



Approved FY 2008-2017


Capital Improvement Program

INVESTING IN PERFORMANCE

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Chairman of the Board

Jerry N. Johnson
General Manager

Olu Adebo
Chief Financial Officer


**District of Columbia
Water and Sewer
Authority**

Adopted January 8, 2009



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ACKNOWLEDGEMENTS

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

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Capital Improvement Program

SECTION I

General Manager's Message

DC WASA's valve replacement projects are essential to the performance and maintenance of the water distribution system.



District of Columbia
Water and Sewer
Authority

I





DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
5000 OVERLOOK AVENUE, S.W., WASHINGTON, D.C. 20032

October 23, 2008

Robin B. Martin, Chairman
and Members of the Board of Directors
District of Columbia Water and Sewer Authority
5000 Overlook Avenue, SW
Washington, DC 20032

Dear Chairman Martin and Members of the Board of Directors:

I am pleased to submit for your review and consideration DC WASA's proposed capital budgets. This budget proposal includes: \$3.2 billion for our FY 2008 – FY 2017 Capital improvement Program (disbursement basis), an increase of \$109 million; \$6.4 billion for life time budget; and \$773.3 million in Capital Authority request. This document provides an enhanced framework, which is useful for understanding, developing, monitoring and measuring the progress of our capital projects. It also serves as a valuable tool for the financial markets and other stakeholders in evaluating our performance.

Our \$3.2 billion ten-Year CIP budget (disbursements) increased by \$109 million over last year's plan, primarily as a result of budget increases for several projects, including the revised biosolids management program; and accelerated schedules for some projects, notably the Anacostia Tunnel project. These increases are offset by reduced disbursements for some programs—notably the reduced spending for the Lead Service Line Replacement Program. The revised biosolids management program would include the use of both digesters and cambi processes to produce Class A biosolids, reduce energy use and reduce DC WASA's carbon footprint through the generation of "green" energy and improved land application. The additional capital investment required for this project is approximately \$100 million, with anticipated operating cost reductions beginning in FY 2014.

I am happy to announce that in April 2008, Standard and Poor's upgraded our bond rating to "AA" from "AA-". DC WASA's ratings from the other two rating agencies remained at the "AA-" level, the second highest rating category available to state and local issuers. Our strong credit rating helps reduce the interest rates we pay on our debt borrowings. These ratings have become increasingly

important, in light of the current turmoil in the financial market, and improve our ability to continue to issue debt to finance our CIP. In our proposed Ten-Year CIP, we anticipate issuing approximately \$1.9 billion in new debt over this ten year period to finance our \$3.2 billion program.

As we try to balance competing needs for scarce resources, we have embarked on an intensive effort to develop clear performance measures that management and the Board will use to assess progress in achieving the Strategic Plan objectives as they relate to these projects. This initiative will not only establish new measures for the capital program, it will also create stronger operating performance targets. These concrete objectives, new measures and targets will also help us to improve how we manage our capital program and assist us in determining how we allocate resources to the various program areas to sustain and improve services and ensure greatest efficiency. Ultimately, these measures will be used by DC WASA's management to assess and improve work processes and identify efficiencies within the staffing, business processes, procurement delivery options and other areas that may provide for enhanced capital project delivery.

As I present these budgets for your consideration, please note that my staff and I have given great consideration to a number of important needs for the Authority. We balanced our proposals with both an awareness of the current economic conditions and a sensitivity concerning impact of our capital program upon our retail and wholesale customers. As such, this budget proposal holds the line on costs for several major projects and has only been adjusted to include high priority projects that can not be deferred.

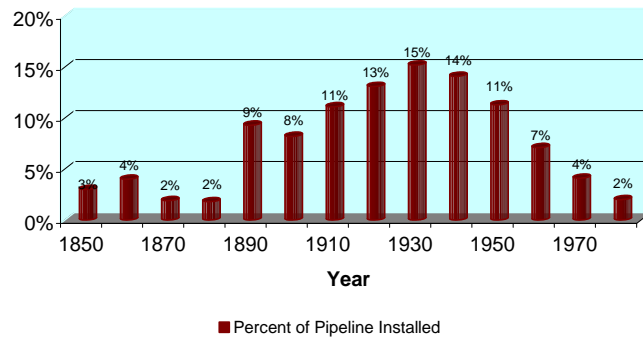
SIGNIFICANT ISSUES AND INITIATIVES

For many years, it has been recognized by local and federal officials that safe drinking water and reliable sewer and wastewater treatment throughout the Washington metropolitan region is of critical importance. Since DC WASA's creation in 1996, we have invested over \$1.5 billion to improve and upgrade our aging infrastructure to meet the critical water and sanitary needs throughout our communities. To date, most of these improvements have been at the Blue Plains treatment plant and above ground water and sewer facilities, with additional focus on the thousands of miles of underground infrastructure. In 2004, the American Water Works Association (AWWA) conducted research on the condition of the nations' water and sewer infrastructure. This study estimates that a total of \$250 billion will be needed nationwide for the next 30 years to address water infrastructure alone. The AWWA national research mirrors what is happening locally, as Washington, DC has many miles of pipes that were installed many years ago. Many of these pipes are now nearing the end of their useful lives and may need to be replaced over the next few decades, to ensure reliability and to comply with greater regulatory standards for safe drinking water. These very large infrastructure improvement needs creates an economic challenge for agencies, such as DC WASA and municipalities all over the country, and will need to be addressed soon.

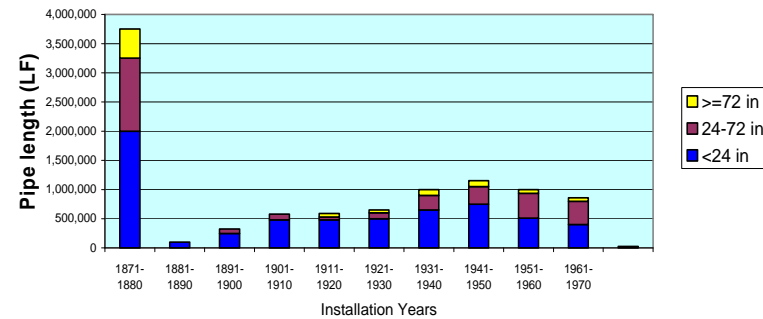
In FY 2008, we received consultant's draft reports on our water and sewer system assessments. Findings from both assessments noted the average age of our water and sewer pipes to be seventy five and one hundred years respectively, with varying stages of deterioration. These assessments also made recommendations which included a number of immediate corrective actions, such as: upgrades of several water pumping facilities and the addition within this FY 2008-2017 CIP of several high priority sewer projects. The recommended ten-year investment from the consultant's report for both water and sewer systems approaches \$600 million, with

a lifetime cost estimate of \$1.4 billion. With the exception of a few high priority projects, these costs are currently not programmed and remain unfunded. Ongoing review of these assessments indicates parallels with the AWWA findings in age and condition of pipes and includes consultant recommended maintenance and replacement schedules. Evaluation of the recommendations will include suggested replacement cycles, availability of local contracting resources, integrated with estimation of costs. Assessment updates recommend annual spending of more than \$60 million. As noted, our ten-year CIP proposal incorporates the most critical of the recommendations from the studies. These projects include upgrades of some water pumping facilities, cathodic protection of priority mains to prolong their estimated life, relocating older sewers from underneath existing buildings and addressing sewers that appear to be most in need of immediate rehabilitation. The total distribution of new work within the 10 year CIP from the two assessments is approximately \$62 million; less than two percent of the total proposed 10 year CIP.

Water Pipeline Age Distribution



Sewer Pipe Installation by Year



It should be noted that the sewer system assessment focused primarily on the top three priority sewer facilities; structures under buildings, outfalls and major sewers. Representative inspections of local sewers and force mains were conducted for the remaining sewer facilities. In all, approximately 5 percent of the total sewer system inventory was inspected (with 70% of the highest priority assets inspected). DC WASA will continue to inspect and assess the system sewers, which is likely to result in identification of additional infrastructure needs. During FY 2009, DC WASA staff will analyze the assessments and recommendations, with a goal of developing a plan that will start to address the problem. This plan would be based on priorities and would try to balance the impact of ongoing mandated programs, such as the \$2.2 billion Long Term Control Plan and \$950 million Blue Plains Total Nitrogen program, with replacement/rehabilitation cycle revisions, available funding sources, and the financial impact on our retail and wholesale customers.

OTHER CONSIDERATIONS

There are a number of important issues and strategic goals that we continue to review and study as we maintain and build the infrastructure necessary to support a world-class organization.

Capital Improvement Program Inflationary Increases

Recently, several factors have arisen that impact the costs of our capital improvement program. These factors include extreme inflation in prices for certain commodities used in DC WASA capital projects such as steel, copper, aluminum, and cement. Review of historical costs over the last few years from sources such as Engineering News-Record (ENR), a weekly magazine that provides news, analysis, cost data and opinion for the construction industry, demonstrate the inflationary costs pressures felt in our recent bid experience. Over the last few years, there has been a less-competitive contractor environment in which contractors are more fully employed and bid on fewer, more select projects. An additional contributing factor is the high inflation in energy prices and petroleum based products such as asphalt. We will continue to monitor these inflationary pressures and the bidding environment, and assess their impact on our capital improvement program budget, and planning. However, recent bid results continue to demonstrate the continuing rise in contracting costs.

Current world economic factors are contracting the financing market which impacts construction contractors and their ability and cost of doing business. As we work through refining the alignment and schedule of the two federally mandated projects – the Blue Plains Nitrogen Removal and the Combined Sewer Overflow Long Term Control Plan – there is a high risk that inflationary pressures may require future adjustments to these endeavors.

Over 50 percent of the planned expenditures in our Ten-year capital program involve legally mandated projects including environmental agreement efforts. In order to continue these mandatory projects that are well underway and identify the appropriate investment level for our aging infrastructure, new revenue opportunities will need to be addressed. For instance, our partners in Virginia and Maryland have provided state revenues to support nutrient removal from local waterways. In the State of Maryland, the Bay Restoration Fund was established through a tax on each water, sewer and septic bill and raises approximately \$66 million a year. The General Assembly of Commonwealth of Virginia provides grants through the State Water Quality Improvement Fund to support environmental projects for nutrient control costs and has dedicated \$50 million a year to the fund. The General Assembly of the State of Pennsylvania recently passed a bond referendum that will be on the November 2008 ballot to provide \$400 million in bonds to support various water, sewer and wastewater investments throughout the state. To date, although, DC WASA continues to get support from several environmental organizations in the effort to identify federal funding for the Blue Plains Nitrogen Removal project, no such funding is currently available. Unless other sources of funding are identified, the District's shares of these enormous costs will have to be paid by District rate payers. We continue to support and urge the District of Columbia to provide similar local mechanisms for their residents and businesses to lighten the impact to the DC retail ratepayers and we welcome the assistance and support of environmental groups and other stakeholders in tackling this issue.

I will continue to work with the Board of Directors to look for opportunities for additional funding sources, provide updates on inflationary trends and ensure that DC WASA meets all of its regulatory commitments to the U.S. Environmental Protection Agency, the environment and the public.

Anacostia Waterfront Development & Nationals Ballpark

The Office of the Deputy Mayor for Planning and Economic Development has expressed a desire to redevelop the area immediately surrounding the new baseball park to take advantage of the momentum and growth potential for the area. Our Department of Sewer Services, Fleet Management and related facilities are directly across from the new stadium. We have continued to work with the relevant parties on the potential relocation of our facilities. In prior budget years, we included \$42.5 million to cover the estimated costs of relocation and development of a new site. We have rolled this budget into the FY 2009 and expect full reimbursement for all related costs by the District, with no impact on DC WASA ratepayers.

The Authority has taken appropriate steps to protect these critical assets that are essential to the provision of public services. These steps include identifying alternative sites of operations, as well as securing and ensuring DC WASA access to physical assets which cannot be relocated.

North of Massachusetts Avenue (NoMA) Development

One rapidly developing area of the District is NoMA, the land approximately lying west of Union station to New York and New Jersey Avenues and from Massachusetts to Florida Avenues. Many construction projects in this area are underway with many more planned over the next several years. The area is characterized by very old water and sewer infrastructure that needs to be replaced and/or upgraded to reliably support the planned development.

In the past few months, we have worked with the Office of the Deputy Mayor for Planning and Economic Development (DMPED) to identify the specific infrastructure needs. Construction of the water and sewer rehabilitation/improvement is estimated to cost approximately \$35 million. Current discussions are that a special tax assessment district will be established to pay for the infrastructure improvements, which will be completed by DC WASA.

NoMA represents the second area of the city where DC WASA has worked with DMPED to develop an alternative financing structure for needed area-wide water and sewer improvements. The first area was the National's ballpark and M street corridor. DC WASA and DMPED are focused on developing a model framework that can be used for future redevelopment areas whereby alternative financing is obtained for water and sewer improvements without placing the burden on the retail ratepayers.

IMA Negotiations

In 1985, the District signed the Blue Plains Intermunicipal Agreement (the IMA) with the "Users" of the Blue Plains Wastewater

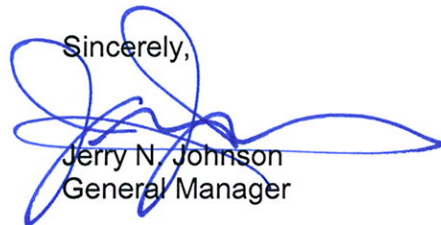
counties and the Washington Suburban Sanitary Commission (WSSC) in Maryland. The IMA outlines terms relating to facility location, sizing, capacity allocations and funding, long-term management of the wastewater treatment and disposal process. The Agreement also establishes a uniform payment basis for facilities and future improvements. IMA signatories share the cost of operations, maintenance and the capital improvements at the Blue Plains and certain other "joint use" facilities. The three surrounding counties comprise approximately 60 percent of the Blue Plains capacity. The signatories have begun re-negotiation of this agreement in order to update the terms to be more consistent with today's mode of operations.

ACKNOWLEDGEMENTS

The following sections of this document provide further detail on all DC WASA's capital programs. I would like to acknowledge the DC WASA Board of Directors for their steadfast commitment to building a world-class organization, setting clear priorities for the Authority and willingness to explore new methods to ensure that we meet our customers' service delivery expectations. I extend a special thanks to the outgoing Chairman, Robin Martin, for his leadership and commitment to the DC WASA customers and community. I also acknowledge the hard work and professional commitment of the DC WASA staff for the long hours and dedication to the production of this document.

I welcome your thorough review of this document and look forward to working with the Board of Directors over the next few weeks as we address the resources identified within this budget to meet the critical infrastructure needs of the Agency.

Sincerely,



Jerry N. Johnson
General Manager

**Approved
FY 2008-2017**

Capital Improvement Program

SECTION II

Capital Improvement Projects Overview

*A new \$33 million, fully automated
Anacostia Pumping Station is under
construction to replace the existing
water pumping station built in 1913.*

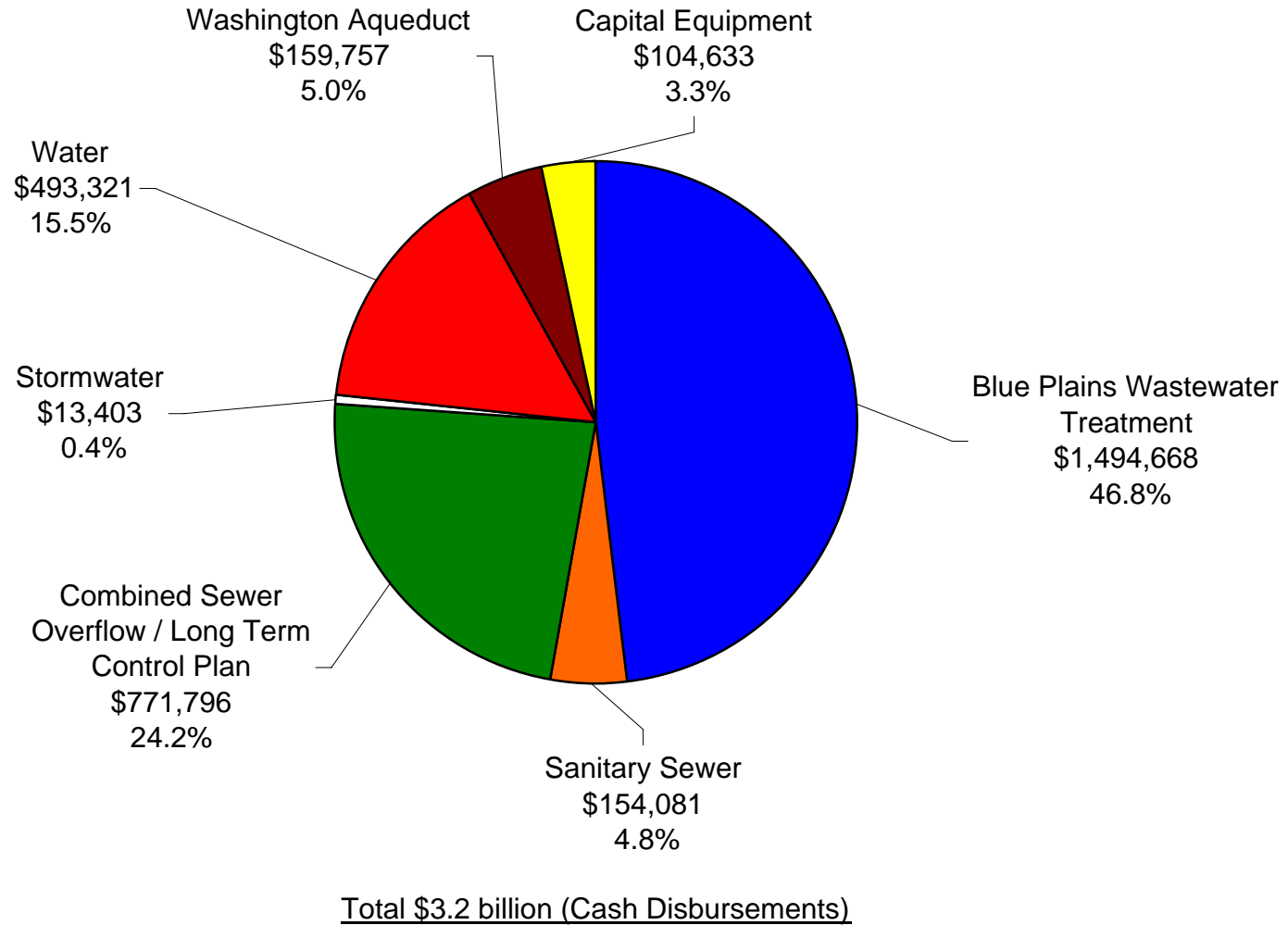


District of Columbia
Water and Sewer
Authority

II



FY 2008 - FY 2017 Capital Improvement Program (\$ in 000's)



FY 2008 – 2017 CAPITAL IMPROVEMENT PROGRAM OVERVIEW

DC WASA's ten-year capital improvement program (CIP) totals \$3.2 billion (cash disbursements basis), approximately \$109 million more than last year's plan. As mentioned in Section I and discussed in more detail later throughout this document. This increase is a result of budget increases for several projects, including the revised biosolids management program; and accelerated schedules for some projects, notably the Anacostia Tunnel project. These increases are offset by reduced disbursements for some programs—notably the reduced spending for the Lead Program. The revised biosolids management program would include the use of both digesters and cambi processes to produce Class A biosolids, reduce energy use and reduce DC WASA's carbon footprint through the generation of "green" energy and improved land application. The additional capital investment required for this project is approximately \$100 million, with anticipated operating cost reductions beginning in FY 2014.

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

WASTEWATER TREATMENT

The lifetime budget for the Wastewater Treatment Service Area is \$2.5 billion dollars, reflecting a \$108 million net increase over last year's budget. The cost of implementing the enhanced digestion/cambi facilities project accounts for most of the budget increase. 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. In addition to meeting permit requirements, DC WASA strives to reduce biosolids odors, both onsite and in the final product leaving Blue Plains.

Several of the planned upgrade projects at Blue Plains are now complete (or substantially complete), and have been placed in service. Five liquid treatment processes (preliminary, primary, secondary, nitrification-denitrification, and filtration) comprise the liquid treatment processing Program at Blue Plains; the first phases of upgrades to the liquid treatment processes are now in service. In tandem with placing these facilities in service, the process control system has been implemented to enable monitoring and control of the upgraded equipment and systems, thus allowing DC WASA to achieve greater process control and treatment efficiency and yield operating cost control efficiency. The current emphasis of the construction program for the liquid treatment processes is the upgrade of the nitrification-denitrification process, adding the permanent blower system for air-water wash of the effluent filters, and an upgrade to Raw Wastewater Pump Station 1. In addition, planning, piloting and conceptual design for the Blue Plains Total Nitrogen Program (BTN) is scheduled to begin in FY 2008.

In FY 2006, the DC WASA Board of Directors decided to defer the Egg-Shaped Digester project due to exceptionally high bid prices, and decided to monitor the market while conducting ongoing research and reviewing revised strategies for long-term biosolids management. An update of the Biosolids Management program was presented to the DC WASA Environmental Quality and Operations Committee in June 2008. Prior to the final recommendation a wide range of biosolids processing options were evaluated. The recommended option includes construction of four Cambi thermal hydrolysis trains, four digesters, new dewatering equipment and a combined heat and power plant. This alternative requires an increase in the capital budget for the digestion project but has the potential to significantly manage biosolids operating costs when it is placed in operation. The preferred option produces power from digester gas to meet over one third of DC WASA's electric demand at Blue Plains and the digestion process destroys nearly one half of the biosolids which will result in lower reuse costs. There is a possibility that DC WASA can market a substantial portion of the biosolids product, further reducing land application reuse costs. The Life-time budget for the Digesters project has been increased by approximately \$100 million to provide for advancement of this project, if the ongoing feasibility study supports the initial cost-benefits presented to the Board Committee in June 2008.

Other long-term upgrade projects now under construction include:

- Nitrification-Denitrification Facilities Upgrade - to upgrade the process and/or replace equipments that are at the end of their useful lives.
- Raw Wastewater Pump Station 1 - Upgrade to the Raw Wastewater Pump Station to replace equipments that are at the end of their useful lives, 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.

COMBINED SEWER

The lifetime budget for the Combined Sewer Service (CSO) Area is \$2.3 billion, which includes the twenty-year CSO Long Term Control Plan (LTCP). The benefits of this plan are significant. When fully implemented, combined sewer overflows will be reduced by a projected 96 percent (98 percent on the Anacostia River), resulting in improved water quality. The \$50 million increase to this service area's lifetime budget is attributable to revised estimates on a few near term projects as well as \$7 million in high priority projects within the combined sewer area that were recommended by the recent sewer assessment.

The Excess Flow Treatment Capacity effort (Project BL – the Blue Plains Tunnel) has been removed from the Combined Sewer Service area and consolidated into the BTN Program within the Wastewater service area. This change reflects the enhanced vision of the Blue Plains Tunnel as serving the dual purpose of containing outfalls and participating in compliance with the new Total Nitrogen/Wet Weather Plan (TN/WW).

Approximately \$170 million of construction projects have already been completed or are in progress. This includes \$140 million that were included in the settlement of a lawsuit against DC WASA regarding implementation of the federal CSO Nine Minimum Controls program, plus \$30 million added this year as detailed below in the CSO section. These projects, which were previously budgeted and planned by DC WASA prior to the lawsuit, are projected to reduce combined sewer overflows by 40 percent. Of these projects, the rehabilitation of twelve inflatable dams and other system improvements and the recent completion of the Eastside Pump Station is expected to result in up to a 30 percent reduction in overflows. We are also underway with engineering to separate additional combined sewer areas in Anacostia and Rock Creek. Additionally, we are completing studies to add Low Impact Development (LID) at several DC WASA facilities. We have undertaken the rehabilitation of our major pumping stations to increase their capacity. Three of these stations are in the construction phase, while the fourth (Poplar Point Pumping Station) is still in the design phase, with construction to be completed by the end of calendar year 2009

We are continuing our Anacostia River CSO projects facility planning efforts. This planning will include advancing the conceptual designs developed in the LTCP to the preliminary design stage. The outcome of the facility planning may identify the need for additional modifications to the selected CSO controls and schedules included in the decree. An initial draft of the Facility Plan was scheduled to be submitted in December 2007 and the Final Facility Plan was submitted to EPA in September 2008.

