/2002
Construction:	10/1/2004
Project Completion:	9/30/2011

Project Description:

A system to integrate existing customer information, maintenance management, process computer control system (PCCS)/supervisory control, data acquisition system (SCADA), and other systems, to assist DC Water in better managing our water and sewer infrastructure and allow better tracking of specific asset performance.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

DC - Joint Use 100% direct Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2012 Approved Budget	7,371,000
FY 2013 Approved Budget	6,632,000
Increase/(Decrease) to Approved Budget:	-739,000

	<u>Pre FY 2012</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Post FY 2020</u>
Disbursements Budget	1,416	1,400	1,578	1,628	185	85	85	85	85	85	
Commitments Budget	1,416	1,400	1,578	1,628	185	85	85	85	85	85	

(projected disbursements do not include contingencies)

(dollars in thousands)