DC WASA'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, retail development and affordable housing among other projects.

STORMWATER

The lifetime budget for the Stormwater Service Area is \$44 million, a slight increase from last year primarily due to the addition of the FY 2017 budget year within the planning period. As in last year's budget, we have not included funding for stormwater pumping rehabilitation projects. Over the past year, 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 WASA 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 continues. DDOE maintains the central responsibility for managing stormwater activities under the MS4 permit and has worked to coordinate all agencies, activities and funding mechanism necessary to ensure full compliance.

While DC WASA has a long term control plan to address these issues within the combined sewer areas, DC WASA's staff continues to participate in the MS4 task force and to monitor the impact of other MS4 NPDES requirements on DC WASA and its ratepayers.

Significant progress has been made throughout the District. Since 2001, DC WASA 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 WASA continues to collect those fees on behalf of the District and transfers them to DDOE quarterly. In FY 2009, we will work closely with DDOE to share our impervious surface area database currently under development. Along with DC WASA, DDOE believes that this new rate structure can help to equitably allocate costs to the cost causers and influence future behavior through education.

SANITARY SEWER

The majority of sewers in the DC WASA system were constructed more than one hundred years ago and are still in operation. As stated in section I, aging infrastructure is a national issue and can impact condition and performance of the system and DC WASA conducted a study to assess the condition of the sewers to determine what, if any, improvements should be made to maintain and renew the system. Lifetime budgets in the Sanitary Sewer Service Area total \$288 million, a net increase of \$15 million over last year's CIP. The increases are primarily due to several high priority projects that resulted from the recommendations of the sewer assessment recently completed; yet the update suggests that an average of \$37 million may need to be invested annually. During FY 2009, DC WASA will finalize its Sewer Facility Plan and put together a plan to start addressing the recommendations from the recently concluded Sewer Assessment Program. Establishment of a reinvestment program can extend the performance of the sewer system and DC WASA will continue the evaluation of the sewer system as an ongoing program to review condition, verify adequate capacity, and prioritize and develop new capital projects, as appropriate. The projects selected to be included in the CIP were based on inspections performed on approximately 80 miles of the District's most critical sewer segments.

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

WATER

The lifetime budget for the Water Service Area (including Meter Replacement / AMR installation) is \$1 billion, a decrease of \$59.9 million from last year's CIP. This is primarily driven by the reduction of approximately \$165 million from the lead service line replacement program, netted against various additions including the proposed phase II of the DC fire hydrant replacement and upgrade program (\$30 million), and an additional \$50 million included to support several high priority investments to the aging infrastructure of our water system.

Major water projects include lead service replacements, rehabilitation/construction of pumping stations such as Anacostia and Bryant Street, elimination of dead ends, water main replacement, rehabilitation and extension, fire hydrant replacement 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.

The water distribution system also includes appurtenances necessary for proper system operation, inspection, and repair. DC WASA'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.

Water System Facilities Planning

DC WASA began work on its first Water System Facilities Plan in 1998 and completed it in September 2000. A facilities plan evaluates the existing system and provides an assessment of improvements needed. The 2000 Facilities Plan identified fourteen projects and a small diameter water main rehabilitation program to be included in the CIP at a ten-year cost of just under \$ 300 million. At this time 9 of 14 projects included in the Facilities Plan have been completed or are under construction. A recent draft update of the facilities plan identified current system needs and related potential CIP projects. Specifically, the report indicated a need for a more aggressive small diameter water main rehabilitation program, given that approximately half of the small diameter water mains in service are more than 75 years old and over 15% are more than 100 years old. Upgrades to several pumping stations were also identified as having high priority needs in order to ensure adequate pressure and reliable service for customers. Overall, the assessment identified at least \$30 million a year for the renewal of the Water service area. This capital budget includes funding for approximately \$50 million in high priority needs. DC WASA management and staff are reviewing the findings of the draft update of the facilities plan and will work to integrate the results with other findings in the water service area in a comprehensive and long-term view point of system maintenance and rehabilitation.

WASHINGTON AQUEDUCT

The Washington Aqueduct, managed by the U.S. Army Corps of Engineers, provides wholesale water treatment services to DC WASA and its partners in Northern Virginia, Arlington County and Falls Church. DC WASA purchases approximately 75 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan treatment plants, and thus is responsible for 75 percent of the Aqueduct's operating and capital costs. Under federal legislation and a memorandum of understanding enacted in 1997, DC WASA 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 WASA's share of Washington Aqueduct projects totals \$196.5 million or \$26.1 million more than last year's 10-year plan of \$170.4 million. This change is due primarily to an increased projection in out year projects.

CAPITAL EQUIPMENT

DC WASA's Capital Equipment budget totals approximately \$104.6 million for FY 2008 – FY 2017 plan, an increase of approximately \$4 million compared to the last ten-year plan. Over fifty percent of spending in the capital equipment area continues to be on major information technology projects, including the document management system (budget of \$2.9 million) and the asset management system (budget of \$6.4 million). DC WASA continues its commitment to scheduled replacement of its vehicle fleet with a budget of \$13.4 million, representing almost thirteen percent of the ten-year plan. Finally, maintenance of large equipment totals \$13.1 million, or twelve percent of the ten-year plan and other equipment including hydrant and valve equipment necessary for the maintenance of the District's public fire system totals \$14.6 million, or fifteen percent of the ten-year plan.

The revised FY 2009 budget at \$19.3 million is \$3.9 million higher than the FY 2009 approved budget. This variance is primarily attributable to budget increases in: the Fleet Management department to comply with the policy of replacing aging vehicles; Information Technology (IT) managed programs – addition of new programs – Enterprise Resource Planning (ERP) systems (to ensure that DC WASA's reporting system remain current and efficient) and Network Storage System Renewal (to ensure safe archival and retrieval of DC WASA's increasing data): these increased disbursements are partly offset by the reduced disbursements in some projects as they near completion, and closure of others.

CIP DEVELOPMENT AND APPROVAL PROCESS

DC WASA'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 WASA departments with responsibility for managing the capital projects as well as finance and budget staff and executive management. The CIP is integrated into DC WASA's ten-year financial plan; because of its size, it is the primary driver of DC WASA'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 WASA's Board of Directors' Environmental Quality & Operations and Finance & Budget 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 January.

After adoption by the Board of Directors, DC WASA 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 WASA'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 WASA'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 WASA's enabling legislation, Congressional appropriation authority is required before any capital design or construction contract can be entered into. The FY 2010 request totals \$773.3 million, and reflects the following:

- Remaining authority from prior years' appropriations;
- Projected commitments in FY 2009 and FY 2010;
- Planned FY 2011 and FY 2012 commitments, to ensure adequate authority exists, in the event that any projects are accelerated.

Due to the timing of the Congressional appropriations process, authority requests must be made well in advance of commitment execution. Including projected FY 2011 and FY 2012 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. However due to the exceptional increases in construction costs experienced in the recent past, some near term projects have been inflated in the range of five to eight percent per annum.

Contingency: DC WASA 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 WASA'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 WASA'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 three programs: Liquid Processing, Plantwide projects and Solids Processing.

Activity Group/Project Title – The activity group is the level at which DC WASA 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 WASA's CIP are managed by an internal DC WASA operating department. DC WASA's CIP also includes some projects which are managed by outside organizations. It is advantageous for DC WASA 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 WASA'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 WASA, but the U.S. Army Corps of Engineers actually manages those projects.

Priority – DC WASA 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 WASA's NPDES permit requirements.

2B. Board Policy, DC WASA'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 WASA'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 WASA 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 WASA 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 WASA'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 WASA'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.

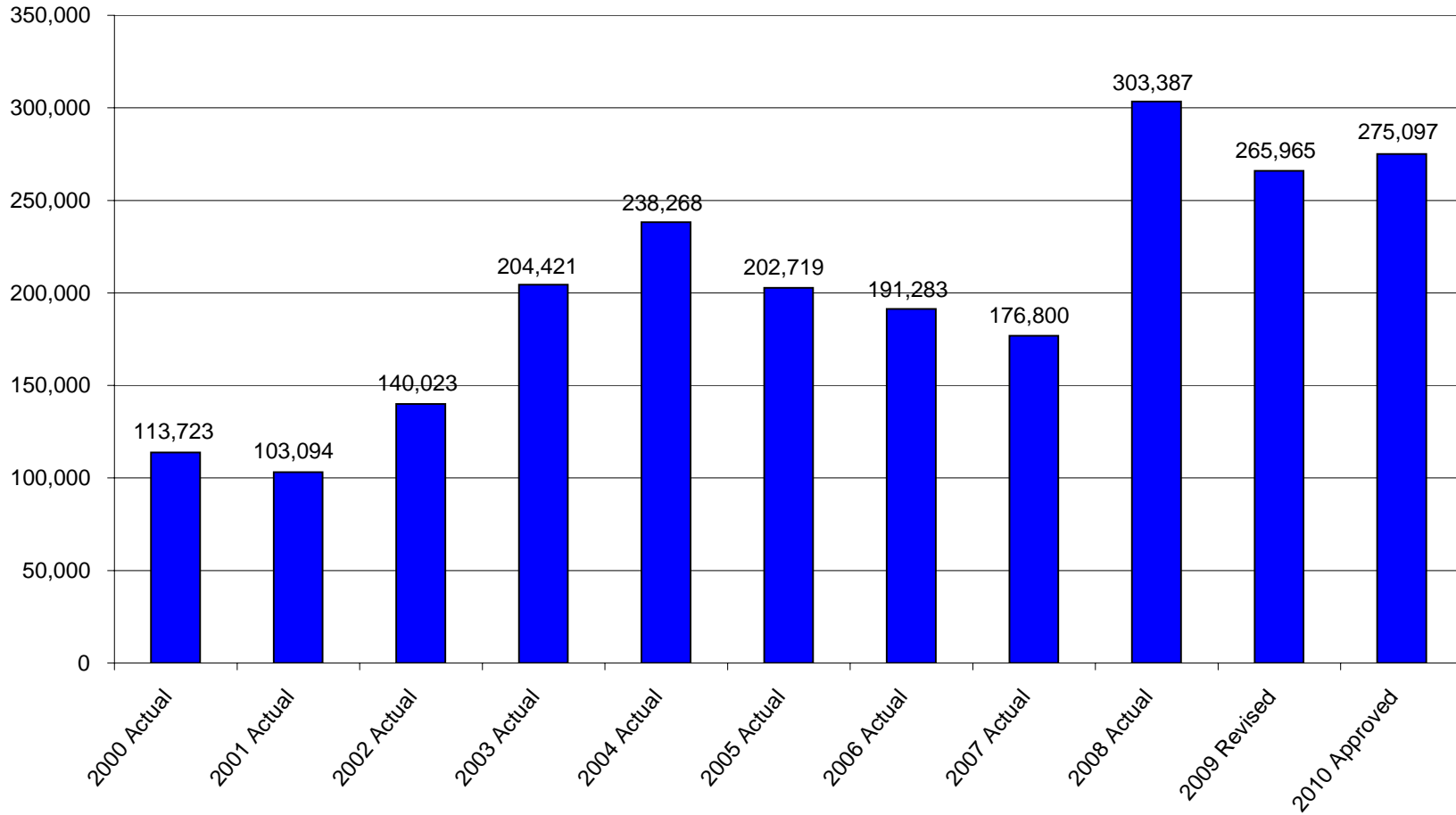
Disbursements / Commitments Budgets – projected disbursements and commitments for various projects are shown by fiscal year in which they are anticipated. Commitments budgets are based on total project budgets, which reflect the fully loaded, anticipated costs of a project, including project contingencies.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

CAPITALIZATION POLICY

DC WASA'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 2000 - FY 2010
(\$ in 000's)**



FY 2008 - FY 2017 PROJECTED CAPITAL IMPROVEMENT PLAN - DISBURSEMENTS BASIS (\$ in 000's)

	FY 2008 Actuals	FY 2009 Revised	FY 2010 Approved	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Total FY '08 -'17
Wastewater Treatment											
Liquid Processing Projects	\$66,443	\$55,288	\$39,518	\$26,390	\$12,146	\$2,088	\$1,321	\$4,260	\$8,029	\$7,694	\$223,178
Plantwide Projects	15,069	15,323	16,137	7,747	11,946	9,198	1,063	989	571	609	78,652
Solids Processing Projects	3,763	17,185	26,083	139,585	99,247	78,761	21,994	2,455	170	1,134	390,377
BTN - Total Nitrogen Program	-	8,037	24,176	61,591	211,641	197,328	87,401	71,618	82,611	58,057	802,461
Sub-total	85,275	95,833	105,914	235,313	334,981	287,375	111,779	79,323	91,381	67,494	1,494,668
Sanitary Sewer											
Sanitary Collection Sewers	65	276	655	526	-	-	-	-	-	4	1,526
Sanitary On-Going Projects	5,549	7,677	7,849	6,227	3,429	3,778	4,065	4,186	4,343	4,400	51,504
Sanitary Pumping Facilities	5,220	5,271	994	118	-	-	-	-	-	33	11,637
Sanitary Sewer Projects Program Management	2,104	1,705	2,631	3,579	2,753	1,560	1,455	1,454	1,465	1,446	20,151
Sanitary Interceptor/Trunk Force Sewers	2,835	3,938	9,845	28,468	13,483	4,805	1,655	1,897	1,576	763	69,264
Sub-total	15,773	18,867	21,974	38,918	19,664	10,143	7,174	7,536	7,384	6,647	154,081
Combined Sewer Overflow / Long Term Control Plan											
CSO Program Management	369	1,100	1,583	1,071	825	820	400	-	-	18	6,188
Combined Sewer Projects	24,933	24,330	49,606	27,793	18,181	3,954	97	43	1,267	3,790	153,994
Long-Term Control Plan-											-
Blue Plains											
Anacostia Tunnel	13,322	16,444	21,353	45,838	75,681	66,006	95,523	99,137	88,232	75,450	596,986
Potomac Tunnel	-	-	-	-	-	-	-	3,006	5,635	4,702	13,343
Rock Creek Tunnel	-	-	-	-	-	-	-	-	453	832	1,285
Sub-total	38,624	41,874	72,543	74,703	94,688	70,779	96,020	102,186	95,587	84,792	771,796
Stormwater											
Stormwater Local Drainage	-	610	734	-	-	-	-	-	-	4	1,348
Stormwater On-Going Program	213	372	263	270	279	289	302	313	365	326	2,994
Stormwater Pumping Facilities	-	-	-	-	-	-	-	-	-	-	-
DDOT Stormwater Program	-	41	10	86	89	93	96	99	89	89	694
Stormwater Research and Program Management	2,217	253	490	449	257	191	-	-	-	9	3,867
Stormwater Trunk/Force Sewers	101	687	663	233	1,050	902	848	5	-	13	4,501
Sub-total	2,531	1,964	2,160	1,038	1,676	1,476	1,246	417	454	442	13,403
Water											
Water Distribution Systems	13,764	28,054	27,037	27,051	25,985	16,338	14,816	12,742	11,009	16,134	192,929
Water On-Going Projects	8,125	9,198	4,345	2,037	2,538	3,286	3,609	3,681	3,961	4,968	45,747
Water Pumping Facilities	20,397	8,154	5,193	5,974	4,219	1,708	203	-	-	135	45,983
DDOT Water Projects	3,369	2,570	761	1,847	1,873	1,213	1,269	1,304	1,313	1,335	16,854
Water Storage Facilities	-	29	214	1,433	3,030	8,021	3,135	143	438	2,226	18,667
Water Projects Program Management	1,858	1,405	1,319	1,400	1,965	1,985	1,995	1,968	1,268	45	15,208
Water Lead Program	21,150	14,331	10,987	11,638	12,887	13,546	14,164	14,635	15,551	15,882	144,771
Meter Replacement /AMR Installation	1,476	1,239	1,279	1,286	1,294	1,301	1,309	1,317	1,326	1,334	13,162
Sub-total	70,139	64,979	51,136	52,665	53,790	47,399	40,500	35,790	34,865	42,059	493,321
Washington Aqueduct	76,415	23,164	5,584	7,016	7,500	8,055	8,023	8,000	8,000	8,000	159,757
Capital Equipment	14,630	19,283	15,788	12,288	8,747	6,615	6,910	6,948	6,733	6,692	104,633
Total FY 2010 WASA Capital Improvement Program	\$303,387	\$265,965	\$275,097	\$421,941	\$521,046	\$431,842	\$271,652	\$240,199	\$244,404	\$216,126	\$3,191,659

FY 2008 - FY 2017 Capital Improvement Plan

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

	FY 2009 Approved	FY 2009 Revised / FY 2010 Approved	Variance
<u>Wastewater Treatment</u>			
Liquid Processing Projects	569,911	573,746	3,835
Plantwide Projects	264,458	259,325	(5,133)
Solids Processing Projects	555,763	664,612	108,849
Blue Plains Total Nitrogen Removal (BTN)	950,000	950,000	0
Sub-total	2,340,132	2,447,683	107,551
<u>Sanitary Sewer</u>			
Sanitary Collection Sewers	10,966	10,966	0
Sanitary On-Going Projects	86,146	89,295	3,149
Sanitary Pumping Facilities	22,999	22,999	0
Sanitary Sewer Projects Program Management	37,045	39,045	2,000
Sanitary Interceptor/Trunk Force Sewers	115,666	125,666	10,000
Sub-total	272,822	287,971	15,149
<u>Combined Sewer Overflow</u>			
CSO Program Management	17,579	24,199	6,620
Combined Sewer Projects	339,664	383,097	43,433
Long-Term Control Plan- Total			0
Blue Plains	296	0	(296)
Anacostia Tunnel	1,372,545	1,372,545	-
Potomac Tunnel	418,700	418,700	-
Rock Creek Tunnel	70,342	70,342	-
Sub-total	2,219,126	2,268,883	49,757
<u>Stormwater</u>			
Stormwater Extensions/Local Drainage	2,333	4,026	1,693
Stormwater On-Going Program	7,762	8,093	331
Stormwater Pumping Facilities	1,173	1,173	0
DDOT Stormwater Program	4,426	4,631	205
Stormwater Projects Program Management	9,630	7,630	(2,000)
Stormwater Trunk/Force Sewers	18,405	18,405	0
Sub-total	43,729	43,958	229

FY 2008 - FY 2017 Capital Improvement Plan

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

	FY 2009 Approved	FY 2009 Revised / FY 2010 Approved	Variance
<u>Water</u>			
Water Distribution Systems	317,342	369,634	52,292
Water Lead Program	438,486	297,000	(141,486)
Water On-Going Projects	72,455	74,158	1,703
Water Pumping Facilities	96,199	116,143	19,944
DDOT Water Projects	35,530	37,111	1,581
Water Storage Facilities	32,359	33,999	1,640
Water Projects Program Management	25,944	23,342	(2,602)
Meter Replacement /AMR Installation	52,910	59,638	6,728
Sub-total	1,071,225	1,011,025	(60,200)
Washington Aqueduct	170,391	196,474	26,083
Capital Equipment	100,840	104,633	3,793
Total WASA CIP Lifetime (see notes)	6,218,265	6,360,627	142,362

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 2008 will be dropped from the CIP next year.

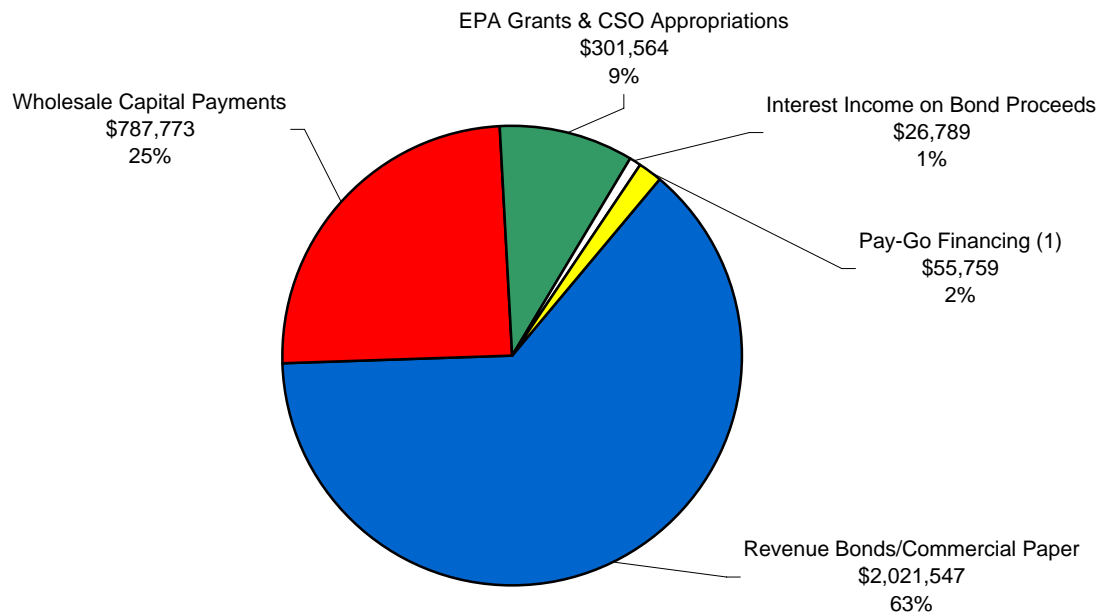
2 These budgets do not include inhouse labor costs, which historically have averaged \$7 to \$8 million annually and are applicable to, primarily, the time charged to capital projects by employees in the Departments of Engineering, Sewer Services, and Water Services.

**Fiscal Year 2010 Capital Authority Request
(\$000's)**

<u>Service Areas</u>	<u>Fiscal Year 2010 Capital Authority Request</u>
Blue Plains Wastewater Treatment	511,855
Sanitary Sewer System ¹	0
Combined Sewer Overflow	230,118
Stormwater ¹	0
Water System ¹	0
Washington Aqueduct (WASA share)	13,667
Capital Equipment	<u>17,687</u>
Total	<u>773,327</u>

¹ The authority request is zero, as, existing (currently available) capital authority in these service areas is in excess of projected commitments in FY 2009 FY 2010, FY 2011 and FY 2012.

FY 2008 - 2017 CAPITAL IMPROVEMENT PROGRAM
Sources of Funds
(In \$000's)



(1) Pay-go financing is any funds available after funding the 180 day operating and maintenance reserve, approximately \$125.4million in FY 2009. These transfers reduce the amount of new debt issuance.

**Capital Improvement Program
Closed and Dropped Project Listing**

Activity Group	Project Title	Service Area	Cost at Completion
<u>Closed Projects:</u>			
K0	Replacement of CSO Fabridam	Combined Sewer Overflow	\$10,031,175
Q2	FY2002 - DSS Sanitary Sewer Project	Sanitary	87,074
Q5	FY2005 - DSS Sanitary Sewer Project	Sanitary	4,308,648
Q6	FY2006 - DSS Sanitary Sewer Project	Sanitary	5,426,944
MJ	20" Anacostia 1st High Watermain Replacements	Water	3,742,408
ML	873Y4 - Elim. Dead Ends (Contract 2)	Water	5,196,741
QP	4" CI Watermain Replacements	Water	2,286,710
E6	FY2006 - DWS Water Projects	Water	5,293,644
NO	873BR - Good Hope Elev'd Tk. Phase I	Water	769,137
			\$37,142,481
<u>Dropped Projects:</u>			
WA	581A1 - ALTERNATE DISINFECTION FACIL	Wastewater Treatment	\$16,401,115
BL	Excess Flow Capacity @ Blue Plains	Combined Sewer Overflow	295,800
AW	Storm Sewer Separation	Stormwater	176,563
C5	FY2005- DSS Storm Sewer Project	Stormwater	414,369
Q4	FY2004 - DSS Sanitary Sewer Project	Sanitary	3,829,282
M4	WDSB6 -Elim. Of Cross Conns #6 Hydts	Water	4,636,302
S2	WDSC3 -Lg. Valve Replace-Contract 2	Water	2,471,997
E2	FY2002 - DWS Water Projects	Water	992,018
E4	FY2004 - DWS Water Projects	Water	3,999,236
M0	WSFB6 - Rehab. Tks Phs.II	Water	1,320,021
			\$34,536,703

**Approved
FY 2008-2017**

Capital Improvement Program

SECTION III

Wastewater Treatment Service Area

Efforts to reduce water pollution in the Potomac River and help protect the Chesapeake Bay are bolstered by nearly \$1 billion in plant upgrades at Blue Plains.



District of Columbia
Water and Sewer
Authority



WASTEWATER TREATMENT

DC WASA operates the Blue Plains Advanced Wastewater Treatment Plant, the world's largest advanced wastewater treatment facility. At Blue Plains, DC WASA provides wastewater treatment services to over 1.7 million people in our service area, including residents of the District of Columbia and significant portions of Montgomery and Prince George's 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 process facilities. Blue Plains is rated for an average flow of 370 million gallons per day (MGD), and is required by its National Pollutant Discharge Elimination System (NPDES) permit to treat a peak flow rate of 740 MGD through the complete treatment process for up to four hours, and continuous peak complete treatment flows of 511 MGD thereafter. The plant treats these flows to a level that meets one of the most stringent NPDES discharge permits in the United States. Additionally, up to 336 MGD storm water flow must receive partial treatment, resulting in a total plant capacity of 1,076 MGD.

Under DC WASA's Biosolids Management Plan ("BMP", originally adopted by the Board in 1999), we 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. However, based on market conditions in FY 2006, the DC WASA Board of Directors decided to defer implementation of the project, and to continue evaluation of alternatives. Since then, staff has evaluated a wide range of biosolids processing options. Four processing options were shortlisted, each of which involves anaerobic digestion, consistent with the 1999 BMP. This budget presents the recommended option for long term biosolids management. This option, which is described in more detail later in this document, includes construction of four Cambi thermal hydrolysis trains, four digesters, new dewatering equipment and a combined heat and power plant. This recommended option results in a \$99.9 million increase in the capital budget of the digesters project, but has the potential to significantly manage biosolids operating costs when it is placed in operation.

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. DC WASA 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 reducing lime use and enhance land application.

The lifetime budget for the Wastewater Treatment Service Area is \$2.5 billion dollars, reflecting a \$108 million net increase over last year's budget. A significant portion of the increase is required to implement the updated Biosolids Management Plan to be discussed later. 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 Total Nitrogen Program, which is comprised of projects necessary to meet the stringent total nitrogen discharge limit in the NPDES permit.

Five liquid treatment processes (preliminary, primary, secondary, nitrification-denitrification, and filtration) comprise the liquid treatment processes at Blue Plains. The first phases of upgrades to 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 WASA to achieve greater process control and treatment efficiency and also yielding operating cost control. The current emphasis of the construction program for the liquid treatment processes is the upgrade of the nitrification-denitrification process and an upgrade to Raw Wastewater Pump Station 1. Construction is scheduled to begin in FY 2009 on Area Substation No. 6, Biological Sludge Thickening, and Rehabilitation of the Laboratory at Blue Plains. The design for additional nitrogen removal is scheduled to begin in FY 2009 and planning for improved treatment of excess flow and biosolids management will continue.

Long-term upgrade projects now under construction include:

- Nitrification-Denitrification Facilities Upgrade- Upgrade to the nitrification-denitrification facilities to improve the process and to 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 Computer 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.

Liquid Processing Program – \$573.7 million

(project pages III-9 to III-25)

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

Specific major projects under this program that are substantially complete include:

- *Grit Chamber Facilities Upgrade (Project TF) \$70.1 million* – This project is for the construction of an automated, continuous grit removal system consisting of sixteen chambers in all. Impact on operations include the elimination of current manual cleaning of each grit tank and lowered maintenance costs of tanks and pumps due to reduced grit load into downstream processes. While all of the grit collection bridges and grit conveyance systems are in operation, a new heating system for Grit Chamber Building No.1, that meets the current low emissions regulations, will be constructed,.
- *Influent Screen Facility (Project TM) \$39.0 million* – This project has provided for the installation of fine screens as a preliminary treatment step in the wastewater process. The fine screening removes rags and other debris from the wastewater and thereby improves treatment processes and provides protection for equipment.
- *Primary Treatment Facility (Project TN) \$38.5 million* – This project entailed 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.

Specific major projects under this program that are now underway include:

- *Raw Wastewater Pumping Station 1 Upgrade (Project UD) \$14.8 million* – This project will rehabilitate pumping equipment and appurtenances in one of the two stations that pump incoming wastewater into the plant. Construction began in FY 2007 and is scheduled to be completed in FY 2009.
- *Biological Nutrient Removal (Project TK & TQ) \$141.7 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. Construction began in FY2007 and will continue through FY 2011. This upgrade will provide for better flow distribution to the reactors and better process control within the reactors, and methanol feed control, and rehabilitation and upgrade of nitrification sedimentation basins. While this project alone will not enable DC WASA 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.
- *Nitrification/Denitrification Facilities Upgrade (Project BR) \$51.1 million* – This project 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. Benefits of this project include lower maintenance and energy costs due to improved efficiency. Design is currently underway.
- *Filtration and Disinfection Facilities Upgrade (Project UC) \$64.2 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. A second contract, currently under construction, will provide a new air-water wash system and improve backwashing controls and instrumentation.

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

- *Dual Purpose Sedimentation Basin Rehabilitation (Project BG) \$20.0 million* – Replacement of sludge collection equipment, sludge and scum pumps, and support process equipment with design starting in FY 2011.
- *Filtration/Disinfection Facility Phase II (Project BT) \$14.6 million* – Design is scheduled to begin in FY 2009 on an upgrade to major electrical equipment serving the Filtration/ Disinfection Facility.
- *Primary Treatment Facilities Phase II (Project BQ) \$14.8 million* – Design is scheduled to begin in FY 2015 for structural repairs to the primary sedimentation tanks.
- *Grit Chamber Facilities Phase II (Project BP) \$5.5 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.

Plantwide Facilities Program – \$259.3 million

(project pages III-26 to III-43)

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.

Specific major projects under this program that are substantially complete include:

- *Process Control and Computer System - Phases 1, 2 and 3 (Project TA) \$59.0 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 are anticipated 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 will continue through FY 2010. The new system is being constructed in conjunction with the major upgrade projects and will be placed in service in tandem with the upgrade-projects becoming operational.
- *Central Operations Facility Renovations – (Project AZ) \$15.8 million* - This project provided for the renovation of the Central Operations Facility and will improve the functionality and appearance of the building. Project includes replacement of existing building windows, HVAC upgrades and renovation of the DETS and Procurement Offices. Construction is underway and is expected to be completed in FY 2009.

Specific major projects under this program include:

- *Plantwide Fine Bubble Aeration System - (Project B)* \$23.6 million – This project involves replacing the coarse bubble diffusers in the secondary treatment aeration system with fine bubble diffusers. The conversion will provide the capability to transfer more oxygen to the process while saving overall energy consumption. The project budget has been reduced significantly since last year because expansion of Secondary Reactors 5 & 6 has been deleted from this project’s scope, and is now included in project EE (Centrate Treatment Facilities), which will be included with the overall upgrades to the Secondary Treatment process upgrades that are needed to achieve the new nitrogen permit limits.
- *Electrical Power System Switchgear (Project TZ)* \$8 million – This project involves replacing or upgrading aging electrical switchgear and transformers throughout Blue Plains. The project includes electrical systems that are not being upgraded as part of other facility upgrade projects.

Solids Processing Program – \$664.6 million

(project pages III-44 to III-52)

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. However, an unacceptably high bid for construction of the Egg-Shaped Digester project led to a decision by the DC WASA Board of Directors to defer the project. The decision by the DC WASA Board of Directors to defer the project until market conditions improve was based on an independently conducted economic analysis and an internal cost-benefit evaluation. As requested by the Board, DC WASA has continued to monitor the construction market, and regulatory initiatives related to land application of biosolids and evolving wastewater treatment technologies. Since then, we have evaluated a wide range of biosolids processing options, narrowed the options to four processing options. Each of the options involves anaerobic digestion, consistent with the 1999 BMP. Various types of digestion vessels have been investigated that would be less expensive to construct than the egg shaped digesters.

The presently favored option includes construction of four Cambi thermal hydrolysis trains, four digesters, new dewatering equipment and a combined heat and power plant. This alternative requires an increase in the capital budget of \$99.9 million for the digestion project but has the potential to significantly manage biosolids operating costs when it is placed in operation. The option produces power from digester gas to meet over one third of DC WASA’s electric demand at Blue Plains and the digestion process destroys nearly one half of the biosolids which will result in lower reuse costs. There is the possibility that DC WASA can market a substantial portion of the biosolids product, further reducing land application reuse costs.

DC WASA'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.

Specific major projects under this program that are substantially complete include:

- *Gravity Thickeners (Project TP) \$20.0 million* – This project has rehabilitated gravity thickeners 1-6.
- *Additional Dewatering Facilities (Project XC) \$81.5 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:

- *Biological Sludge Thickening Facilities (Project XB - formerly Centrifuge Thickener Facility) \$47.6 million* - This project will upgrade the existing dissolved air floatation thickening units and provide mechanical thickening equipment. Improvements are expected to reduce sludge processing and chemical costs through improved efficiency. The construction contract for this project was bid in FY 2008.
- *Solids Processing Building / DSLF (Project XZ)- \$22.2 million* – 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.
- *Area Substation No. 6 (Project EV) \$17.4 million* – This project involves installation of a new Area Substation No. 6 (ASS-6) with three feeds to replace aged Area Substation No. 4 (ASS-4). ASS-4 would become a vault for other electrical equipment.

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

- *Gravity Thickening Facility Upgrade (Project BX) \$14.6 million* -- 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.

Blue Plains Enhanced Nitrogen Removal Program – \$950 million

(project pages III-53 to III-56)

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 WASA's NPDES permit. Projects included in the Blue Plains Enhanced Nitrogen Removal Program were identified through a strategic planning process that resulted in development of DC WASA'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 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. Significant work on refining and resequencing the alignment, facilities and schedule has been completed. Review of the estimates and inflationary risks is ongoing.

- *Enhanced Clarification Facilities - (Project E8) \$239 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.
- *Nitrogen Removal Facilities (Project E9) \$345.7 million* – This project includes a new or expanded facility to remove additional nitrogen from the wastewater prior to discharge to the Potomac River as well as any improvements to upstream processes that may be required to ensure the reliability of the new or expanded system.
- *Centrate Treatment Facilities – (Project EE) \$88.9 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 existing and new nitrogen removal processes. DC WASA is currently participating in research to determine the most cost-effective and reliable methods to provide separate treatment of the centrate recycle stream. Specifics of this project are dependent on the findings and recommendations of the updated Biosolids Management Plan.
- *Wet Weather Peak Mitigation (aka Blue Plains Tunnel – (Project EG) \$276.5 million* - 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 impact of this project will be to reduce peak flow rates through Blue Plains without reducing the total volume of wet weather flow that receives treatment. It is important to note that the proposed project will not increase combined sewer overflows beyond those anticipated in the Long Term Control Plan.

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-I**
Priority: Good Engineering, High pay back, Mission / Function

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

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

Funding by User (percent):

DC - 41.71%
 EPA/Fed - 0.00%
 WSSC - 45.46%
 Fairfax - 8.31%
 Loudoun/PI - 4.52%



FY2008 Approved Life Budget	10,282,160
FY2009 Revised/FY2010 Proposed Life Budget	11,781,095
Increase/(Decrease) to Approved Life Budget:	1,498,935

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	4,368	1,174	1,194	1,211	1,037	838	502	260	186	160	200
Commitments Budget	4,481	6,200					1,100				

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 2011
Construction:	Aug 2009
Project Completion:	Apr 2020

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	20,033,500
FY2009 Revised/FY2010 Proposed Life Budget	20,033,500
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	1,532	468	43	575	654	542	404	3,214	5,674	6,011
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		2,000		2,230				15,803			

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2015
Construction:	Mar 2018
Project Completion:	Mar 2022

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	5,500,000
FY2009 Revised/FY2010 Proposed Life Budget	5,500,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0							25	199	146	4,588
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
								425			5,075

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-I**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2015
Construction:	Mar 2018
Project Completion:	Mar 2022

Project Description:

This project provides structural repairs to the primary sedimentation tanks and conduits and would be initiated based on future structural inspection of the facilities. Concrete inspection and testing performed in 2001 indicated that the tanks did not require concrete repairs in the Primary Treatment Facilities Upgrade contract, but that 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 WASA's investment in these facilities.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	14,800,000
FY2009 Revised/FY2010 Proposed Life Budget	14,800,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0							74	591	435	12,999
Commitments Budget								1,200			13,600

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-I**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2007
Construction:	Jun 2009
Project Completion:	Aug 2013

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 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 costs are anticipated to be reduced.

Funding by User (percent):

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



FY2008 Approved Life Budget	50,394,974
FY2009 Revised/FY2010 Proposed Life Budget	51,056,112
Increase/(Decrease) to Approved Life Budget:	661,138

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	438	2,386	11,483	20,448	12,865	446					0
Commitments Budget	1,581	33,438	230	15,807							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-I**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Mar 2009
Construction:	Mar 2011
Project Completion:	Mar 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	14,616,000
FY2009 Revised/FY2010 Proposed Life Budget	14,616,000
Increase/(Decrease) to Approved Life Budget:	0

	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
Disbursements Budget	10	466	903	1,071	6,477	2,495	84	0	0	0	0
Commitments Budget	10	1,624			12,992						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-I**
Priority: Board Policy, WASA's commitment to outside agencies

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

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 WASA, 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	2,960,591
FY2009 Revised/FY2010 Proposed Life Budget	2,996,091
Increase/(Decrease) to Approved Life Budget:	35,500

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	897	815	184	16							0
Commitments Budget	1,446	1,450	100								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 1998
Construction:	Jan 2003
Project Completion:	Oct 2010

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.

Funding by User (percent):

DC - 14.78%
EPA/Fed - 26.55%
WSSC - 45.84%
Fairfax - 8.38%
Loudoun/PI - 4.46%



FY2008 Approved Life Budget	69,798,633
FY2009 Revised/FY2010 Proposed Life Budget	70,138,133
Increase/(Decrease) to Approved Life Budget:	339,500

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	65,970	1,364	2,310	21							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	67,067	526	2,545								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 1998
Construction:	Jun 1999
Project Completion:	Dec 2011

Project Description:

This project funds multiple construction contracts to demonstrate and implement Biological Nutrient Removal. The first contract involved construction of and operations assistance for the Denitrification Demonstration Facility (DDF). The DDF included methanol storage and feed facilities enabling WASA 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. Increase in budget resulted, primarily, from the construction contract bid coming at an amount higher than the previously approved budget.

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 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.

Funding by User (percent):

DC - 35.13%
 EPA/Fed - 6.09%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.56%



FY2008 Approved Life Budget	94,574,659
FY2009 Revised/FY2010 Proposed Life Budget	94,797,324
Increase/(Decrease) to Approved Life Budget:	222,665

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	40,959	27,960	14,383	6,171	7						0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	94,109	688									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	Dec 1998
Construction:	Jan 2003
Project Completion:	Jul 2009

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	38,948,197
FY2009 Revised/FY2010 Proposed Life Budget	38,983,697
Increase/(Decrease) to Approved Life Budget:	35,500

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	38,698	223									0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	38,903	81									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 1999
Construction:	Oct 2001
Project Completion:	Sep 2009

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.

Funding by User (percent):

DC - 14.25%
 EPA/Fed - 27.16%
 WSSC - 45.78%
 Fairfax - 8.37%
 Loudoun/PI - 4.45%



FY2008 Approved Life Budget	38,518,262
FY2009 Revised/FY2010 Proposed Life Budget	38,519,262
Increase/(Decrease) to Approved Life Budget:	1,000

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	38,352	28									0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	38,363	157									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Aug 1999
Construction:	Feb 2002
Project Completion:	Jan 2011

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	70,554,158
FY2009 Revised/FY2010 Proposed Life Budget	70,593,858
Increase/(Decrease) to Approved Life Budget:	39,700

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	69,274	679									0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	70,494	100									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2003
Construction:	Jun 2005
Project Completion:	Dec 2011

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.

Funding by User (percent):

DC - 35.47%
 EPA/Fed - 6.09%
 WSSC - 45.57%
 Fairfax - 8.33%
 Loudoun/PI - 4.54%



FY2008 Approved Life Budget	46,711,338
FY2009 Revised/FY2010 Proposed Life Budget	46,924,238
Increase/(Decrease) to Approved Life Budget:	212,900

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	24,038	11,715	6,190	2,701	13						0
Commitments Budget	46,837	87									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	Jan 1999
Project Completion:	Sep 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,684,749
FY2009 Revised/FY2010 Proposed Life Budget	1,684,749
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,554										0
Commitments Budget	1,553	132									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Aug 2002
Construction:	Mar 2004
Project Completion:	Sep 2011

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.

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 through 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	64,090,860
FY2009 Revised/FY2010 Proposed Life Budget	64,206,160
Increase/(Decrease) to Approved Life Budget:	115,300

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	50,469	5,268	4,566	2,095							0
Commitments Budget	59,741	1,391	3,075								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	May 2001
Construction:	Apr 2007
Project Completion:	Jul 2010

Project Description:

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

Increase in budget resulted, primarily, from the construction contract bid coming at an amount higher than the previously approved budget.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	14,079,029
FY2009 Revised/FY2010 Proposed Life Budget	14,752,129
Increase/(Decrease) to Approved Life Budget:	673,100

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	9,834	3,478	231								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	13,525	1,227									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Wastewater Treatment Service Area
Program Title: Liquid Processing
Activity Group/Project Title: YN 700E8 - Filtration Fac Pumping Sys
Managing Department: Engineering and Technical Services **EPMC:** EPMC-I
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Dec 1999
Project Completion:	Jan 2009

Project Description:
 This project upgrades the filtration facility pumping systems by providing all new filter influent pumps, wastewater pumps, surface wash pumps, spent wastewater pumps, high pressure reclaimed final effluent pumps and low pressure reclaimed final effluent pumps. The project refurbishes all of the associated motors and drives. This project increases the reliability of the pumping systems .

Impact on Operations:
 Project has no material impact on operations costs

Funding by User (percent):

DC - 10.31%
 EPA/Fed - 31.04%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.44%



FY2008 Approved Life Budget	12,363,502
FY2009 Revised/FY2010 Proposed Life Budget	12,363,502
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	12,196		165								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	12,364										

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

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Good Engineering, High pay back, Mission / Function

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

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.

Funding by User (percent):

DC - 41.80%
 EPA/Fed - 0.00%
 WSSC - 45.39%
 Fairfax - 8.30%
 Loudoun/PI - 4.52%



FY2008 Approved Life Budget	11,242,105
FY2009 Revised/FY2010 Proposed Life Budget	12,760,771
Increase/(Decrease) to Approved Life Budget:	1,518,666

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	6,331	1,319	1,802	1,205	1,004	421					0
Commitments Budget	6,361	6,400									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2010

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 Authority 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 Board Room, while those for other departments are in different stages of completion. The budget increase is mostly attributable to the reallocation the Program Management costs.

Impact on Operations:

This project has no material impact on the operating budget.

Funding by User (percent):

DC - 78.57%
 EPA/Fed - 0.00%
 WSSC - 16.76%
 Fairfax - 3.07%
 Loudoun/PI - 1.61%



FY2008 Approved Life Budget	15,510,318
FY2009 Revised/FY2010 Proposed Life Budget	15,768,063
Increase/(Decrease) to Approved Life Budget:	257,745

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	9,286	2,334	2,010								0
Commitments Budget	11,395	2,133	2,240								

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Wastewater Treatment Service Area
Program Title: Plantwide
Activity Group/Project Title: **BI Plantwide Fine Bubble Aeration**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-I
Priority: Health Safety

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

Project Description:

This project replaces the coarse bubble diffusers in the Secondary Treatment process with fine bubble diffusers. Conversion to a fine bubble aeration system provides the capability to transfer more oxygen to the process while saving overall energy consumption. The project retrofits or replaces the Secondary process blowers and motors that are needed to operate at the higher-pressure requirements of fine bubble systems. This project also modifies Secondary Reactors 3 and 4, to reduce short-circuiting and improve their detention time and performance. An activity to expand Secondary Reactors 5 and 6 was removed from this project which resulted in a reduction of the budget by over \$36 million.

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	23,645,000
FY2009 Revised/FY2010 Proposed Life Budget	23,645,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	14	1,545	647	11,588	8,703	239				0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		2,432		21,214							

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Wastewater Treatment Service Area
Program Title: Plantwide
Activity Group/Project Title: CH Misc Facility Projects
Managing Department: Engineering and Technical Services EPMC: EPMC-I
Priority: Good Engineering, Low, M&F over long term

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

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

Impact on Operations:

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

Funding by User (percent):

DC - 83.57%
 EPA/Fed - 0.00%
 WSSC - 12.84%
 Fairfax - 2.35%
 Loudoun/PI - 1.24%



FY2008 Approved Life Budget	5,402,862
FY2009 Revised/FY2010 Proposed Life Budget	5,476,762
Increase/(Decrease) to Approved Life Budget:	73,900

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	2,268	1,919	1,151								0
Commitments Budget	2,397	3,080									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

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

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 DCWASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,206,061
FY2009 Revised/FY2010 Proposed Life Budget	1,225,861
Increase/(Decrease) to Approved Life Budget:	19,800

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,137	90									0
Commitments Budget	1,226										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2007
Construction:	May 2009
Project Completion:	Oct 2010

Project Description:

This project will renovate the central laboratory building located at Blue Plains. This building was constructed around 1935, 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	4,775,000
FY2009 Revised/FY2010 Proposed Life Budget	4,829,400
Increase/(Decrease) to Approved Life Budget:	54,400

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	356	1,055	2,777	33							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	659	4,170									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-I**
Priority: Health Safety

Phase	Start Date
Design:	
Construction:	
Project Completion:	Mar 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,450,000
FY2009 Revised/FY2010 Proposed Life Budget	1,450,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	3	1,099	348								0
Commitments Budget	3	1,447									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2008
Construction:	Apr 2009
Project Completion:	Mar 2010

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 system.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,550,000
FY2009 Revised/FY2010 Proposed Life Budget	1,550,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	6	833	544								0
Commitments Budget	130	1,420									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 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. WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	2,000,000
FY2009 Revised/FY2010 Proposed Life Budget	2,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	743	197		350	245	142	193			0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		1,070			930						

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-I**
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2010
Construction:	Dec 2011
Project Completion:	Mar 2018

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	4,960,000
FY2009 Revised/FY2010 Proposed Life Budget	4,960,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0			420	149	489	901	1,016	693	474	167
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
				960	4,000						

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Health Safety

Phase	Start Date
Design:	
Construction:	Mar 2009
Project Completion:	Apr 2010

Project Description:

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

Impact on Operations:

This project will have no impact on the operating budget.

Funding by User (percent):

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



FY2008 Approved Life Budget	2,392,000
FY2009 Revised/FY2010 Proposed Life Budget	2,392,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	1,335	745								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		2,392									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

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

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 WASA 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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	9,496,253
Increase/(Decrease) to Approved Life Budget:	9,496,253

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	1,945	2,600	1,751	1,604	1,596					0
Commitments Budget		9,496									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-I**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
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.

Funding by User (percent):

DC - 41.38%
 EPA/Fed - 0.00%
 WSSC - 45.72%
 Fairfax - 8.36%
 Loudoun/PI - 4.55%



FY2008 Approved Life Budget	61,255,169
FY2009 Revised/FY2010 Proposed Life Budget	59,008,696
Increase/(Decrease) to Approved Life Budget:	-2,246,473

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	39,417	9,308	6,603	2,906							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	57,613	1,395									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Dec 1998
Construction:	Apr 2001
Project Completion:	Sep 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	74,060,046
FY2009 Revised/FY2010 Proposed Life Budget	74,060,046
Increase/(Decrease) to Approved Life Budget:	0

	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
Disbursements Budget	73,966	36	35								0
Commitments Budget	73,983	77									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Wastewater Treatment Service Area
Program Title: Plantwide
Activity Group/Project Title: **TU 504H7 - Central Operation Facility**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-I
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	Dec 1998
Construction:	
Project Completion:	Feb 2014

Project Description:

Project provides for upgrade of the Central Operation Facility at the Blue Plains AWTP to meet current BOCA/BC/DC Building Code compliance, HVAC standards, ADA compliance, and fire protection codes. The majority of scheduled work within this project has been transferred to project AZ - Renovation of Central Operations Building during FY04.

Impact on Operations:

Project has no material impact on operations costs

Funding by User (percent):

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



FY2008 Approved Life Budget	1,201,489
FY2009 Revised/FY2010 Proposed Life Budget	1,201,489
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	868	242									0
Commitments Budget	1,201										

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Wastewater Treatment Service Area
Program Title: Plantwide
Activity Group/Project Title: TZ 504I6 - Elec Power Sys - Switch Gear
Managing Department: Engineering and Technical Services **EPMC:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	Mar 2003
Project Completion:	Mar 2011

Project Description:

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

Impact on Operations:

Project has no material impact on operations costs

Funding by User (percent):

DC - 40.28%
 EPA/Fed - 0.95%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.55%



FY2008 Approved Life Budget	7,974,932
FY2009 Revised/FY2010 Proposed Life Budget	7,974,932
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	2,135	157	4,086	1,012							0
Commitments Budget	2,312	5,663									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Wastewater Treatment Service Area
Program Title: Plantwide
Activity Group/Project Title: **VA Additional Aeration Facility**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-I
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Oct 2008

Project Description:

This project provides an additional effluent aeration channel and air diffuser piping to increase hydraulic capacity in the channels from the Nitrification sedimentation basins to the Filtration Facility fore bays at the Blue Plains AWTP.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	400,000
FY2009 Revised/FY2010 Proposed Life Budget	400,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	265	119									0
Commitments Budget	400										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

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

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 operations costs.

Funding by User (percent):

DC - 36.82%
 EPA/Fed - 5.28%
 WSSC - 45.17%
 Fairfax - 8.26%
 Loudoun/PI - 4.47%



FY2008 Approved Life Budget	29,031,860
FY2009 Revised/FY2010 Proposed Life Budget	31,126,059
Increase/(Decrease) to Approved Life Budget:	2,094,199

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	22,490	4,312	2,184	1,461							0
Commitments Budget	26,946	2,123	2,057								

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: N/A**
Priority: Good Engineering, High pay back, Mission / Function

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

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.

Funding by User (percent):

DC - 41.63%
 EPA/Fed - 0.00%
 WSSC - 45.52%
 Fairfax - 8.32%
 Loudoun/PI - 4.53%



FY2008 Approved Life Budget	7,324,135
FY2009 Revised/FY2010 Proposed Life Budget	15,919,942
Increase/(Decrease) to Approved Life Budget:	8,595,807

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,909	4,802	1,401	2,269	2,268	1,396	688				0
Commitments Budget	2,570	13,350									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2009
Construction:	Jul 2012
Project Completion:	Jul 2016

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	14,800,000
FY2009 Revised/FY2010 Proposed Life Budget	14,620,000
Increase/(Decrease) to Approved Life Budget:	-180,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0		460	577	237	3,494	6,187	3,017	213		0
Commitments Budget			1,200		13,420						

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Oct 2008
Construction:	Jun 2009
Project Completion:	Mar 2012

Project Description:

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

Impact on Operations:

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

Funding by User (percent):

DC - 40.80%
 EPA/Fed - 0.43%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.56%



FY2008 Approved Life Budget	17,622,000
FY2009 Revised/FY2010 Proposed Life Budget	17,398,470
Increase/(Decrease) to Approved Life Budget:	-223,530

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	839	9,978	5,580	58						0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		17,398									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Oct 1999
Construction:	Dec 2002
Project Completion:	Sep 2009

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	19,957,737
FY2009 Revised/FY2010 Proposed Life Budget	19,957,737
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	19,689	208									0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	19,898	60									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Aug 2002
Construction:	
Project Completion:	Apr 2017

Project Description:

Project provides for construction of a new advanced digestion facility capable of anaerobically digesting all biosolids generated at the Blue Plains AWTP, as called for in the Biosolids Master Plan. The anaerobic digestion process reduces the volume and weight of biosolids to be transported to land application sites resulting in reduced truck traffic, odor, noise and pollution. In FY 2006, The Board decided to reject the single bid received on the first phase digester construction contract and defer the project until 2010. An update to the Biosolids Management Plan was started in FY 2007 to review biosolids technologies that are now available to WASA and to evaluate less expensive digester vessels. The final options being considered utilize digestion and can produce a Class A biosolids product. WASA proposes to utilize the Cambi Thermal Hydrolysis digestion process, which has resulted in most of the budget increase.

Impact on Operations:

The new digestion facility reduces biosolids production by half, produces a stable product for beneficial reuse, and generates excess digester gas that can supply 1/3 of the plant's electrical needs. The facility provides savings of approximately \$16 million per year that include savings in biosolids hauling and reuse, personnel, chemicals, contracts, and energy costs.

Funding by User (percent):

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



FY2008 Approved Life Budget	339,028,088
FY2009 Revised/FY2010 Proposed Life Budget	438,901,949
Increase/(Decrease) to Approved Life Budget:	99,873,861

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	30,718	13,926	16,314	143,855	105,529	87,354	20,493	44			0
Commitments Budget	31,390	26,272	8,050	373,190							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jun 2005
Construction:	Oct 2009
Project Completion:	Jun 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	47,569,047
FY2009 Revised/FY2010 Proposed Life Budget	47,604,047
Increase/(Decrease) to Approved Life Budget:	35,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	6,024	1,710	5,719	15,132	11,689	5,065					0
Commitments Budget	7,586	4,123	35,894								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Dec 1998
Construction:	Dec 2001
Project Completion:	Sep 2009

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.

Impact on Operations:

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

Funding by User (percent):

DC - 15.49%
 EPA/Fed - 25.83%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.46%



FY2008 Approved Life Budget	81,416,523
FY2009 Revised/FY2010 Proposed Life Budget	81,544,523
Increase/(Decrease) to Approved Life Budget:	128,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	76,305	4,754									0
Commitments Budget	80,539	1,005									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-I**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2009
Construction:	Oct 2008
Project Completion:	Dec 2013

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 would avoid future maintenance and cost from inoperable systems.

Funding by User (percent):

DC - 40.16%
 EPA/Fed - 1.07%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.56%



FY2008 Approved Life Budget	22,203,505
FY2009 Revised/FY2010 Proposed Life Budget	22,203,505
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	4,598	3,465	4,304	4,926	2,267	212	5				0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	6,604	3,790	7,710	4,100							

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-I
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	May 2000
Construction:	Nov 2001
Project Completion:	May 2011

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	5,842,000
FY2009 Revised/FY2010 Proposed Life Budget	6,461,500
Increase/(Decrease) to Approved Life Budget:	619,500

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	1,349	93	381	71							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	1,350	5,112									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

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

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2012
Construction:	Oct 2014
Project Completion:	Jul 2018

Project Description:

The Enhanced Clarification Facility is part of DC WASA'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.

Funding by User (percent):

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



FY2008 Approved Life Budget	240,000,000
FY2009 Revised/FY2010 Proposed Life Budget	239,000,000
Increase/(Decrease) to Approved Life Budget:	-1,000,000

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	264	578	1,128	4,017	6,449	3,792	32,395	89,075	61,948	27,030
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		3,000	1,000		14,200		20,800	200,000			

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

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

Phase	Start Date
Design:	
Construction:	Mar 2011
Project Completion:	Jul 2015

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

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	350,000,000
FY2009 Revised/FY2010 Proposed Life Budget	345,650,000
Increase/(Decrease) to Approved Life Budget:	-4,350,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	8,882	12,659	18,792	107,077	123,055	56,330	3,001			0
Commitments Budget		24,300	2,600	315,550		3,200					

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

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

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2009
Construction:	Aug 2011
Project Completion:	Aug 2014

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

Funding by User (percent):

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



FY2008 Approved Life Budget	90,000,000
FY2009 Revised/FY2010 Proposed Life Budget	88,875,000
Increase/(Decrease) to Approved Life Budget:	-1,125,000

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	374	2,442	2,430	44,213	33,694	1,415				0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		6,300		82,575							

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

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

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2009
Construction:	May 2011
Project Completion:	Sep 2015

Project Description:

The Blue Plains Tunnel is part of DC WASA'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 WASA submitted to the USEPA. The recommended alternative in the plan removes additional nitrogen from the wastewater prior to discharge and improves the quality of discharge to the Potomac and Anacostia Rivers during wet weather events.

Impact on Operations:

Dewatering pump station costs will increase operating and maintenance costs beginning in FY 2014. The estimated annual cost increase is \$3 million per year, in 2007 dollars.

Funding by User (percent):

DC - 99.21%
 EPA/Fed - 0.00%
 WSSC - 0.62%
 Fairfax - 0.11%
 Loudoun/PI - 0.06%



FY2008 Approved Life Budget	270,000,000
FY2009 Revised/FY2010 Proposed Life Budget	276,475,000
Increase/(Decrease) to Approved Life Budget:	6,475,000

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	144	12,989	42,170	75,397	52,855	32,606	40,777			0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		4,000	18,864	253,611							

(projected disbursements do not include contingencies)

(dollars in thousands)

**Approved
FY 2008-2017**

Capital Improvement Program

SECTION IV

Sanitary Sewer Service Area

DC WASA has undertaken an assessment of the sanitary sewer system to evaluate structural condition and capacity.



District of Columbia
Water and Sewer
Authority

IV



SANITARY SEWER

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

During FY 2009, DC WASA will review the draft Sewer Facility Plan and recommendations based on the Sewer Assessment Program conducted during the last several years. DC WASA will continue the evaluation of the sewer system as an ongoing program to determine its condition, verify adequate capacity, and prioritize and develop new capital projects, as appropriate. The projects selected to be included in the CIP were based on inspections performed on approximately 80 miles of the District's most critical sewer segments. The criticalities of these sewers were developed based on several factors including size, age, historical problems, and locations such as under buildings. A new program management contract (EPMC-IIIB) will continue the inspections and assessment program as well as providing project management services for active projects.

Since FY 2002, approximately \$7 million in annual funding has been included in the CIP for sewer projects and the comprehensive sewer assessment concludes that the more than \$40 million a year would be need to replace all aging sanitary infrastructure.

The current CIP includes the following projects:

Collection Sewer Projects – \$11 million

(project pages IV-8 to IV-10)

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

- East Side Interceptor Rehabilitation – Project 'J3' - The portion of the sewer that traverses the National Arboretum has significant structural distress. Design is underway for the rehabilitation of the sewer with construction scheduled to start in 2009.
- Sewer Rehabilitation on 10th & 12th, N.W. – Project 'I9' - This project consists of rehabilitation of deteriorated 36" and 30" diameter sewers on 10th Street, N.W. and on 12th Street, N.W in the vicinity of Pennsylvania Avenue.

Ongoing Sanitary Sewer Projects – \$89.3 million

(project pages IV-11 to IV-26)

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 4400 feet of sewer. Design scheduled for completion during 2009 with construction scheduled to start in 2010.

Pumping Facilities – \$23 million

(project pages IV-27 to IV-30)

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 reliability and integrity of DC WASA's sanitary sewer system. In addition, a Security Upgrade (Project 'CX') is scheduled to begin in mid-FY 2009, which will place interior and exterior cameras throughout DC WASA's Sewer Services Facilities, install traffic control devices, and install perimeter fencing. Additionally, this program includes costs for activities related to the Authority's planned relocation of certain facilities located at the Main and 'O' Street Pumping stations, as described in more detail below.

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

- Rock Creek – Project 'L3' – The design is complete and construction is underway.
- Upper Anacostia – Project 'L4' - The pumping station design is complete and construction is underway.
- Earl Place - Project 'L5' – The facility was placed in service in November 2006.

Sanitary Sewer Service Area - Management – \$39 million

(project pages IV-31 to IV-32)

During FY 2009, DC WASA will continue with an ongoing evaluation of the sanitary and combined sewer systems, as well as design management for sewer pumping station rehabilitations and sewer infrastructure projects, as described in more detail below.

- Sanitary Sewer Program Management & Planning (EPMC-III A/II B) – Project ‘AU’ - This project provides design, review and management of the sewer system to determine if it is in an adequate structural condition, and has sufficient capacity to meet current service demands and planned growth. The planning effort is also required to comply with the current National Pollutant Discharge Elimination System (NPDES) permit, the Nine Minimum Controls consent decree, and prevention of non-permitted sewer overflows.
- Design Management for Sanitary Sewer Pumping Stations - This ongoing project began in FY 2001, and provides for the management of the design and construction of three small sanitary sewage pumping stations requiring major rehabilitation or replacement. ‘L3’ (Rock Creek) design is complete and construction procurement is underway. Project ‘L4’ – Upper Anacostia design is complete and construction procurement is underway. Project ‘L5’ (Earl Place) was placed in service in November 2006.
- Sewer Inspection Program – Project ‘DN’ – This program, began in early FY08, provides an on-going effort to further inspect the Authority’s existing sewer system at a rate of approximately 90 miles of sewer lines per year. The resultant information will assist in the scheduling and prioritization of sewer main line and lateral repair work. An additional \$2million was added to the life time budget as a near term response to recommendations from the sewer assessment.

Interceptor/Trunk Sewer/Force Sewers – \$125.7 million

(project pages IV-33 to IV-41)

This program includes large diameter sewers that may be required to serve new development, replace undersized sewers, or replace or rehabilitate large diameter sewers that have reached their useful life or are in need of major repair. In addition, this category includes approximately \$10 million for sewer projects (G5 and G6) that were identified as part of the comprehensive assessment of the sewer system. A description is included below.

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

- Potomac Interceptor Rehabilitation – Project ‘N7’ - The Potomac Interceptor Sewer System is a 50-mile long sewer that provides conveyance of wastewater from areas in Virginia, Maryland and the District to Blue Plains. DC WASA 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 (\$44.7 million) has faced challenges, such as , larger equipment needed to control odors, high architectural costs related in part to historical preservation requirements of the National Park Service, and difficult construction locations, including:

- Potomac Interceptor Rehabilitation in Fairfax and Loudon Counties – This capital improvement Project includes funding to design and reconstruct portions of the interceptor in Fairfax and Loudoun Counties. The design revisions were needed as part of a project design reassessment. Construction bidding will take place in FY 2009.
 - Additional Inspections and Access Road Improvements – Three projects are included in the CIP to further assess over 20 miles of the pipeline, improve deteriorated access roads for operations and maintenance needs, and to evaluate soil erosion along the pipeline at stream crossings and along the banks of the C&O Canal.
 - PI Repair @ Waxpool Rd - This capital project involves the relining of 930 feet of the 48-inch Potomac Interceptor in Loudoun County near Waxpool Road. The final design was submitted in FY-2008 after the original contract was modified to remove a portion of the Upper Potomac Interceptor repair in Washington DC due to unresolved access issues with the National Park Service. Construction for the repairs to the PI at Waxpool Rd. are scheduled for early FY 2009.
- Odor Control Projects – Project 'N7'
 - Interim Odor Controls – As an interim step, DC WASA installed odor-absorbing chemicals and passive carbon filters in manholes at selected locations where problems have been experienced. This interim project cost approximately \$0.4 million and was completed in October 2000. These interim controls have been continually maintained, pending the implementation of the permanent odor controls, currently scheduled to begin in FY 2010.
 - Permanent Odor Controls – DC WASA plans to install a permanent odor control system that includes a forced air/activated carbon filter system. This project will cost approximately \$44.7 million. The conceptual design was completed in FY 2003. During the past five years, DC WASA has been seeking the requisite National Park Service permit, performing associated environmental assessments, and coordinating with the community. Permits and property access issues are continuing and recent acceptance of architectural features by the National Park Service indicate that DC WASA is nearing completion of all coordination issues. DC WASA expects construction on the facilities to begin in FY 2009.
 - 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 is scheduled to be completed in FY2009, and construction is anticipated to start in early 2010.
 - Future Sewer System Upgrades – Project A4
 - Tide Gate Replacements - Design was completed in FY 2008. Construction scheduled for FY 2009. This project is for the replacement of the structures at various outfalls to prevent the river from flowing into the combined sewer system during high

tides. It is estimated that approximately 40,000 gallons per day of river water that is currently being treated at Blue Plains WWTP can be prevented from entering the combined sewer system upon completion of the project.

- Georgetown Sewer Rehabilitation - Design was completed in FY 2008 and construction began in late FY 2008. Combined sewer inspections performed throughout the Georgetown neighborhood of the District found severe structural defects in the existing sewer system. This project is for the design and construction for rehabilitation of approximately 2,600 feet of the existing sanitary system. This project will utilize trenchless technologies to limit the impact to the existing neighborhood.
- Watts Branch Sewers Rehabilitation – The DC Department of Environment (DDOE), DC WASA, and United States Fish & Wildlife Service (USFWS) are working together to design plans for the Stream Restoration of Watts Branch. The sewer system improvements are being performed by DC WASA staff. Preliminary design drawings and permits completed in FY 2008. The project was to be broken into three phases 1, 2, and 3 and involves the improvements to the sewers along Watts Branch. Phase 1 work was necessary to begin prior to the USACE / DDOE Stream restoration projects. It involved three sites for excavation and some lining of a few sewers that currently cross Watts Branch. Phase 2 involves the relocation of the Watts Branch interceptor for approximately 2 blocks to eliminate 3 (or 4) sewer crossings of Watts Branch as well as lining of the interceptor from west of Grant Street / 46th Street to where the sewer exits the park. Phase 3 is miscellaneous work such as manhole lining or additional manhole placement for ease of maintenance.

Projects scheduled to begin in FY 2009 include:

- B St/New Jersey Ave Trunk Sewer Rehab – Project ‘J0’ – Project to rehabilitate the numerous defects noted in this early 1900’s brick sewer, as noted in the condition assessment study completed in the 2004 inspection program.
- Upper Anacostia Main Interceptor (UAMI) Relief Sewer – Project ‘DM’ – 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, Lily Pond and Kenilworth Terrace neighborhoods.
- Oxon Run Sewer Leakage Correction – Project ‘J1’ – This project assesses the condition and develops needed repairs for a segment of sewer that crosses Oxon Run. Project scope includes additional sewer rehabilitation (7,700 linear feet of 12 inch to 36 inch diameter sanitary sewer) and pilot study to eliminate infiltration (450,000 gpd estimate).
- Low Area Trunk Sewer Rehabilitation – Project DR - Project created in response to unanticipated structural collapse on Low Area Trunk Sewer which was recently fixed in one location. Inspection & Cleaning to be performed prior to expected rehabilitation. Necessary rehabilitation to be determined post inspection and cleaning.

New Projects added to this service area in FY 2009:

- G5 Sewer Rehab Near Creek Beds – The Sewer Assessment Program identified several areas within the city's stream valleys where sewer systems have become exposed due to creek bed erosion. The overall program budget is being reviewed as part of the draft Sewer Facility Plan, however, start up funds were programmed to begin planning, design and coordination with park authorities so progress can be made during the review of the overall program budget costs.
- G6 – 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.

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 2001
Construction:	Feb 2004
Project Completion:	Mar 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	5,542,597
FY2009 Revised/FY2010 Proposed Life Budget	5,542,597
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	4,206	610	406								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	4,283	1,260									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary Collection Sewers
Activity Group/Project Title: **19 Sewer Rehab.10th-12th St, Bet. Penn**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2007
Construction:	Mar 2009
Project Completion:	Feb 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,150,000
FY2009 Revised/FY2010 Proposed Life Budget	1,150,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	141	485	273								0
Commitments Budget	350	800									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 2001
Construction:	Jan 2003
Project Completion:	Apr 2011

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 WASA's sanitary sewer system.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	4,273,000
FY2009 Revised/FY2010 Proposed Life Budget	4,273,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	1,171	172	1,896	657							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	1,187	3,086									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority

FY 2008 - 2017 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: N/A**
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	Jan 2010
Project Completion:	Jun 2011

Project Description:

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

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	4,640,000
FY2009 Revised/FY2010 Proposed Life Budget	4,640,000
Increase/(Decrease) to Approved Life Budget:	0

	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
Disbursements Budget	0		2,100	1,861							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
			4,640								

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2009
Project Completion:	Mar 2010

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

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

Funding by User (percent):

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



FY2008 Approved Life Budget	4,640,000
FY2009 Revised/FY2010 Proposed Life Budget	4,640,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	2,454	1,642								0
Commitments Budget	0	4,640									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jan 2011
Project Completion:	Apr 2012

Project Description:

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

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	4,785,000
FY2009 Revised/FY2010 Proposed Life Budget	4,785,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0			2,735	1,427						0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
				4,785							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jan 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:
 This project will have no material impact on the operating budget.

Funding by User (percent):

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



FY2008 Approved Life Budget	4,785,000
FY2009 Revised/FY2010 Proposed Life Budget	4,785,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0				2,750	1,412					0
Commitments Budget					4,785						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

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

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

Funding by User (percent):

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



FY2008 Approved Life Budget	5,505,000
FY2009 Revised/FY2010 Proposed Life Budget	5,505,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0					3,145	1,640				0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
						5,505					

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: Engineering and Technical Services **EPMC:** NA
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jan 2014
Project Completion:	Apr 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:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	5,675,000
FY2009 Revised/FY2010 Proposed Life Budget	5,675,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0						3,245	1,695			0
Commitments Budget							5,675				

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** NA
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jan 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:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	5,846,000
FY2009 Revised/FY2010 Proposed Life Budget	5,846,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0							3,339	1,744		0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
								5,846			

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** NA
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jan 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. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system. Job numbers will be issued to identify the location of projects

Impact on Operations:

This project will have an annual operating cost for maintenance of the laboratory and cost of utilities.

Funding by User (percent):

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



FY2008 Approved Life Budget	6,015,000
FY2009 Revised/FY2010 Proposed Life Budget	6,015,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0								3,453	1,777	0
Commitments Budget	0								6,015		

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** NA
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Oct 2008
Project Completion:	Sep 2011

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 on at least three occasions. In these cases such challenges as later deterioration, tree roots and grease buildup damage have made additional relatively 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 WASA'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.

Funding by User (percent):

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



FY2008 Approved Life Budget	14,600,000
FY2009 Revised/FY2010 Proposed Life Budget	14,600,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	4,942	4,797	2,406							0
Commitments Budget	14,600										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jan 2017
Project Completion:	Apr 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. This project is needed to replace aged infrastructure to restore integrity and reliability of the sanitary sewer system. Job numbers will be issued to identify the location of projects

Impact on Operations:

This project will have an annual operating cost for maintenance of the laboratory and cost of utilities.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	6,200,000
Increase/(Decrease) to Approved Life Budget:	6,200,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0									3,542	1,848
Commitments Budget										6,200	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary On-Going
Activity Group/Project Title: Q2 FY2002 - DSS Sanitary Sewer Project
Managing Department: Sewer Services **EPMC:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

This project was created as an annual program for Planned projects by the Department of Sewer Services in FY2002 for sanitary infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	481,000
FY2009 Revised/FY2010 Proposed Life Budget	87,074
Increase/(Decrease) to Approved Life Budget:	-393,926

CLOSED

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	87										
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	87			0		0				0	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Board Policy, WASA's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2007
Construction:	Mar 2003
Project Completion:	Jan 2012

Project Description:

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

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	6,471,000
FY2009 Revised/FY2010 Proposed Life Budget	6,471,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	4,227	122	590	711	16						0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	4,966		1,505								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary On-Going
Activity Group/Project Title: **Q5 FY2005 - DSS Sanitary Sewer Project**
Managing Department: Sewer Services **EPMC:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	Jul 2005
Project Completion:	

Project Description:

This project was created as an annual program for Planned projects by the Department of Sewer Services in FY2005 for sanitary infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	4,640,000
FY2009 Revised/FY2010 Proposed Life Budget	4,308,648
Increase/(Decrease) to Approved Life Budget:	-331,352

CLOSED

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	4,309										
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	4,309			0		0				0	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary On-Going
Activity Group/Project Title: Q6 FY2006 - DSS Sanitary Sewer Project
Managing Department: Sewer Services **EPMC:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	Jul 2006
Project Completion:	

Project Description:

This project was created as an annual program for Planned projects by the Department of Sewer Services in FY2006 for sanitary infrastructure improvements. Job numbers will be issued to identify location of projects.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	3,924,000
FY2009 Revised/FY2010 Proposed Life Budget	5,426,944
Increase/(Decrease) to Approved Life Budget:	1,502,944

CLOSED

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	5,426										
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	5,426			0	0	0				0	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2007
Project Completion:	Jan 2010

Project Description:

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

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	5,670,000
FY2009 Revised/FY2010 Proposed Life Budget	5,670,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	5,186	321	104								0
Commitments Budget	4,083	1,587									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jun 2008
Project Completion:	Jan 2010

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

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

Funding by User (percent):

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



FY2008 Approved Life Budget	4,640,000
FY2009 Revised/FY2010 Proposed Life Budget	4,640,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	2,070	2,043	413								0
Commitments Budget	3,015	1,625									

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

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

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	635,000
FY2009 Revised/FY2010 Proposed Life Budget	635,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	40	473	122							0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		635									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Feb 2002
Construction:	Apr 2007
Project Completion:	Aug 2010

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.

Funding by User (percent):

DC - 44.11%
 EPA/Fed - 0.00%
 WSSC - 35.39%
 Fairfax - 12.41%
 Loudoun/PI - 8.08%



FY2008 Approved Life Budget	11,131,290
FY2009 Revised/FY2010 Proposed Life Budget	11,131,290
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	5,309	3,053	155								0
Commitments Budget	11,081	50									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Feb 2002
Construction:	May 2008
Project Completion:	Oct 2011

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.

Funding by User (percent):

DC - 98.27%
 EPA/Fed - 0.00%
 WSSC - 1.73%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	9,134,739
FY2009 Revised/FY2010 Proposed Life Budget	9,134,739
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,640	5,420	898	26	0						0
Commitments Budget	9,010	125									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Feb 2002
Construction:	Aug 2005
Project Completion:	Jul 2009

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	2,097,568
FY2009 Revised/FY2010 Proposed Life Budget	2,097,568
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,715	214									0
Commitments Budget	2,048	50									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary Sewer Program Mgmt
Activity Group/Project Title: **AU Sanitary Sewer Program Management**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Potential Failure/Ability to continue meeting permit requirement

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

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 WASA's sanitary sewer system.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	21,044,994
FY2009 Revised/FY2010 Proposed Life Budget	21,044,994
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	10,683	945	2,181	2,666	1,648	140					0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	12,895	8,150									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function
Project Description:
 The program will provide an ongoing effort to further inspect the Authority's existing sewer system
Impact on Operations:
 This project will have no material impact on the operating budget.

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2017

Funding by User (percent):

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



FY2008 Approved Life Budget	16,000,000
FY2009 Revised/FY2010 Proposed Life Budget	18,000,000
Increase/(Decrease) to Approved Life Budget:	2,000,000

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	1,750	1,750	1,750	1,755	1,750	1,750	1,750	1,755	1,740	0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		2,000	2,000	2,000	4,000	2,000	2,000	2,000	2,000		

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary Interceptor/Trunk/Force Sewers
Activity Group/Project Title: **A4 Future Sewer System Upgrades**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	May 2004
Construction:	Jul 2006
Project Completion:	Mar 2021

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 WASA'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.

Funding by User (percent):

DC - 92.20%
 EPA/Fed - 6.81%
 WSSC - 0.99%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	49,000,000
FY2009 Revised/FY2010 Proposed Life Budget	49,000,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	7,802	6,386	11,399	3,516	3,056	3,400	1,744	2,062	1,704	488	0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	13,874	22,826			8,300			2,000	2,000		

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Board Policy, WASA's commitment to outside agencies

Phase	Start Date
Design:	Jan 2009
Construction:	Jun 2010
Project Completion:	Oct 2011

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 FY13. This will also provide capacity for the high level of development that is revitalizing Anacostia Gardens, Lily Pond and Kenwilworth Terrace neighborhoods.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	2,500,000
FY2009 Revised/FY2010 Proposed Life Budget	2,500,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	112	386	1,672	15						0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		200	2,300								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2007
Construction:	May 2009
Project Completion:	Mar 2012

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 lf of 42" sewer requires heavy cleaning and inspection. Light cleaning is required on 6,800 lf of 42" sewer from the siphon to the Main Pumping Station.

Impact on Operations:

Repair of this Trunk Sewer will ensure WASA'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.

Funding by User (percent):

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



FY2008 Approved Life Budget	4,600,000
FY2009 Revised/FY2010 Proposed Life Budget	4,600,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	1,786	544	1,160	490						0
Commitments Budget	160	2,240	300	1,900							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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.**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Oct 2004
Construction:	Mar 2010
Project Completion:	Jun 2011

Project Description:

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

Impact on Operations:

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

Funding by User (percent):

DC - 66.41%
 EPA/Fed - 0.00%
 WSSC - 33.59%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	3,000,000
FY2009 Revised/FY2010 Proposed Life Budget	3,000,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	254	9	1,731	704							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	270		2,730								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Health Safety

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

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	7,000,000
Increase/(Decrease) to Approved Life Budget:	7,000,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0		49	606	4,105	1,550					0
Commitments Budget			470	6,530							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	Oct 2009
Project Completion:	Sep 2012

Project Description:

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

Impact on Operations:

There will be no significant impacts on operational costs.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	3,000,000
Increase/(Decrease) to Approved Life Budget:	3,000,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0		867	867	867						0
Commitments Budget			3,000								

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary Interceptor/Trunk/Force Sewers
Activity Group/Project Title: **J0 B St/New Jersey Ave Trunk Sewer Rehab.**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

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

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	3,920,000
FY2009 Revised/FY2010 Proposed Life Budget	3,920,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	106	49	211	2,542	458						0
Commitments Budget	170	300		3,450							

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary Interceptor/Trunk/Force Sewers
Activity Group/Project Title: J1 Oxon Run Sewer Leakage Correction
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jan 2009
Construction:	Sep 2010
Project Completion:	Aug 2012

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	7,945,000
FY2009 Revised/FY2010 Proposed Life Budget	7,945,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	121	196	294	4,419	2,101						0
Commitments Budget	145	400	7,400								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Sanitary Sewer Service Area
Program Title: Sanitary Interceptor/Trunk/Force Sewers
Activity Group/Project Title: **N7 Potomac Sewer System Rehab.**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Board Policy, WASA's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	Sep 2000
Construction:	Dec 2001
Project Completion:	Aug 2017

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.

Funding by User (percent):

DC - 10.94%
 EPA/Fed - 0.00%
 WSSC - 32.01%
 Fairfax - 32.01%
 Loudoun/PI - 25.04%



FY2008 Approved Life Budget	44,700,633
FY2009 Revised/FY2010 Proposed Life Budget	44,700,633
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	5,381	1,806	7,622	19,815	5,639	989	235	235	236	215	0
Commitments Budget	5,709	2,996	34,346	275	275	275	275	275	275		

(projected disbursements do not include contingencies)

(dollars in thousands)

**Approved
FY 2008-2017**

Capital Improvement Program

SECTION V

Combined Sewer Overflow Service Area

DC WASA sewer service workers led the way for a production crew filming the historic Tiber Creek sewer for a History Channel television documentary.



District of Columbia
Water and Sewer
Authority

V



COMBINED SEWER AREA

(project pages V-5 to V-30)

Similar to many older communities in the Mid-Atlantic, Northeast, and Midwest portions of the country, a portion of the District of Columbia is served by a combined sewer system. Approximately one-third of the system is combined, mostly in the downtown and older parts of the city. In dry weather, the system delivers wastewater to the Blue Plains Wastewater Treatment Plant. In wet weather, rain water also enters the system, and if the conveyance capacity of the system is exceeded, the excess flow spills into the waterways of the District of Columbia. This discharge is called Combined Sewer Overflow (CSO). There are 53 permitted CSO outfalls in the District.

Along with a few smaller CSO projects, DC WASA is currently engaged in implementing a Long Term Control Plan (LTCP) for CSOs that discharge to the Anacostia River, Rock Creek and the Potomac River. The schedule for completing the LTCP spans over a 20-year period that ends in 2025 and is included in a Federal Consent Decree between the United States, the District Government and DC WASA. The benefits of our twenty-year 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 and a significant reduction in debris on our national capital's waterways. In addition, DC WASA'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 federal consent decree was entered by the court in March 2005. Projects to control CSOs to the Anacostia River are at the top of the court ordered schedule and DC WASA has recently completed a draft final Facility Plan for these projects. The Facility Plan includes a Summary Report and detailed implementation schedule which DC WASA has submitted to EPA as required by the consent decree. DC WASA is now moving forward in the design and construction phases of the Anacostia River projects according to the detailed implementation schedule submitted to EPA. A recent Court decision from an environmental group's lawsuit involving the interpretation of Total Maximum Daily Pollutant Load (TMDL) measurement may have a potential impact on the LTCP implementation schedule, as we ensure that the Plan we undertake can achieve the goals and requirements of the District's water quality standards which are the bases for the LTCP. DC WASA continues to work with EPA to clarify and resolve this issue.

The plan includes a variety of improvements throughout the District:

- \$37 million (Project BL) to increase excess flow treatment capacity at Blue Plains: facility planning began in FY 2005 with project completion in FY 2016.
- \$1.4 billion (Project CY) to construct a ten-mile main tunnel system to control Anacostia River overflows, three miles of branch tunnels to relieve surface flooding and a tunnels dewatering pumping station, with project completion in FY 2025.
- \$419 million (Project CZ) to construct a three-mile tunnel system to control Potomac River overflows and a lift station, with facility planning to begin in 2015 and project completion in FY 2025.
- \$70 million (Project DZ) to construct a mile long tunnel system to control Piney Branch/Rock Creek overflows, with facility planning to begin in 2016 and project completion in FY 2025.

Construction is well underway with completion of approximately \$140 million of projects that were included in the settlement of a lawsuit against DC WASA regarding implementation of the federal CSO Nine Minimum Controls program. These projects, which were previously budgeted and planned by DC WASA prior to the lawsuit, have reduced combined sewer overflows by almost 368 percent. We are also underway with engineering to separate additional combined sewer areas in Anacostia and Rock Creek. Additionally, we are completing studies to add Low Impact Development (LID) at several DC WASA facilities. We have undertaken the rehabilitation of our major pumping stations to increase their capacity: three of these stations are in the construction phase with construction to be complete in FY 2009, while the fourth (Poplar Point Pumping Station) is still in the design phase with construction scheduled to be completed by FY 2011:

- Potomac Pumping Station rehabilitation (Project BB), with a lifetime budget of \$18.6 million, provides for replacing pump motors, motor controls, adding variable speed drives, upgrading the electrical system and electrical feeders, and modifying the existing wet-wells and influent channels. The rehabilitation of the pumping equipment has been completed and placed in service. Completion of this station is expected in FY 2009.
- Main & “O” Street Pumping Stations rehabilitation (Project K1), with a project lifetime budget of \$75.9 million, provides for rebuilding and upgrading sanitary pumps, upgrading electrical and ventilation systems, replacing screens and, installing a screening handling system, and installing odor control systems. Completion of this station is expected in FY 2009.
- East Side Pumping Station rehabilitation (Project K3), with a lifetime budget of \$18.5 million, provides for a new, above- grade pumping station. The new station is operational.
- Poplar Point Pumping Station rehabilitation (Project K4), with a lifetime budget of \$12.7 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 currently 80% complete.
- 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 has begun.
- DC WASA Low Impact Development Projects (Project BA) with a lifetime budget of \$3.0 million, project developed to control wet weather related pollution from DC WASA own facilities as part of the agreement for the LTCP. LID technology will be evaluated for it’s effectiveness in controlling storm water runoff and improvement in water quality.
- Rock Creek CSO Projects (Project BH) with a lifetime budget of \$18.1 million, these are early action item projects constructed to lower the discharge of combined sewer overflows through regulator adjustments at several outfalls and a separation of sanitary and storm water at permitted CSO outfalls 031 037, 053, and 058.

- Outfall Sewer Rehabilitation (Project D2) with a lifetime budget of \$56 million, project provides for the rehabilitation of approximately 20,000 feet of the influent sewers to Blue Plains AWT to ensure reliable conveyance of 1076 mgd by April 2011. This project budget has increase by \$26 million and is required to assure that DC WASA can convey 1076 mgd to Blue Plains. After DC WASA inspected the large diameter sewers which convey wastewater from the pumping stations to Blue Plains, the inspections revealed significant corrosion and exposed reinforcing steel in portions of the pipes. Engineering analyses determined that the conduits could not carry 1076 mgd due to their condition. As a result, this project will rehabilitate approximately 4 miles of the Outfall Sewers. In accordance with the decree, DC WASA has requested approximately a 4 year extension to 2011 to convey 1076 mgd until the rehabilitation project is complete. The cost of this project has been incorporated within the ten-year capital plan to ensure that the benefits of the Long Term Control Plan can be fully realized and that DC WASA is in complete compliance with all requirements.

Additional projects within the combined sewer area include:

- Main & 'O' Pump Station Intermediate Upgrade (Project FQ), with a lifetime budget of \$13.2, this project reflects work originally anticipated to be completed later in the ten-year plan. However, a small portion of the work was removed from the original upgrade project (EK) and has been brought forward in this new project along with some other needed work to provide for needed replacement of storm water pumps and various sluice gates and gate valves at the Main and O Street Pumping Stations.
- Combined Sewers Under Buildings (Project G7) – with a lifetime budget of \$7 million, the project has been added to rehabilitate combined sewers located under buildings citywide. This project is a result of the highest priority recommendations from the sewer assessment. Other activities included in this project are cleaning, pre and post CCTV, sealing joints and repair of offset pipe.

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: CSO Program Management
Activity Group/Project Title: **AV CSO Program Management**
Managing Department: Engineering and Technical Services **EPMC:** N/A
Priority: Potential Failure/Ability to continue meeting permit requirement

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

Project Description:

Project AV provides engineering project management services for planning, design and rehabilitation projects for WASA'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.

Funding by User (percent):

DC - 90.60%
 EPA/Fed - 9.40%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	3,060,146
FY2009 Revised/FY2010 Proposed Life Budget	9,680,146
Increase/(Decrease) to Approved Life Budget:	6,620,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	2,526	879	1,643	1,322	1,011	1,008	500				0
Commitments Budget	2,610	7,070									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2008

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 hydraulic analyses and modeling. Services required by WASA related to compliance of the 3-Party Consent Decree and the CSS LTCP Consent Decree are also provided under this project.

Impact on Operations:

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

Funding by User (percent):

DC - 54.70%
 EPA/Fed - 44.59%
 WSSC - 0.55%
 Fairfax - 0.10%
 Loudoun/PI - 0.05%



FY2008 Approved Life Budget	14,518,848
FY2009 Revised/FY2010 Proposed Life Budget	14,518,848
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	14,231	284									0
Commitments Budget	14,519										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **A7 Supplemental Environmental Projects**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
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, WASA will provide funds to the Chesapeake Bay Foundation to undertake green roof projects within the CSO area in the District. WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,900,000
FY2009 Revised/FY2010 Proposed Life Budget	1,900,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,536	47	20	20	20	16					0
Commitments Budget	1,700	200									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **BA WASA Low Impact Development Projects**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Feb 2002
Construction:	Jun 2004
Project Completion:	May 2014

Project Description:

This project was developed in accordance with WASA's commitment to promote Low Impact Development (LID) to control wet weather related pollution, WASA has or will under take projects to implement LID technology at its own facilities, when and where possible. In addition to reduce storm water runoff and thereby contribute to the water quality of the receiving waters, this also provides WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	3,000,000
FY2009 Revised/FY2010 Proposed Life Budget	3,000,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	424	265	212	1,089	493	106	45				0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	572	320	1,928		180						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **BB Potomac Pumping Station Rehab**
Managing Department: Engineering and Technical Services **EPMC:** N/A
Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	Jul 2002
Construction:	Apr 2005
Project Completion:	Sep 2011

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.

Funding by User (percent):

DC - 25.54%
 EPA/Fed - 24.36%
 WSSC - 27.33%
 Fairfax - 14.43%
 Loudoun/PI - 8.33%



FY2008 Approved Life Budget	18,575,590
FY2009 Revised/FY2010 Proposed Life Budget	18,575,590
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	14,660	3,680	41	41							0
Commitments Budget	17,475	1,101									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **BH Rock Creek CSO Projects**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2007
Construction:	Mar 2009
Project Completion:	Mar 2013

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.

Funding by User (percent):

DC - 95.73%
 EPA/Fed - 4.27%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	12,507,000
FY2009 Revised/FY2010 Proposed Life Budget	18,070,900
Increase/(Decrease) to Approved Life Budget:	5,563,900

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	592	3,937	6,158	3,121	2,782	521					0
Commitments Budget	734	12,652		4,685							

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2004
Construction:	Feb 2008
Project Completion:	May 2009

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.

Funding by User (percent):

DC - 58.81%
 EPA/Fed - 41.19%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	1,150,000
FY2009 Revised/FY2010 Proposed Life Budget	1,315,000
Increase/(Decrease) to Approved Life Budget:	165,000

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	1,108		53								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	1,315										

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: CI O Street - Facility Projects
Managing Department: Facilities and Security **EPMC:** N/A
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Mar 2009

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,350,000
FY2009 Revised/FY2010 Proposed Life Budget	1,350,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	544	62									0
Commitments Budget	1,325	25									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **D2 Outfall Sewer Rehabilitation**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	Nov 2007
Construction:	Apr 2009
Project Completion:	Jun 2011

Project Description:

This project will rehabilitate the existing Outfall Sewer System tributary to the headworks of the Blue Plains WWTP. Four 10-foot diameter sewers were inspected in 2005 and it was concluded that the pipelines will need to be rehabilitated in order to provide reliable service. As the design has progressed to the concept finalization phase, the latest estimates require an additional budget of \$26 million, primarily for construction costs. The additional budget is also required for design work to separate the project into multiple contracts in order to meet LTCP deadlines. This project is eligible for 50/50 matching funding from the Congressional CSO Appropriation.

Impact on Operations:

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

Funding by User (percent):

DC - 20.67%
 EPA/Fed - 20.68%
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.43%



FY2008 Approved Life Budget	30,000,000
FY2009 Revised/FY2010 Proposed Life Budget	56,000,000
Increase/(Decrease) to Approved Life Budget:	26,000,000

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	1,239	8,312	34,059	10,680							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	2,535	53,465									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **DB Sewer Services Field Facility & Relocation**
Managing Department: Engineering and Technical Services **EPMC:** NA
Priority: Board Policy, WASA's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2008
Construction:	Jan 2009
Project Completion:	Mar 2013

Project Description:

This project is for efforts needed to address the new stadium projects in the vicinity of Main and "O", and the renovations attendant thereto. Both Long- term and short- term alternate locations for Fleet (and vehicle storage) and Sewer Services' staff must be addressed, as well as the security of the remaining pump station, as also the large sewer main that traverses the property. We expect to be fully reimbursed by the District, through the Anacostia Waterfront Development Corporation (AWDC) for all related costs, and expect no impact on WASA rate-payers.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	40,500,000
FY2009 Revised/FY2010 Proposed Life Budget	40,500,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	381	227	10,686	11,358	4,646	35					0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	419	23,446	16,235	400							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **DD Main & O Pump Sta. Development Effort**
Managing Department: Finance and Budget **EPMC:** NA
Priority: Board Policy, WASA's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	2,000,000
FY2009 Revised/FY2010 Proposed Life Budget	2,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	388	580	715								0
Commitments Budget	646	1,354									

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

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: DS New WASA Headquarters
Managing Department: Engineering and Technical Services **EPMC:** N/A
Priority: Good Engineering, Low, M&F over long term

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

Project Description:

This project is for the construction of the new DC WASA Headquarters building. However, at this time we have budgeted for only \$2 million for the immediate costs of planning and preliminary design; additional budget will be added resulting from the outcome of the planning and preliminary design.

Impact on Operations:

Though this project will have an impact on the operating budget; the extent is not determinable at this preliminary stage.

Funding by User (percent):

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



FY2008 Approved Life Budget	2,000,000
FY2009 Revised/FY2010 Proposed Life Budget	2,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	366	34								0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		2,000									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: NA
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Feb 2009
Construction:	Oct 2010
Project Completion:	Sep 2013

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.

Funding by User (percent):

DC - 24.87%
 EPA/Fed - 24.87%
 WSSC - 27.42%
 Fairfax - 14.48%
 Loudoun/PI - 8.36%



FY2008 Approved Life Budget	9,470,000
FY2009 Revised/FY2010 Proposed Life Budget	9,470,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	560	723	2,218	4,166	1,425					0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		1,430	855	6,810	375						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **EK Long Term Rehabilitation Main & O Pump Stations**
Managing Department: Engineering and Technical Services **EPMC:** NA
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2016
Construction:	Aug 2019
Project Completion:	Jan 2023

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). Accordingly, the budget for this project has been reduced to reflect the cost of such work transferred to the new Project (FQ).

Impact on Operations:

While there is minimal financial impact on Operations, this project provides new sanitary and storm pumps, which 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	82,575,000
FY2009 Revised/FY2010 Proposed Life Budget	72,444,000
Increase/(Decrease) to Approved Life Budget:	-10,131,000

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0								1,181	3,444	63,336
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
									11,533		60,911

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** NA
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2009
Construction:	Mar 2011
Project Completion:	Nov 2013

Project Description:

This project will provide a partial rehabilitation to this facility that was placed in service in 1990. It will provide for the replacement of deteriorated chemical pumps, repair structural damage done by chemicals, make repairs to the control system and wiring for the chemical pumps, replace deteriorated conduits and wiring in the screen room and swirl room as necessary, replace damaged components of HVAC system and repair the control system for the mixing chamber.

Impact on Operations:

This project will decrease maintenance costs by generally improving the condition of the facility. Installing correctly sized pumps for the current capacity, thus decreasing the flooding of the station and the related cleanup costs, as well as preventing water getting into the switch gear and shorting out, will also improve overall reliability and effectiveness of the station.

Funding by User (percent):

DC - 93.38%
 EPA/Fed - 6.62%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	3,665,000
FY2009 Revised/FY2010 Proposed Life Budget	3,665,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	29	152	191	589	1,757	400	22				0
Commitments Budget	145	290	50	2,865	315						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: NA
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Jun 2016
Construction:	Nov 2017
Project Completion:	May 2019

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	7,515,000
FY2009 Revised/FY2010 Proposed Life Budget	7,515,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0								221	717	5,590
Commitments Budget									1,085	650	5,780

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **FQ Main & O St PS Intermediate Upgrade**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

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

Project Description:

This project will provide for needed replacement of storm water pumps and various sluice gates and gate valves at the Main and O Street Pumping Stations. In Main, this project will replace three storm pumps, motors and controls and add a new sluice gate to isolate the suction side of Pump No. 4. Also, the project will replace the 48" Butterfly Valve 16 on the discharge side of Pump No. 4 with a plug valve, remove and plug the 30" Butterfly Valve 17 on the overflow to the river, and replace the 66" Sluice Gate 9 on the suction side of Pump No. 1. It replaces the discharge flap gates on all six storm pumps. In the 'O' Street Pumping Station this project will replace seven gate valves on the suction and discharge of the four sanitary pumps and automate these gate valves to improve control of the flow within the station. A major part of this project's budget was funded by transferring the rehabilitation tasks (and associated budgets) from Project EK.

Impact on Operations:

There will be no significant impacts on operational costs.

Funding by User (percent):

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



FY2008 Approved Life Budget	<input type="text"/>
FY2009 Revised/FY2010 Proposed Life Budget	13,155,000
Increase/(Decrease) to Approved Life Budget:	13,155,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	1,229	1,519	6,574	2,433	54					0
Commitments Budget		2,035	10,940	90	90						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **G7 Combined Sewers Under Buildings**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2012

Project Description:

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

Impact on Operations:

There will be no significant impacts on operational costs.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	7,000,000
Increase/(Decrease) to Approved Life Budget:	7,000,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0		2,120	2,120	2,120						0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
			7,000								

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **K0 Replacement of CSO Fabridam**
Managing Department: Engineering and Technical Services **EPMC:** N/A
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2000
Construction:	Sep 2002
Project Completion:	

Project Description:
 Project K0 provides for the replacement of the 12 fabridams, piping and controls at eight sites in the combined sewer system. Many of the existing dams are at or near the end of their useful lives. These fabridams are an integral part of the current CSO control.

Impact on Operations:
 Replacement of these dams and their controls will reduce the magnitude of overflows by diverting flow into the various pumping stations so that it can be pumped to Blue Plains for treatment. These dams are an integral part of the Long Term Control Plan and are required by the NPDES Permit No. DC0021199. There will be no material impact on the operating costs.

Funding by User (percent):

DC -	64.97%
EPA/Fed -	35.03%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%



FY2008 Approved Life Budget	10,350,900
FY2009 Revised/FY2010 Proposed Life Budget	10,031,175
Increase/(Decrease) to Approved Life Budget:	-319,725

CLOSED

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	10,031										
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	10,031			0		0				0	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority

FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **K1 Main & "O" St. Pump Stations**
Managing Department: Engineering and Technical Services **EPMC: NA**
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2001
Construction:	Apr 2005
Project Completion:	Sep 2011

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	75,920,723
FY2009 Revised/FY2010 Proposed Life Budget	75,920,723
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	62,502	8,789	110								0
Commitments Budget	72,642	3,279									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **K3 East Side Pumping Station**
Managing Department: Engineering and Technical Services **EPMC:** N/A
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 2001
Construction:	Aug 2004
Project Completion:	Aug 2010

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.

Funding by User (percent):

DC - 53.77%
 EPA/Fed - 46.23%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	18,455,852
FY2009 Revised/FY2010 Proposed Life Budget	18,455,852
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	16,406	390	74								0
Commitments Budget	18,022	433									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **K4 Poplar Point Pumping Station**
Managing Department: Engineering and Technical Services **EPMC:** N/A
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2005
Construction:	Sep 2009
Project Completion:	Jul 2012

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.

Funding by User (percent):

DC - 91.25%
 EPA/Fed - 8.75%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	6,601,001
FY2009 Revised/FY2010 Proposed Life Budget	8,601,001
Increase/(Decrease) to Approved Life Budget:	2,000,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,419	761	3,770	1,493	67						0
Commitments Budget	1,933	6,373	220	75							

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Combined Sewer Overflow
Program Title: Combined Sewer Projects
Activity Group/Project Title: **K5 Dry-Weather Overflow Elimination**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	May 1999
Construction:	Oct 2000
Project Completion:	Jan 2011

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.

Funding by User (percent):

DC - 56.67%
 EPA/Fed - 43.33%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	12,128,271
FY2009 Revised/FY2010 Proposed Life Budget	12,128,271
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	7,648	2,010	1,131	110							0
Commitments Budget	11,993	25	110								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: CSO Long Term Control Plan
Activity Group/Project Title: **CY CSO LTCP Anacostia Projects**
Managing Department: Engineering and Technical Services **EPMC:** NA
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2009
Construction:	Mar 2011
Project Completion:	Jun 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.

Funding by User (percent):

DC - 98.62%
 EPA/Fed - 1.38%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	1,372,544,800
FY2009 Revised/FY2010 Proposed Life Budget	1,372,544,800
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	21,712	18,520	22,667	55,720	92,981	78,610	114,597	119,712	106,228	92,276	559,786
Commitments Budget	40,106	70,344	13,055	189,190	24,885	35,036	329,302	126,008		15,750	528,869

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: CSO Long Term Control Plan
Activity Group/Project Title: **CZ CSO LTCP Potomac Projects**
Managing Department: Engineering and Technical Services **EPMC:** NA
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2018
Construction:	Mar 2021
Project Completion:	Jun 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	418,700,000
FY2009 Revised/FY2010 Proposed Life Budget	418,700,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0							3,630	6,785	5,751	380,072
Commitments Budget								20,935			397,765

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Combined Sewer Overflow
Program Title: CSO Long Term Control Plan
Activity Group/Project Title: **DZ CSO LTCP Rock Creek Projects**
Managing Department: Engineering and Technical Services **EPMC:** NA
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2019
Construction:	Mar 2022
Project Completion:	Jun 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	70,341,600
FY2009 Revised/FY2010 Proposed Life Budget	70,341,600
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0								546	1,018	63,325
Commitments Budget									3,517		66,825

(projected disbursements do not include contingencies)

(dollars in thousands)

**Approved
FY 2008-2017**

Capital Improvement Program

SECTION VI

Stormwater Service Area

There are approximately 600 miles of storm sewer pipes in the District that convey storm runoff to the Blue Plains plant for treatment.



District of Columbia
Water and Sewer
Authority

VI



STORMWATER

Over 34 miles of rivers and streams in and around the District of Columbia do not support swimming and aquatic life. Stormwater runoff from separated and combined sewers is the primary source of pathogens that cause impairments to the District's local waterways. The District's stormwater system includes both separate and combined sewers, has approximately 600 miles of storm sewer pipes, catch basins, inlets, special structures and related facilities. Some components of the existing storm sewer system are over 100 years old. The system is constructed of a variety of materials such as ductile iron, plastic, steel, brick, cast iron, cast-in place concrete, brick and concrete, vitrified clay, and concrete. DC WASA 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 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 several best practice enhancements, several with measurable and quantifiable milestones.

While DC WASA has a long term control plan to address these issues within the combined sewer areas, DC WASA's staff continues to participate in the MS4 task force, and to monitor the impact of other MS4 NPDES requirements on DC WASA and its ratepayers. Significant progress has been made throughout the District. Since 2001, DC WASA 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 WASA continues to collect those fees on behalf of the District and transfers them to DDOE quarterly. Over the past year, 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 WASA's lifetime budget for the Stormwater Service Area is \$44 million. Projects include rehabilitation or replacement of certain storm sewer systems that have experienced structural deterioration and studies and analysis. DC WASA 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 WASA 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 WASA has the expertise available to support this research as required to enable evaluation of alternatives and best practices for future decision making.

Local Drainage Projects - \$4 million

(project pages VI-5 to VI-6)

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, which will correct a drainage and flooding problem. Complication with access permits resulted in a delay of construction advertisement. The design was completed in FY 2008 and construction is scheduled to begin in FY 2009.

On-Going Stormwater Projects – \$8.1 million

(project pages VI-7 to VI-20)

These include projects carried out by DC WASA’s Department of Sewer Services, including storm sewer rehabilitation and extensions to serve new development.

Pumping Facilities - \$1.2 million

(project pages VI-21 to VI-21)

As in last year’s budget, we have not included funding for stormwater pumping rehabilitation projects. We have been engaged in extensive discussions with the District over the last few years regarding how responsibilities for a variety of stormwater-related functions are divided among District agencies, including responsibility for stormwater pumping stations. To date, turn over of these activities to others is still anticipated.

DDOT Storm Projects – \$4.6 million

(project pages VI-22 to VI-37)

This program funds projects associated with DDOT road projects, which often require relocation of storm sewers, inlets or other structures. We have reduced the lifetime budgets in this area based on an analysis of actual spending and work completed over the last three to five years, which has been significantly less than budgeted.

Stormwater Research and Program Management - \$7.6 million

(project pages VI-38 to VI-38)

This area provides for required technical assessments and hydraulic studies required to assess problems in the storm water system. For example, a comprehensive study of the Palisades Stormwater neighborhood flooding problems was completed in FY 2008 and a study of the federal triangle area has been requested by various federal agencies. These investigations are anticipated to be

reimbursed through the MS4 fees and thus have no impact upon the rate payers, however, the budget is included within this program area. This also funds program management costs associated with studies and designs of DC WASA facilities that may involve review of stormwater facilities.

Trunk/Force Sewers – \$18.4 million

(project pages VI-39 to VI-39)

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.

- Pennsylvania Avenue Storm Sewer Rehab – Project BO 04 – The project involves the replacement of a storm sewer under Pennsylvania Avenue between 38th and Texas Avenue SE and other improvements at the discharge headwall. The final design was provided in FY 2008 and construction is scheduled for early FY 2009.
- Bangor Street & Park Drive Storm Sewer Rehab – Project BO 06 – The project involves the installation of an inlet and associated storm sewer along an undeveloped alley easement to an existing storm sewer near Bangor Street. Additional alley improvements (curbing, regrading) will be necessary to prevent overland flow from adjacent properties. In addition, 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. Design for the projects is scheduled for FY 2009 with construction in FY 2010.

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Oct 2004
Construction:	Mar 2009
Project Completion:	Nov 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,149,166
FY2009 Revised/FY2010 Proposed Life Budget	3,019,166
Increase/(Decrease) to Approved Life Budget:	1,870,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	242	1,298	1,468								0
Commitments Budget	251	2,768									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Stormwater Service Area
Program Title: Stormwater Local Drainage
Activity Group/Project Title: **D1 Drainage Improvement Projects**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jul 2003
Construction:	Feb 2004
Project Completion:	Sep 2008

Project Description:

This project involves drainage throughout the city. Presently, it includes the construction of drainage systems along W Street, NW, Broad Branch Parkway, NW, Lingan Road, NW, 5300 Sherrier Place, NW, and Henson Ridge, SW.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	1,007,700
FY2009 Revised/FY2010 Proposed Life Budget	1,007,700
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		921	0								
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		1,008									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Mar 2010
Project Completion:	Jun 2011

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	600,000
FY2009 Revised/FY2010 Proposed Life Budget	600,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0		226	296							0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
			600								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	Mar 2009
Project Completion:	Jun 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	497,000
FY2009 Revised/FY2010 Proposed Life Budget	497,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	187	245								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		497									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: N/A**
Priority: Good Engineering, Low, M&F over long term

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

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	618,000
FY2009 Revised/FY2010 Proposed Life Budget	618,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0			235	303						0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
				618							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	
Project Completion:	Sep 2008

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	247,000
FY2009 Revised/FY2010 Proposed Life Budget	247,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	168		9								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	247										

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	Jun 2004
Project Completion:	Sep 2009

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	497,000
FY2009 Revised/FY2010 Proposed Life Budget	497,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	416	68									0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	416	81									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: N/A**
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	May 2007
Project Completion:	Sep 2009

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	497,000
FY2009 Revised/FY2010 Proposed Life Budget	497,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	371	70									0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	416	81									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Stormwater Service Area
Program Title: Stormwater On-Going
Activity Group/Project Title: **C7 FY2007- DSS Storm Sewer Project**
Managing Department: Sewer Services **EPMC: N/A**
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	Oct 2008
Project Completion:	Dec 2009

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	497,000
FY2009 Revised/FY2010 Proposed Life Budget	497,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	6	413	17								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	6	491									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: N/A**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jan 2009
Project Completion:	Apr 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	497,000
FY2009 Revised/FY2010 Proposed Life Budget	497,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	242	161	83								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		497									

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: N/A**
Priority: Good Engineering, Low, M&F over long term

<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.

Funding by User (percent):

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



FY2008 Approved Life Budget	637,000
FY2009 Revised/FY2010 Proposed Life Budget	637,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0				244	310					0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
					637						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority

FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

<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.

Funding by User (percent):

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



FY2008 Approved Life Budget	660,000
FY2009 Revised/FY2010 Proposed Life Budget	660,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0					249	322				0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
						660					

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: Engineering and Technical Services **EPMC:** NA
Priority: Good Engineering, Low, M&F over long term

<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.

Funding by User (percent):

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



FY2008 Approved Life Budget	680,000
FY2009 Revised/FY2010 Proposed Life Budget	680,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0						259	334			0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	680	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** NA
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	701,000
FY2009 Revised/FY2010 Proposed Life Budget	701,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0							266	343		0
Commitments Budget	Pre FY 2009	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	701	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority

FY 2008 - 2017 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: NA**
Priority: Good Engineering, Low, M&F over long term

<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:

Funding by User (percent):

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



FY2008 Approved Life Budget	720,000
FY2009 Revised/FY2010 Proposed Life Budget	720,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0								360	270	0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
									720		

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Stormwater Service Area
Program Title: Stormwater On-Going
Activity Group/Project Title: **FN FY2017 DSS Stormwater Projects**
Managing Department: Sewer Services **EPMC: N/A**
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	745,000
Increase/(Decrease) to Approved Life Budget:	745,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0									366	279
Commitments Budget										745	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Stormwater Service Area
Program Title: Stormwater Pumping Facilities
Activity Group/Project Title: **AA Rehab. Stormwater Pumping Station**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:

As in last year's budget, we have not included funding for stormwater pumping rehabilitation projects. We have been engaged in extensive discussions with the District over the last few years regarding how responsibilities for a variety of stormwater-related functions are divided among District agencies, including responsibility for stormwater pumping stations. To date, turn over of these activities to others is still anticipated.

Impact on Operations:

As this responsibility is to be transferred to DDOT, there is no impact on operating costs.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,172,937
FY2009 Revised/FY2010 Proposed Life Budget	1,172,937
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	342										0
Commitments Budget	417										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2009

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 Public Works. This project is needed to minimize public inconvenience caused by construction work and to save WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	160,000
FY2009 Revised/FY2010 Proposed Life Budget	160,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	160									0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		160									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Stormwater Service Area
Program Title: DDOT Stormwater
Activity Group/Project Title: **B3 B3 FY2010 - DDOT Stormwater Projects**
Managing Department: DC Dept. of Transportation **EPMC:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2010

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 Public Works. This coordination minimizes public inconvenience caused by construction work and saves WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	165,000
FY2009 Revised/FY2010 Proposed Life Budget	165,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0		165								0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
			165								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

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

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 Public Works. This coordination minimizes public inconvenience caused by construction work and saves WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	170,000
FY2009 Revised/FY2010 Proposed Life Budget	170,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0			170							0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
				170							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Stormwater Service Area
Program Title: DDOT Stormwater
Activity Group/Project Title: **CB FY2012 - DDOT Stormwater Projects**
Managing Department: Engineering and Technical Services **EPMC:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2012

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 Public Works. This coordination minimizes public inconvenience caused by construction work and saves WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	175,000
FY2009 Revised/FY2010 Proposed Life Budget	175,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0				175						0
Commitments Budget					175						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Stormwater Service Area
Program Title: DDOT Stormwater
Activity Group/Project Title: **CL FY2013 - DDOT Stormwater Projects**
Managing Department: Engineering and Technical Services **EPMC:** N/A
Priority: Good Engineering, Low, M&F over long term

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

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	180,000
FY2009 Revised/FY2010 Proposed Life Budget	180,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0					180					0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
						180					

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Stormwater Service Area
Program Title: DDOT Stormwater
Activity Group/Project Title: **D8 FY2014 - DDOT Stormwater Projects**
Managing Department: Engineering and Technical Services **EPMC:** NA
Priority: Good Engineering, Low, M&F over long term

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

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	185,000
FY2009 Revised/FY2010 Proposed Life Budget	185,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0						185				0
Commitments Budget							185				

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** NA
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	191,000
FY2009 Revised/FY2010 Proposed Life Budget	191,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0							191			0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
								191			

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Stormwater Service Area
Program Title: DDOT Stormwater
Activity Group/Project Title: DT FY2016 - DDOT Stormwater Projects
Managing Department: Engineering and Technical Services **EPMC:** NA
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
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 Public Works. This coordination minimizes public inconvenience caused by construction work and saves WASA the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

Funding by User (percent):

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



FY2008 Approved Life Budget	196,000
FY2009 Revised/FY2010 Proposed Life Budget	196,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0								170	26	0
Commitments Budget	Pre FY 2009	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
									196		

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	205,000
Increase/(Decrease) to Approved Life Budget:	205,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0									175	0
Commitments Budget										205	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2009

Project Description:
 This project was created as an annual program for Planned DPW projects in FY2000 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	755,198
FY2009 Revised/FY2010 Proposed Life Budget	755,198
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	409	128									0
Commitments Budget	500	255									

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2009

Project Description:

This project was created as an annual program for Planned projects by the Department of Public Works 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	713,955
FY2009 Revised/FY2010 Proposed Life Budget	713,955
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	601	114									0
Commitments Budget	714										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2009

Project Description:
 This project was created as an annual program for Planned projects by the Department of Public Works in FY2002 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	184,672
FY2009 Revised/FY2010 Proposed Life Budget	184,672
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	118	68									0
Commitments Budget	185										

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Jun 2009

Project Description:
 This project was created as an annual program for Planned projects by the Department of Public Works in FY2003 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	175,000
FY2009 Revised/FY2010 Proposed Life Budget	175,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	175									0
Commitments Budget		175									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2008

Project Description:
 This project was created as an annual program for Planned projects by the Department of Public Works 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	20,000
FY2009 Revised/FY2010 Proposed Life Budget	20,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	20									0
Commitments Budget	0	20									0

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2009

Project Description:
 This project was created as an annual program for Planned projects by the Department of Public Works 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	155,000
FY2009 Revised/FY2010 Proposed Life Budget	155,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0										0
Commitments Budget		155									

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2009

Project Description:
 This project was created as an annual program for Planned projects by the Department of Public Works 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,000,000
FY2009 Revised/FY2010 Proposed Life Budget	1,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	155									0
Commitments Budget		1,000									

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

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

Project Description:

This project provides engineering program management services for the storm water service area capital projects and design management services for the rehabilitation or replacement of 15 storm water 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	9,630,190
FY2009 Revised/FY2010 Proposed Life Budget	7,630,190
Increase/(Decrease) to Approved Life Budget:	-2,000,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	4,575	263	601	556	316	239					0
Commitments Budget	5,490	2,140									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Jan 2006
Construction:	Jan 2009
Project Completion:	Oct 2014

Project Description:

This project provides design and construction services for stormwater 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 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	18,405,000
FY2009 Revised/FY2010 Proposed Life Budget	18,405,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	1,010	3,324	2,632	430	2,065	1,746	1,695	9			0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	1,313	6,670	4,088		2,364	2,000	1,970				

(projected disbursements do not include contingencies)

(dollars in thousands)

**Approved
FY 2008-2017**

Capital Improvement Program

SECTION VII

Water System Service Area

Replacement and rehabilitation of water transmission and distribution mains are included in DC WASA's Capital Improvement Program.



District of Columbia
Water and Sewer
Authority

VII



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 line and meter replacements.

The water distribution system includes appurtenances necessary for proper system operation, inspection, and repair. DC WASA's system includes approximately 1,300 miles of pipe and over 36,000 valves of various sizes. A variety of valve types allow flow control, prevent air entrapment, allow watermain draining, permit flow in only one direction, and allow water transfer between service areas during emergencies. The system also includes approximately 9,000 hydrants in public space to support DC Fire and Emergency Services.

The lifetime budget for the Water Service Area is approximately \$1 billion, which is slightly reduced from last year's CIP primarily due to the revised strategy for replacement of public lead service lines. Major water projects include construction of a new pumping station to serve areas east of the Anacostia River; water main replacements, rehabilitations and extensions; lead service replacements; fire hydrant replacements; and valve replacements.

Water System Facilities Planning

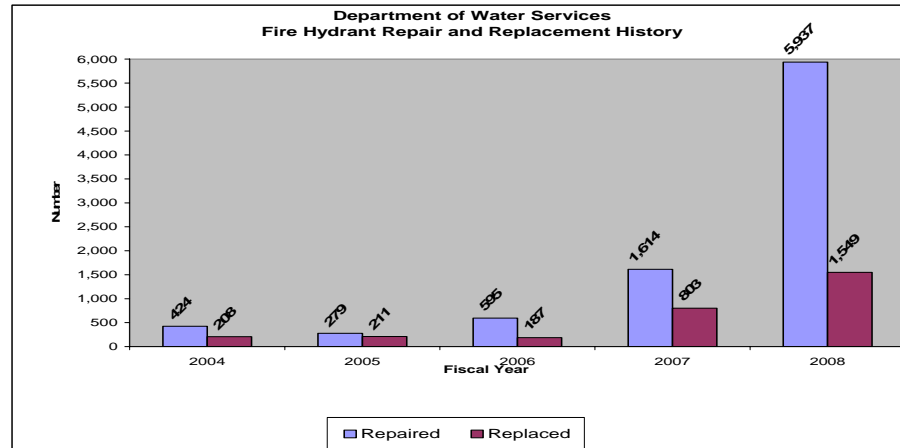
DC WASA began work on its first Water System Facilities Plan in 1998 and completed it in September 2000. A facilities plan evaluates the existing system and provides an assessment of improvements needed. The 2000 Facilities Plan identified fourteen projects and a small diameter water main rehabilitation program to be included in the CIP at a ten-year cost of just under \$ 300 million. At this time 9 of 14 projects included in the Facilities Plan have been completed or are under construction. Also, in 2004, the lead service replacement program was included in the capital improvement program. A recent draft update of the facilities plan identified current system needs and related potential CIP projects. Specifically, the report indicated a need for a more aggressive small diameter water main rehabilitation program, given that approximately half of the small diameter water mains in service are more than 75 years old and over 15% are more than 100 years old. DC WASA management and staff are reviewing the findings of the draft update of the facilities plan and will work to integrate the results with other findings in the water service area in a comprehensive and long-term view point of system maintenance and rehabilitation.

Water Distribution System – \$369.6 million

(project pages VII-8 to VII-41)

This program provides for rehabilitation, replacement or extension of the water distribution system through several project categories. This year's water distribution system budget includes increases for a variety of water quality-related work, primarily in the small main area. Highlights of the work under this program by project category are:

- *Valve Replacements* - This involves replacing defective valves throughout the water distribution system. Operable valves are necessary to complete the annual flushing program, for routine and emergency system repairs, and for support of capital projects that require valve operation to isolate portions of the system. Six contracts replacing 112 large valves (16-inch and larger) are either completed or under construction, and three additional contracts to replace approximately 50 large valves are planned for construction in FY2009 through FY2012. Additionally, a contract that includes replacing 38 small diameter valves throughout the District is scheduled to commence construction in FY2009.
- *Water Main Dead End Elimination* – This project eliminates the potential for stagnant water accumulating at the end of water mains and will assist in maintaining water quality in the distribution system. Eliminating known dead end water mains is accomplished by looping to other water mains or by providing a fire hydrant to flush the line. The three projects in the capital program to perform this work were accelerated to commence construction in FY2005 as part of our overall focus on water quality projects. It is scheduled that the last construction contract will be completed in FY2009.
- *Large Diameter Water Main Rehabilitation* - This project consists of performing internal joint repairs on large diameter (16-inch diameter and larger) water mains exhibiting a high frequency of joint leaks. It also includes cleaning and lining water mains, if necessary, and replacing or rehabilitating smaller segments of water mains. Work also includes the relocation of water mains from underneath private property when necessary. Several jobs were completed and two contracts for internal joint repairs are scheduled to commence construction in FY2011 and FY2013 respectively.
- *Water Distribution/Transmission Mains* - These projects include replacing and constructing distribution and transmission mains in the system. In FY2007, construction commenced for one construction contract that includes replacing 6,100 linear feet of 20-inch water main in Minnesota Avenue S.E. with a 30-inch water main, and for installing approximately 5,300 linear feet of 24-inch water main to reinforce the supply to the Fort Stanton Reservoirs. Construction of approximately 5,100 linear feet of 16-inch water main in Michigan Avenue, NE to reinforce the supply to the McMillan Water Treatment Plant was completed in FY2008.
- *Fire Hydrant Program* - The original \$26.5 million program provided funding for the replacement/upgrade of up to 3000 of the critical public fire hydrants on behalf of the District of Columbia government over a five year period that began in FY 2006. Through FY 2008, over 2,500 hydrant replacements/upgrades in public space were completed by DC WASA as shown in the graph below.



In addition, repairs and maintenance are ongoing. In October 2007, DC WASA and the DC Fire and Emergency Medical Services entered into a Memorandum of Understanding to jointly inspect all public fire hydrants annually within the District and provide an identification and replacement program for a portion of the inventory. As DC WASA is well on its way to completing the original quantity target prior to the end of the five year period, a phase two program has been included within this budget proposal for approximately \$30 million over a five year period. As the cost is born by the District of Columbia (DC) and not the rate payers, the proposal will be subject to review and acceptance by DC officials and the appropriate budget process. However, inclusion within the DC WASA budget proposal will provide congressional contracting authority that will be required to move forward. A major highlight in FY 2008 has been the 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 with construction scheduled to be completed FY2010. Higher pressures combined with older mains in this area makes replacement necessary. Additionally, a holistic approach combining the lead service replacement program and the water main rehabilitation program was implemented. The planned FY2009 replacement of approximately 25,000 LF of small diameter water mains will include LSR work within one construction contract. The concept for this approach is, for a given block where the small diameter water main replacement is required. DC WASA will also assess the presence of lead service. In addition, replacement of all

valves and hydrants will be accomplished at the same time as required. Finally, it was coordinated that the District Department of Transportation will complete a majority of the road and sidewalk restoration work after the water mains are installed. The concept is to complete all needed improvements to a block at one time to minimize disruption and costs. Future fiscal year small diameter water main replacement projects will follow this holistic approach.

- *Cleaning & Lining Large Diameter Water Mains* – DC WASA is re-evaluating the rehabilitation program for large diameter water mains and alternative rehabilitation or replacement methods may be proposed in the future.

On-Going Water Projects – \$74.2 million

(project pages VII-42 to VII-54)

The ongoing program includes small projects for extension of water mains to service new development in the District of Columbia, repairing water main breaks, replacing valves and fire hydrants, replacing water service connections, and other minor water main rehabilitation work. Budgeted projects reflect the substantial costs of street repaving due to the street repair and restoration regulations required of DC WASA and other area utilities.

Water Pumping Facilities – \$116.1 million

(project pages VII-55 to VII-61)

This program includes several projects to rehabilitate or replace water-pumping stations in the system.

- Construction of a new Anacostia Pumping Station at the same site of the existing pumping station commenced in FY2007 and is schedule to be completed in early FY2009. The new pumping station includes pumps that will serve the new proposed service area in the southern portion of the Anacostia first high service area. The total project budget is \$31 million.
- A major rehabilitation of the Bryant Street Pumping Station to meet current code requirements and maintain the reliability of the water distribution system was substantially completed in FY2007. The final closeout of the construction contract will be completed in FY2009. Work included replacing 11 high lift pumps, architectural improvements to the building, replacing heating, cooling and ventilating system, paving and site improvements, replacing water mains, cathodic protection of a 48-inch steel water main, rehabilitating the warehouse and shop buildings, and an electronic security system. Also, upgrading SCADA for the water distribution system is included. The total budget for this project is \$64.2 million.
- The rehabilitation/replacement of six large diameter discharge pipes from the Bryant Street Pumping Station ,ranging in size from 24-inch to 48-inch diameter, is included in the CIP. Construction of this project is scheduled to start in FY2010 and the total budget is \$7 million. Also, included in the CIP is the rehabilitation of the parking deck bridge ramp connecting the rooftop parking area over the Meter Shop and Warehouse building at the Bryant Street Pumping Station site at a total budget of \$0.4 million.
- The Fort Reno Pumping Station will be upgraded to improve pressure in the fourth high service area in the northwest quadrant of the District. This project includes the replacement of pump controls, three existing variable drives and electrical equipment. The improvements also include an emergency backup generator and twenty-eight (28) remote pressure monitoring stations at critical

locations in the water distribution system, which will improve system operations. Construction is currently scheduled to commence in FY2010 at a total project budget of \$10.5 million.

- A project to upgrade the 16th and Alaska Avenue Pumping Station was added to the CIP and includes the installation of redundant suction and discharge headers; replacement of the electrical distribution equipment and controls; improvements to the ventilation system for cooling of the station and provisions for a second electric feeder. The total budget for this project is \$4.4 million and construction is scheduled to commence in FY2011.

DDOT Water Program – \$37.1 million

(project pages VII-62 to VII-79)

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 – \$34 million

(project pages VII-80 to VII-84)

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. Coordination with District authorities to obtain zoning approvals will be completed by early FY 2011 with design commencing in late FY2009, and construction scheduled to be completed in FY2013. In addition, siting studies for the two new storage facilities are scheduled as follows: 5 million gallon reservoir in the 2nd high service area, expected to commence in FY2009 (Project MR), and a 2 million gallon elevated storage tank in the 4th high service area, expected to start in FY2014 (Project MQ). Design of each of these facilities follows the completion of the siting study with construction commencing in FY 2012 and FY 2017 respectively.

Design for the emergency rehabilitation of the Fort Stanton Reservoir #2 (Project FA) is scheduled to commence in early FY2009 with construction also commencing in FY2009. The emergency work is required to stop the leakage of reservoir, and repair the damage caused by the failure of the embankment and drainage system near the reservoir.

Water Service Area - Management – \$23.3 million

(project pages VII-85 to VII-85)

This program area provides engineering program management services for the water system capital improvements program, including assessing system needs, developing facilities plans and conceptual designs, and managing design consultants through the development of scope of work, cost estimates, task orders or agreements, and design document review. In FY2008, a draft water

system facilities plan was submitted and is currently under review. The plan includes water demand projections and identifies needs through 2030.

Lead Service Replacement Program – \$297 million

(project pages VII-86 to VII-86)

In FY2008, DC WASA achieved its goal and replaced over 3,000 lead services lines in public space. Through FY2008 DC WASA had replaced approximately 17,500 lead service lines in public space, well on the way to the Board's FY2004 goal of replacing the original inventory of 23,000 lines by FY2010. In September 2008, The DC WASA Board of Directors approved a significant modification of the Lead Service Replacement (LSR) Policy to encourage full service line replacements and to manage costs. Under the newly structured LSR program, lead lines in public space (between the main and the property line) will continue to be replaced with copper pipe in conjunction with DC WASA's ongoing water main replacement projects, when DC Department of Transportation is conducting street paving and the customers in that area agree to have the private side replaced or where a customer is replacing the private portion of a lead service line and requests DC WASA to replace the public side of the lead line with funds budgeted for that purpose.

Under the prior program, Board policy mandated the replacement of all of the approximate 35,000 known public lead service lines in the District of Columbia by 2016. It is anticipated that only \$144.6 million will be spent in the 10 year CIP period as compared to the \$438 million that was previously planned.

Metering – \$59.6 million

(project pages VII-87 to VII-88)

The meter installation / Automated Meter Reading (AMR) program, representing approximately 125,000 customer locations under the original contract is substantially completed. Meter Operations is in process of completing the less than 1% of the remaining meters in FY 2009. We are also in the process of upgrading the automated meter reading equipment. This planned upgrade is part of DC WASA's preventative maintenance program for the data collection units, which collect approximately 250,000 meter readings per day and are an essential asset to our billing process. The upgrade allows DC WASA to move to the current version of AMR software in addition to providing two-way communication from the meter transmitting units (mtus) to the data collection units (dcus) (the original equipment provided for one-way communication). The AMR upgrade will be done in phases with the dcu replacements starting in FY 2009 and the mtu replacements completed in conjunction with our meter/mtu preventative maintenance program planned over a seven year period (FY 2010 through FY 2016).

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **A3 16" Tie-in to McMillan Plant**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Board Policy, WASA's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2003
Construction:	Feb 2006
Project Completion: Aug 2009	

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	3,393,026
FY2009 Revised/FY2010 Proposed Life Budget	3,418,948
Increase/(Decrease) to Approved Life Budget:	25,922

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	2,544	458									0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	3,019	400									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Oct 2003
Construction:	Jan 2010
Project Completion:	Jul 2011

Project Description:
 This project entails the upgrade of 5 metered interconnections between WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	2,260,393
FY2009 Revised/FY2010 Proposed Life Budget	2,312,238
Increase/(Decrease) to Approved Life Budget:	51,845

	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
Disbursements Budget	428	156	637	862							0
Commitments Budget	560	70	1,683								

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **BZ Large Valve Replacements 8 - 9**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Health Safety

Phase	Start Date
Design:	Mar 2009
Construction:	Jul 2010
Project Completion:	Nov 2012

Project Description:

Replacement of 40 broken large diameter valves under two separate contracts through out the water distribution system. Replacement of inoperable valves will improve the reliability of the system by reducing the number of valves that would need to be closed under emergency conditions. Increasing the number of operable valves in the system will also reduce the number of customers that may be impacted during emergency conditions.

Impact on Operations:

This project will improve valve operations thus increasing schedule efficiencies. O & M cost avoidance will be realized.

Funding by User (percent):

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



FY2008 Approved Life Budget	7,000,000
FY2009 Revised/FY2010 Proposed Life Budget	7,000,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	92	377	2,638	2,690	283					0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		300	3,500	3,200							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

<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.

Funding by User (percent):

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



FY2008 Approved Life Budget	18,400,000
FY2009 Revised/FY2010 Proposed Life Budget	18,400,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0						167	655	1,493	8,030	6,326
Commitments Budget							300	1,370	16,730		

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Health Safety

<u>Phase</u>	<u>Start Date</u>
Design:	Mar 2007
Construction:	Jun 2009
Project Completion:	Nov 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,000,000
FY2009 Revised/FY2010 Proposed Life Budget	1,038,883
Increase/(Decrease) to Approved Life Budget:	38,883

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	71	94	677	89							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	99	940									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: DC Fire Hydrant Replacement Program
Managing Department: Engineering and Technical Services **EPMC:** NA
Priority: Board Policy, WASA's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	Aug 2006
Project Completion:	Mar 2009

Project Description:

This project includes the replacement of 250 broken fire hydrants through out the water distribution system. DWS began a comprehensive fire hydrant repair and assessment program in FY 2005 resulting in a following project (DL) for the replacement and upgrade of up to 3000 fire hydrants on behalf of The District of Columbia.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	1,567,482
FY2009 Revised/FY2010 Proposed Life Budget	1,567,482
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,507	54									0
Commitments Budget	1,567										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** NA
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Dec 2014
Construction:	May 2016
Project Completion:	Nov 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, improve available fire flows and water quality.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	13,000,000
FY2009 Revised/FY2010 Proposed Life Budget	13,000,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0							516	1,654	8,855	1,109
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
								1,275	11,725		

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2009
Construction:	Jan 2011
Project Completion:	Jul 2012

Project Description:

This project is to rehabilitate 300 linear feet a of 24-inch low service steel main under the ramp of the Whitehurst Freeway and Rock Creek in vicinity of K and 30th Streets, NW. Rehabilitation includes lining the existing 24-inch water main with HDPE and replacement of thrust blocks, couplings and fittings. The water main in 29th and K Streets, NW will be replaced with new HDPE pipe.

Impact on Operations:

This project will have no material impact in the operating budget

Funding by User (percent):

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



FY2008 Approved Life Budget	800,000
FY2009 Revised/FY2010 Proposed Life Budget	838,883
Increase/(Decrease) to Approved Life Budget:	38,883

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	38	29	52	266	378						0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	39	50	70	680							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Board Policy, WASA's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	Jul 2007
Project Completion:	Oct 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	25,000,000
FY2009 Revised/FY2010 Proposed Life Budget	25,539,718
Increase/(Decrease) to Approved Life Budget:	539,718

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	9,833	8,794	4,922	191							0
Commitments Budget	17,443	8,096									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: Water Services **EPMC: NA**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Dec 2015
Construction:	Apr 2017
Project Completion:	Oct 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 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	13,000,000
FY2009 Revised/FY2010 Proposed Life Budget	13,000,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0								518	2,217	9,400
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
									1,275	11,725	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2017
Construction:	Aug 2018
Project Completion:	Jan 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, or to clean and line unlined cast iron pipe provided the pipe is in sound condition. It includes the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program serves to gradually replace deteriorated pipe, and improve available fire flows and water quality

Impact on Operations:

No significant O&M cost impact.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	13,000,000
Increase/(Decrease) to Approved Life Budget:	13,000,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0									359	11,456
Commitments Budget										1,180	11,820

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2010
Construction:	Aug 2011
Project Completion:	Jan 2013

Project Description:

This project is to install cathodic protection systems (CP) on five high priority large diameter steel water mains, where there is a near term need of cathodic protection in order to mitigate corrosion effects degrading these pipelines.

Impact on Operations:

No significant O&M cost impact.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	8,340,000
Increase/(Decrease) to Approved Life Budget:	8,340,000

NEW

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	31	192	588	5,264	1,145					0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		90	600	7,650							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **GQ Fire Hydrant Replacement Program – Phase II**
Managing Department: Water Services **EPMC: EPMC-II**
Priority: Board Policy, WASA's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	Jan 2010
Project Completion:	Jul 2015

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	29,600,000
Increase/(Decrease) to Approved Life Budget:	29,600,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	180	2,484	5,813	4,763	4,750	4,750	3,669			0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		200	5,690	23,710							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: MJ 20" Anacostia 1st High Watermain Replacements
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 2001
Construction:	Feb 2004
Project Completion:	

Project Description:

This project replaces approximately 11,250 linear feet of 20-inch diameter CI water main with a pressure rating of 50 psi in the Anacostia 1st High Service Area. Job MJ01 is to replace approximately 6,100 linear feet of the 20-inch water main along Minnesota Avenue, Good Hope Road and 14th Street SE from Pennsylvania Avenue to W Street. Job MJ02 is to replace approximately 5,150 linear feet of the 20-inch diameter water main in Martin Luther King Jr. Avenue, SE from Milwaukee Place to Upsal Street.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	3,585,263
FY2009 Revised/FY2010 Proposed Life Budget	3,742,408
Increase/(Decrease) to Approved Life Budget:	157,145

CLOSED

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	3,742										
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	3,742			0		0				0	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Aug 2002
Construction:	Sep 2007
Project Completion:	Apr 2011

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	17,369,383
FY2009 Revised/FY2010 Proposed Life Budget	17,582,303
Increase/(Decrease) to Approved Life Budget:	212,920

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	2,783	8,869	3,642	881							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	17,582										

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **ML 873Y4 - Elim. Dead Ends (Contract 2)**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 2002
Construction:	Aug 2005
Project Completion:	Jan 2008

Project Description:

This is the second of four projects 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.

Funding by User (percent):

DC - 61.53%
 EPA/Fed - 38.47%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	5,144,896
FY2009 Revised/FY2010 Proposed Life Budget	5,196,741
Increase/(Decrease) to Approved Life Budget:	51,845

CLOSED

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	4,041										
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	4,041			0		0				0	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **MT Small Diameter Watermain Rehab. (1)**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 2003
Construction:	Sep 2005
Project Completion:	Apr 2011

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	12,054,743
FY2009 Revised/FY2010 Proposed Life Budget	12,262,120
Increase/(Decrease) to Approved Life Budget:	207,377

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	5,286	3,827	1,377	570							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	11,486	776									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **MU Small Diameter Watermain Rehab. (2)**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Aug 2005
Construction:	Jul 2008
Project Completion:	Dec 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	15,695,719
FY2009 Revised/FY2010 Proposed Life Budget	15,851,242
Increase/(Decrease) to Approved Life Budget:	155,523

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,662	6,500	4,891								0
Commitments Budget	15,643	208									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **MV Small Diameter Watermain Rehab. (3)**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	May 2006
Construction:	Jan 2009
Project Completion:	Jul 2011

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

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

Funding by User (percent):

DC - 47.52%
 EPA/Fed - 52.48%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	16,179,953
FY2009 Revised/FY2010 Proposed Life Budget	16,341,029
Increase/(Decrease) to Approved Life Budget:	161,076

	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
Disbursements Budget	867	2,133	6,986	1,800							0
Commitments Budget	932	15,409									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: MW Small Diameter Watermain Rehab. (4)
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Aug 2008
Construction:	Oct 2007
Project Completion:	Mar 2011

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	8,500,000
FY2009 Revised/FY2010 Proposed Life Budget	8,686,998
Increase/(Decrease) to Approved Life Budget:	186,998

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	534	3,088	3,579	320							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	3,387	5,300									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **MX Small Diameter Watermain Rehab. (5)**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Nov 2008
Construction:	Nov 2008
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:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	12,570,000
FY2009 Revised/FY2010 Proposed Life Budget	12,621,845
Increase/(Decrease) to Approved Life Budget:	51,845

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	52	650	2,071	6,481	1,878						0
Commitments Budget	52	1,380	11,190								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Health Safety

Phase	Start Date
Design:	Jun 2003
Construction:	Oct 2005
Project Completion:	Oct 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	8,446,643
FY2009 Revised/FY2010 Proposed Life Budget	8,529,952
Increase/(Decrease) to Approved Life Budget:	83,309

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	5,893	1,649	41								0
Commitments Budget	8,251	279									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority

FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **N8 Small Diameter Watermain Rehab. (6)**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2009
Construction:	Aug 2010
Project Completion:	May 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:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	6,500,000
FY2009 Revised/FY2010 Proposed Life Budget	13,000,000
Increase/(Decrease) to Approved Life Budget:	6,500,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	412	1,796	7,756	1,396						0
Commitments Budget		1,060	11,940								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **N9 Small Diameter Watermain Rehab. (7)**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Dec 2009
Construction:	May 2011
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	13,000,000
FY2009 Revised/FY2010 Proposed Life Budget	13,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0		673	1,525	9,242						0
Commitments Budget			1,280	11,720							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Nov 2003
Construction:	Jan 2009
Project Completion:	Jul 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	4,573,910
FY2009 Revised/FY2010 Proposed Life Budget	4,599,832
Increase/(Decrease) to Approved Life Budget:	25,922

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	606	812	1,308								0
Commitments Budget	635	3,964									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **NB Small Diameter Watermain Replacements**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Aug 2003
Project Completion:	Dec 2009

Project Description:

This project entails replacement of undersized and defective 12-inch diameter and smaller water mains at various locations city wide. Replacement of approximately 3,510 linear. ft. of 12-inch diameter water main at 6th Street, NW from College Street to Girard Street and at Girard Street, NW from 6th Street to Georgia Avenue. Replacement of approximately 12,840 linear. ft. of 8-inch diameter water main at the following locations:
 East Capitol Street, NE from 46th Street to 55th Street; Alley Square 442, "S" Street and Ward Court, NW.;4th Street, NE from Eye Street to K Street.;Linden Place, NE from 12th Street to 13th Street.;14th Street, NE from East Capitol Street to North Carolina Avenue.;Nicholson Street, NE from 2nd Street to 3rd Street.;Crittenden Street, NE from 8th Street to 10th Street.;Eastern Avenue, NE from Division Avenue to Lee Street.;Lee Street, NE from 51st Street to Eastern Avenue.

This project is needed to replace aged infrastructure to restore integrity and reliability to the water distribution system. This project includes former projects NB, OR, OV, OW and OX.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	6,662,560
FY2009 Revised/FY2010 Proposed Life Budget	6,662,560
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	5,724	272	97								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	6,427	235									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **00 Small Diameter Watermain Rehab. (8)**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2010
Construction:	May 2012
Project Completion:	Aug 2013

Project Description:

This annual project is for the rehabilitation of small diameter (12-inch and smaller) water pipe. The objective is to replace pipe when the condition warrants replacement, or to clean and line unlined cast iron pipe provided the pipe is in serviceable condition. Also included is the elimination of dead end pipelines in the system, and the replacement of appurtenances, such as valves, fire hydrants and house service lines. The program will serve to gradually replace pipe that has exceeded the useful service life, improve available fire flows, and remove corrosion by-products from the inside of the pipe improving water quality and reducing the potential for creation of biofilms and bacteriological activity that can impair the quality of potable water.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	13,000,000
FY2009 Revised/FY2010 Proposed Life Budget	13,000,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0			673	1,546	9,222					0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
				1,280	11,720						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **O1 Small Diameter Watermain Rehab. (9)**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2011
Construction:	May 2013
Project Completion:	Aug 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:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	13,000,000
FY2009 Revised/FY2010 Proposed Life Budget	13,000,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0				676	1,642	9,122				0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
					1,280	11,720					

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2012
Construction:	May 2014
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 deteriorated pipe, and improve available fire flows and water quality.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	13,000,000
FY2009 Revised/FY2010 Proposed Life Budget	13,000,000
Increase/(Decrease) to Approved Life Budget:	0

<u>Disbursements Budget</u>	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
	0					673	1,699	9,068			0
<u>Commitments Budget</u>	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
						1,280	11,720				

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Dec 2013
Construction:	May 2015
Project Completion:	Aug 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:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	13,000,000
FY2009 Revised/FY2010 Proposed Life Budget	13,000,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0						673	1,525	9,242		0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
							1,280	11,720			

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **QM Small Valve Replacements - Contract 4**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Good Engineering, Low, M&F over long term

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

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.

Funding by User (percent):

DC - 55.53%
 EPA/Fed - 44.47%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	3,891,195
FY2009 Revised/FY2010 Proposed Life Budget	3,891,195
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	2,791	234	58	2							0
Commitments Budget	2,960	931									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **QP 4" CI Watermain Replacements**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	Aug 2002
Construction:	Aug 2005
Project Completion:	Jan 2008

Project Description:

This project includes the replacement of approximately 5,000 linear feet of undersized 4-inch diameter cast iron water mains at ten different locations throughout the District. The replacement of these mains will improve available fire protection and water quality in the areas served by these mains.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	2,580,238
FY2009 Revised/FY2010 Proposed Life Budget	2,286,710
Increase/(Decrease) to Approved Life Budget:	-293,528

CLOSED

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	2,268										
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	2,268			0		0				0	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Distribution Systems
Activity Group/Project Title: **S3 Large Valve Replacement (Contract 3-7)**
Managing Department: Engineering and Technical Services **EPMC:** EPMC-II
Priority: Health Safety

Phase	Start Date
Design:	Jul 1999
Construction:	Jan 2004
Project Completion:	Jan 2012

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 in the operating budget.

Funding by User (percent):

DC - 58.97%
 EPA/Fed - 41.03%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	21,951,836
FY2009 Revised/FY2010 Proposed Life Budget	22,216,591
Increase/(Decrease) to Approved Life Budget:	264,755

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	11,782	3,331	1,840	1,236	295						0
Commitments Budget	17,189	5,027									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Jul 2002
Construction:	Feb 2011
Project Completion:	May 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 in the operating budget.

Funding by User (percent):

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



FY2008 Approved Life Budget	14,106,322
FY2009 Revised/FY2010 Proposed Life Budget	14,106,322
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	2,591	97	113	1,577	3,944	2,098	1,507				0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	2,688		200	7,490	200	3,528					

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water On-Going Projects
Activity Group/Project Title: **E3 FY2003 - DWS Water Projects**
Managing Department: Water Services **EPMC: N/A**
Priority: Court Ordered, Stipulated Agreements, Etc.

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2003
Project Completion:	Sep 2008

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	7,551,456
FY2009 Revised/FY2010 Proposed Life Budget	7,551,456
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	7,498	2									0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	7,551										

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water On-Going Projects
Activity Group/Project Title: **E6 FY2006 - DWS Water Projects**
Managing Department: Water Services **EPMC: N/A**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	May 2006
Project Completion:	

Project Description:
 This project is for the FY2006 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 on the operating budget.

Funding by User (percent):

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



FY2008 Approved Life Budget	5,783,742
FY2009 Revised/FY2010 Proposed Life Budget	5,293,644
Increase/(Decrease) to Approved Life Budget:	-490,098

CLOSED

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	5,294										
Commitments Budget	5,294			0		0				0	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water On-Going Projects
Activity Group/Project Title: **AJ FY2007 - DWS Water Projects**
Managing Department: Water Services **EPMC: N/A**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Jul 2007
Project Completion:	Nov 2008

Project Description:

This project is for the FY2007 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	6,368,000
FY2009 Revised/FY2010 Proposed Life Budget	6,406,883
Increase/(Decrease) to Approved Life Budget:	38,883

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	6,166	207									0
Commitments Budget	6,407										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	May 2008
Project Completion:	Oct 2009

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. This Project is closed.

Impact on Operations:
 This project will result in cost avoidance to future O & M budgets and improved customer service.

Funding by User (percent):

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



FY2008 Approved Life Budget	6,835,982
FY2009 Revised/FY2010 Proposed Life Budget	6,835,982
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	3,192	2,971	3								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	6,836										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: N/A**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Oct 2008
Project Completion:	Sep 2009

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	6,200,000
FY2009 Revised/FY2010 Proposed Life Budget	7,800,000
Increase/(Decrease) to Approved Life Budget:	1,600,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	6,875									0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		7,800									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: N/A**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Oct 2009
Project Completion:	Sep 2010

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	6,200,000
FY2009 Revised/FY2010 Proposed Life Budget	6,200,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0		5,375								0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
			6,200								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: N/A**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Feb 2011
Project Completion:	Feb 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	4,130,000
FY2009 Revised/FY2010 Proposed Life Budget	4,130,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0			2,494	1,436						0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
				4,130							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	4,255,000
FY2009 Revised/FY2010 Proposed Life Budget	4,255,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0				1,654	2,046					0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
					4,255						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	4,920,000
FY2009 Revised/FY2010 Proposed Life Budget	4,920,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0					1,914	2,365				0
Commitments Budget						4,920					

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: Engineering and Technical Services **EPMC:** NA
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	5,070,000
FY2009 Revised/FY2010 Proposed Life Budget	5,070,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0						1,975	2,435			0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	5,070				<u>Post FY 2017</u>

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: Engineering and Technical Services **EPMC:** NA
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	4,775,000
FY2009 Revised/FY2010 Proposed Life Budget	4,775,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0							1,987	2,183		0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	4,775	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** NA
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Oct 2015
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	5,375,000
FY2009 Revised/FY2010 Proposed Life Budget	5,375,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0								2,503	2,257	0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
									5,375		

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: N/A**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	Oct 2016
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	5,545,000
Increase/(Decrease) to Approved Life Budget:	5,545,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0									3,787	1,018
Commitments Budget										5,545	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Oct 2002
Construction:	Jan 2010
Project Completion:	Nov 2011

Project Description:

This project includes the replacement of pump controls, three existing variable frequency drives, electrical switchgear and motor control centers, along with upgrades to the SCADA system at Fort Reno Pumping Station. The improvements also include the installation of: a surge suppression system at the Fort Reno Pumping Station; an altitude valve on Fort Reno Tank No. 2; installation of redundant instrumentation; security system upgrades; and 28 remote pressure monitoring stations at critical locations in the system to allow operators to monitor pressures in the distribution system. The main benefit of this project is increased pressures and improved system reliability supplying water to the 4th High Service Area west of Rock Creek Park.

Impact on Operations:

This project will have no material impact on the operating budget, but will improve system reliability and customer service.

Funding by User (percent):

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



FY2008 Approved Life Budget	2,726,405
FY2009 Revised/FY2010 Proposed Life Budget	10,489,172
Increase/(Decrease) to Approved Life Budget:	7,762,767

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	543	424	3,685	4,462	469						0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	636	800	9,053								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, Low, M&F over long term

<u>Phase</u>	<u>Start Date</u>
Design:	May 2009
Construction:	Sep 2010
Project Completion:	Dec 2011

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	450,000
FY2009 Revised/FY2010 Proposed Life Budget	488,883
Increase/(Decrease) to Approved Life Budget:	38,883

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	39	6	28	296	50						0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	39	60	390								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2010
Construction:	Aug 2011
Project Completion:	Jan 2013

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	4,380,000
Increase/(Decrease) to Approved Life Budget:	4,380,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0		102	639	2,303	755					0
Commitments Budget			430	3,950							

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

Phase	Start Date
Design:	Jan 2009
Construction:	Jun 2010
Project Completion:	Nov 2013

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	7,000,000
Increase/(Decrease) to Approved Life Budget:	7,000,000

NEW

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	0	200	488	1,419	2,349	1,370	254				0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
		580	6,420								

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Potential Failure/Ability to continue meeting permit requirement

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2009
Construction:	Aug 2010
Project Completion:	Jan 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	420,000
Increase/(Decrease) to Approved Life Budget:	420,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	9	34	271	59						0
Commitments Budget		35	385								

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Mar 1999
Construction:	Mar 2002
Project Completion:	Oct 2010

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 WASA IT services.

Impact on Operations:

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

Funding by User (percent):

DC - 69.90%
 EPA/Fed - 30.10%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	62,134,483
FY2009 Revised/FY2010 Proposed Life Budget	62,212,250
Increase/(Decrease) to Approved Life Budget:	77,767

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	54,493	4,482	1,476	81							0
Commitments Budget	59,055	1,945	1,212								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: Water Pumping Facilities
Activity Group/Project Title: **M7 WPPFA3 - Replacement of Anacostia Pump Sta.**
Managing Department: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Board Policy, WASA's commitment to outside agencies

<u>Phase</u>	<u>Start Date</u>
Design:	Apr 2004
Construction:	Mar 2007
Project Completion:	May 2011

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.

Funding by User (percent):

DC -	43.50%
EPA/Fed -	56.50%
WSSC -	0.00%
Fairfax -	0.00%
Loudoun/PI -	0.00%



FY2008 Approved Life Budget	30,888,070
FY2009 Revised/FY2010 Proposed Life Budget	31,152,835
Increase/(Decrease) to Approved Life Budget:	264,765

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	25,653	4,267	521	210							0
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	30,593	560									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2009

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,450,000
FY2009 Revised/FY2010 Proposed Life Budget	1,450,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	1,250									0
Commitments Budget		1,450									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: DDOT Water Projects
Activity Group/Project Title: **B0 B0 FY2010 - DDOT Water Projects**
Managing Department: DC Dept. of Transportation **EPMC:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2010

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 WASA the paving cost.

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

Funding by User (percent):

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



FY2008 Approved Life Budget	1,380,000
FY2009 Revised/FY2010 Proposed Life Budget	1,380,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0		1,200								0
Commitments Budget			1,380								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

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

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 WASA the paving cost.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	1,650,000
FY2009 Revised/FY2010 Proposed Life Budget	1,650,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0			1,425							0
Commitments Budget				1,650							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: Engineering and Technical Services **EPMC:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2012

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 WASA the paving cost.

Impact on Operations:

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

Funding by User (percent):

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



FY2008 Approved Life Budget	1,700,000
FY2009 Revised/FY2010 Proposed Life Budget	1,700,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0				1,465						0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
					1,700						

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: Engineering and Technical Services **EPMC: N/A**
Priority: Good Engineering, Low, M&F over long term

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,700,000
FY2009 Revised/FY2010 Proposed Life Budget	1,700,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0					1,465					0
Commitments Budget						1,700					

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: Engineering and Technical Services **EPMC:** NA
Priority: Good Engineering, Low, M&F over long term

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 WASA the paving cost

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

Funding by User (percent):

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



FY2008 Approved Life Budget	1,750,000
FY2009 Revised/FY2010 Proposed Life Budget	1,750,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0						1,525				0
Commitments Budget							1,750				

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** NA
Priority: Good Engineering, Low, M&F over long term

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 WASA the paving cost

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

Funding by User (percent):

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



FY2008 Approved Life Budget	1,805,000
FY2009 Revised/FY2010 Proposed Life Budget	1,805,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0							1,570			0
Commitments Budget	0							1,805			

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** NA
Priority: Good Engineering, Low, M&F over long term

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 WASA the paving cost. Job numbers will be issued to identify the location of projects.

Impact on Operations:

Funding by User (percent):

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



FY2008 Approved Life Budget	1,805,000
FY2009 Revised/FY2010 Proposed Life Budget	1,805,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0								1,570		0
Commitments Budget									1,805		

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Water Service Area
Program Title: DDOT Water Projects
Activity Group/Project Title: FL FY2017 - DDOT Water Projects
Managing Department: DC Dept. of Transportation **EPMC:** N/A
Priority: Good Engineering, High pay back, Mission / Function

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 WASA the paving cost.

Impact on Operations:

No significant O&M cost impact.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	1,860,000
Increase/(Decrease) to Approved Life Budget:	1,860,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0									1,615	0
Commitments Budget										1,860	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Board Policy, WASA's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2009

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,311,300
FY2009 Revised/FY2010 Proposed Life Budget	1,311,300
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,118	191									0
Commitments Budget	1,309	3									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Board Policy, WASA's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Dec 2009

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	1,266,616
FY2009 Revised/FY2010 Proposed Life Budget	1,266,616
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	763	374	19								0
Commitments Budget	950	316									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Board Policy, WASA's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Jul 2009

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	2,964,872
FY2009 Revised/FY2010 Proposed Life Budget	2,600,814
Increase/(Decrease) to Approved Life Budget:	-364,058

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	2,357	242									0
Commitments Budget	2,601										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Court Ordered, Stipulated Agreements, Etc.

Phase	Start Date
Design:	
Construction:	
Project Completion:	Oct 2010

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	4,284,816
FY2009 Revised/FY2010 Proposed Life Budget	4,284,816
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	3,788	494	2								0
Commitments Budget	4,285										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Board Policy, WASA's commitment to outside agencies

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

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	641,393
FY2009 Revised/FY2010 Proposed Life Budget	641,393
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	601	17									0
Commitments Budget	621	21									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	
Construction:	
Project Completion:	Mar 2009

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	415,000
FY2009 Revised/FY2010 Proposed Life Budget	415,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	51	364									0
Commitments Budget	415										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Aug 2009

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	383,742
FY2009 Revised/FY2010 Proposed Life Budget	383,742
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	34	200									0
Commitments Budget	34	350									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2012

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	8,832,000
FY2009 Revised/FY2010 Proposed Life Budget	8,917,688
Increase/(Decrease) to Approved Life Budget:	85,688

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	2,648	3,461	844	844	846						0
Commitments Budget	3,086	5,831									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** N/A
Priority: Good Engineering, Low, M&F over long term

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2009

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 WASA 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.

Funding by User (percent):

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



FY2008 Approved Life Budget	2,190,000
FY2009 Revised/FY2010 Proposed Life Budget	2,190,000
Increase/(Decrease) to Approved Life Budget:	0

Disbursements Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
	0	1,892									0
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		2,190									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	Dec 2008
Construction:	May 2009
Project Completion:	May 2012

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.

Impact on Operations:

This project will reduce water loss, thus slowing the growth in water purchase costs.

Funding by User (percent):

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



FY2008 Approved Life Budget	
FY2009 Revised/FY2010 Proposed Life Budget	3,000,000
Increase/(Decrease) to Approved Life Budget:	3,000,000

NEW

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	308	1,599	532							0
Commitments Budget		3,000									

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Board Policy, WASA's commitment to outside agencies

Phase	Start Date
Design:	Dec 2009
Construction:	Apr 2011
Project Completion:	Dec 2013

Project Description:

The project includes the construction of a 2.0 million gallon elevated water storage tank. The new storage tank will provide additional potable water storage for the Anacostia 1st High South service area, increasing pressures to the higher elevation areas and improving fire protection in the distribution system served by this storage tank. St. Elizabeth's Hospital has agreed to allow the tank to be located on the Hospital complex as this new facility will improve the reliability of the Hospital's water supply system.

Impact on Operations:

New tank will require periodic (10 to 15 year) maintenance involving painting.

Funding by User (percent):

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



FY2008 Approved Life Budget	6,902,440
FY2009 Revised/FY2010 Proposed Life Budget	7,089,438
Increase/(Decrease) to Approved Life Budget:	186,998

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	710		198	517	2,361	1,724	290				0
Commitments Budget	709	500	490	5,390							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:** EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
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.

Funding by User (percent):

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



FY2008 Approved Life Budget	7,915,558
FY2009 Revised/FY2010 Proposed Life Budget	7,915,558
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	184	8					89	162	429	2,715	3,375
Commitments Budget	316						200	600		6,800	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority

FY 2008 - 2017 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: EPMC-II
Priority: Good Engineering, High pay back, Mission / Function

Phase	Start Date
Design:	Jan 2011
Construction:	May 2012
Project Completion:	Jul 2014

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	15,225,000
FY2009 Revised/FY2010 Proposed Life Budget	15,225,000
Increase/(Decrease) to Approved Life Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	129	51	681	1,222	8,169	3,533				0
Commitments Budget		205		1,200	13,820						

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Water Service Area
Program Title: Water Storage Facilities
Activity Group/Project Title: **NO 873BR - Good Hope Elev'd Tk. Phase I**
Managing Department: Engineering and Technical Services **EPMC: N/A**
Priority: Good Engineering, High pay back, Mission / Function

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	Aug 1998
Project Completion:	

Project Description:

EPA Sanitary Survey (1995) and EPA Administrative Order (1996) require rehabilitation of Good Hope Elevated Tank, also known as Anacostia Tank No.1, as soon as possible. This project includes modifications to the tank to address sanitary survey defects and safety concerns, and repainting of the tank interior.

Impact on Operations:

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

Funding by User (percent):

DC - 33.26%
 EPA/Fed - 66.74%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	996,366
FY2009 Revised/FY2010 Proposed Life Budget	769,137
Increase/(Decrease) to Approved Life Budget:	-227,229

CLOSED

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	769										
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	769			0		0				0	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: EPMC-II**
Priority: Good Engineering, High pay back, Mission / Function

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

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.

Funding by User (percent):

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



FY2008 Approved Life Budget	25,942,577
FY2009 Revised/FY2010 Proposed Life Budget	23,340,767
Increase/(Decrease) to Approved Life Budget:	-2,601,810

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	6,818	1,432	1,358	1,709	2,407	2,400	2,400	2,400	1,585		0
Commitments Budget	10,841			12,500							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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: Engineering and Technical Services **EPMC: EPMC-II**
Priority: Board Policy, WASA's commitment to outside agencies

Phase	Start Date
Design:	
Construction:	
Project Completion:	Sep 2017

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 FY2008 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.

Funding by User (percent):

DC - 96.56%
 EPA/Fed - 3.44%
 WSSC - 0.00%
 Fairfax - 0.00%
 Loudoun/PI - 0.00%



FY2008 Approved Life Budget	438,486,492
FY2009 Revised/FY2010 Proposed Life Budget	297,000,000
Increase/(Decrease) to Approved Life Budget:	-141,486,492

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	113,878	14,331	10,987	11,638	12,887	13,546	14,164	14,635	15,551	15,882	
Commitments Budget	155,175	16,480	12,635	13,384	14,820	15,578	16,289	16,830	17,883	17,925	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Life Budget	10,023,000
FY 2010 Proposed Life Budget	16,310,000
Increase/(Decrease) to Approved Life Budget:	6,287,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,084	1,014	1,054	1,421	1,429	1,436	1,444	1,452	1,461	1,469	
Commitments Budget	1,084	1,268	1,317	1,777	1,786	1,795	1,805	1,815	1,826	1,837	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:

WASA is replacing all meters with meters that automatically transmit consumption data via radio and cellular technology. This has improved the accuracy of meter reads to over 99.9 percent, and the labor needed for meter reading has been substantially reduced. By the end of FY 2008 a substantial amount of this project has been completed (approximately 120,000 meters had been installed, or 98.9% of the project). This project will be completed over the next two years.

Impact on Operations:

The cost of a single meter read will be reduced from approximately \$3 in FY 2002 to approximately \$1.13 when the program is fully implemented.

Funding by User (percent):

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



FY 2009 Approved Life Budget	41,000,000
FY 2010 Proposed Life Budget	43,328,000
Increase/(Decrease) to Approved Life Budget:	2,328,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	42,428	225	675	0	0	0	0	0	0	0	
Commitments Budget	42,428	450	450	0	0	0	0	0	0	0	

(projected disbursements do not include contingencies)

(dollars in thousands)

**Approved
FY 2008-2017**

Capital Improvement Program

SECTION VIII

Washington Aqueduct

*DC WASA purchases approximately
75 percent of the water treated by the
Corps of Engineers Washington Aqueduct.*



District of Columbia
Water and Sewer
Authority

VIII



WASHINGTON AQUEDUCT

The Washington Aqueduct, managed by the U.S. Army Corps of Engineers, provides wholesale water treatment services to DC WASA and its partners in Northern Virginia, Arlington County and Falls Church. DC WASA purchases approximately 75 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan treatment plants, and thus is responsible for 75 percent of the Aqueduct's operating and capital costs. Under federal legislation and a memorandum of understanding enacted in 1997, DC WASA 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 WASA's share of Washington Aqueduct projects totals \$196 million or \$26 million more than last year's 10-year plan of \$170 million. This change is due primarily to an increased projection in out year projects.

The Aqueduct CIP is broken into seven primary areas with specific Projects under each area:

Basin Waste Recovery/Residuals Disposal - \$94 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. The Aqueduct selected a process to meet the Compliance Agreement, which dewateres the residuals on site and trucks them off-site for disposal. The major contract was awarded in FY 2008 and construction is underway.

Dalecarlia Pumping Station Improvements - \$10 Million

(project pages VIII-6)

Beginning in FY2010, the Aqueduct will start a series of initiatives at Dalecarlia Pumping Station aimed at modernizing and upgrading the facility. These initiatives include building renovation and elevator replacements FY 2012 & FY 2013, fire protection system improvements FY 2011 & FY 2012, mechanical upgrades FY 2013 & FY 2014 and SCADA upgrades FY 2019.

Cabin John Bridge Repairs - \$715 Thousand

(project pages VIII-7)

Scheduled in FY 2013 and FY 2014 are future improvements including parapet and additional roadway repairs. The most recent improvements to the bridge were completed in FY 2001.

McMillian Water Treatment Plant Improvements - \$ 25 Million

(project pages VIII-8)

The immediate focus for the Aqueduct will be on current projects including the conversion from chlorine to sodium hypochlorite, the filter media/valve replacements, the chemical building HVAC improvements and the first phase of a building renovation project. Future major projects include annex 1 building renovation and boat dock/chemical storage building renovation FY 2012 & FY 2013, clearwell cleaning & disinfection FY 2012 & FY 2014, ESA (Engineering Support Activity) building demolition and the east shaft pumping station renovation and instrumentation improvements FY 2016. FY 2011 will see sample line and silt curtain replacements. Also security improvements will occur in FY 2010 while SCADA upgrade will take place in FY 2016.

Appurtenant Transmission & Storage Facility - \$22 Million

(project pages VIII-9)

In FY2001, the Aqueduct intends to begin building renovations at the Georgetown reservoir, Champlain Street, warehouse no. 6 and warehouse no. 8, while conduit repairs and cross connection structure upgrades will start in FY 2015. There will be significant improvements to the Little Falls Pump Station, including a crane over haul, HVAC upgrades and motor control upgrades (FY 2010 – FY 2015). Improvements are also schedule for the Great Falls Intake buildings in FY 2014 & FY 2015.

Dalecarlia Water Treatment Plant Improvements - \$43 Million

(project pages VIII-10)

Dalecarlia WTP will continue to improve its infrastructure with current projects including conversion from chlorine to sodium hypochlorite, renovation of the old pumping station into a visitor's center and SCADA/instrumentation improvements, among others. Future projects include building renovation/improvements (FY 2011) for the administration building, east filter building, intake building, maintenance building, south connection building and west filter building, flocculation/sedimentation basin no. 3 & no. 4 improvements (FY 2018) . GIS System installation will take place in FY 2016 while SCADA upgrades are projected to begin FY 2019.

Alternate Treatment Methods - \$2 Million

(project pages VIII-11)

In FY2011 Aqueduct will begin the 30 MG clearwell mixing improvements project, while future projects include Georgetown mixing improvements (FY 2018).

Financing of Aqueduct Capital Projects

The U.S. Army Corps of Engineers in accordance with Federal procurement regulations require DC WASA 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 WASA. Over the last few years, extensive discussions with the U.S. Office of Management and Budget (OMB) and the Corps resulted in a proposal in the President's FY2006 and FY2007 budgets that would allow Aqueduct customers to deposit funds for any projects required by their NPDES permit (including the residuals project) to a separate escrow account, allowing the Aqueduct customers to retain interest on these funds. The proposal was submitted in May 2006 to the Senate and House. During FY 2006, the Corps briefed the Senate Environment and Public Works committee staff and in conjunction with DC WASA briefed the Senate Homeland Security and Government Affairs committee staff. Additionally DC WASA 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 WASA, including transferring dollars on a phased basis, utilizing U.S. Treasury notes, 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 2008 - 2017 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

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	10/1/2007
Project Completion:	10/1/2009

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. The Aqueduct is implementing a plan it developed to build new residuals processing facilities at the Dalecarlia treatment plant. The construction started in April 2008, with completion expected in 2010. The cost of this project is currently at \$125.7 (WASA share - \$67.5 to \$93.8 million). In the last year's CIP, WASA carried this project at a estimate of \$84.4 million. This year's lifetime budget increased by \$9.3 million to \$93.8 million, and reflects the higher than anticipated award price, current modification, contingency and construction inflation estimates assumed by the Aqueduct.

Impact on Operations:

The estimated increase to the Washington Aqueduct Operating budget due to the Residual Facilities is in the range of \$3.0 to \$5.0 million. We anticipate future cost increases in areas of personnel, building maintenance, chemicals, electricity and contract disposal. The major portion of the increase will be in the areas of electrical consumption and contract trucking for disposal. Funding will be required in FY 2010.

Funding by User (percent):

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



FY 2009 Approved Life Budget	84,459,884
FY 2010 Proposed Life Budget	93,802,396
Increase/(Decrease) to Approved Life Budget:	9,342,512

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	79,610	11,936	2,255								
Commitments Budget	79,610	11,936	2,255								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Washington Aqueduct
Program Title: Washington Aqueduct
Activity Group/Project Title: WAD122 Dalecarlia Pumping Station
Managing Department:
Priority: Good Engineering Practices

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	10/1/2010
Project Completion:	10/1/2017

EPMC:

Project Description:

The Dalecarlia Pumping Station was built over forty years ago and beginning in FY 2010, the Aqueduct will start its next series of improvements aimed at modernizing and upgrading the pumping station. These initiatives include a building renovation and elevator replacements (FY 2012 & FY 2013); fire protection system improvements (FY 2011 & FY 2012); mechanical upgrades (FY2013 & FY 2014); overhead crane replacements (FY 2014); pump motor control conversions (FY 2010 & FY 2011); roof replacements (FY2011 & FY2012) and SCADA upgrades (FY 2019).

Impact on Operations:

Improvements to the Dalecarlia pumping station are not expected to have significant impact on operating costs.

Funding by User (percent):

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



FY 2009 Approved Life Budget	12,488,156
FY 2010 Proposed Life Budget	10,422,858
Increase/(Decrease) to Approved Life Budget:	-2,065,298

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	4,097	414	162	1,429	1,364	1,656	1,299				
Commitments Budget	4,097	414	162	1,429	1,364	1,656	1,299				

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2013 and FY 2014 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 2009 Approved Life Budget 791,964

FY 2010 Proposed Life Budget 714,582

Increase/(Decrease) to Approved Life Budget: -77,382

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget						64	649				
Commitments Budget						64	649				

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	10/1/2007
Project Completion:	10/1/2017

Project Description:

The McMillian 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 WASA's Bryant St. pumping station. Current projects include the conversion from chlorine to sodium hypochlorite and filter media/valve replacements, the chemical building HVAC improvements and the first phase of building renovations project. Future major projects include annex 1 building renovation and boat dock/chemical storage building renovation (FY 2012 & FY 2013); clearwell cleaning & disinfection (FY 2012 & FY 2014); ESA (Engineering Support Activity) building demolition and the east shaft pumping station renovation (FY 2014 & FY 2015); fire protection system improvements (FY 2011 & FY 2012); GIS System (FY 2014 - FY 2016); future building renovations (FY 2013 - FY 2019); instrumentation improvements (FY 2016 & FY 2019); process improvements (FY 2019); roadway repairs (FY 2016 & FY 2017); roof replacements (FY 2013); sample line replacement and silt curtain replacements (FY 2011); SCADA upgrade (FY 2016); security improvements (FY 2010).

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 2009 Approved Life Budget	23,723,553
FY 2010 Proposed Life Budget	24,616,150
Increase/(Decrease) to Approved Life Budget:	892,597

<u>Disbursements Budget</u>	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
	5,986	7,118	695	812	1,429	2,046	2,143	1,753	2,046	584	
<u>Commitments Budget</u>	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
	5,986	7,118	695	812	1,429	2,046	2,143	1,753	2,046	584	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

<u>Phase</u>	<u>Start Date</u>
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 pump into the Dalecarlia Reservoir. This project area covers improvements to the Aqueduct's major transmission mains and storage facilities and outlying structures. Future major projects include building renovations (FY 2011 - FY 2019) at the Georgetown reservoir, Champlain street, warehouse no. 6 and warehouse no. 8; conduit repairs (FY 2015 - FY 2019); cross connection structure upgrades (FY 2015 & FY 2016); finished water reservoir cleanings (FY 2011 - FY 2019); fire protection system improvements (FY 2011 & FY 2012); forebay dredging (FY 2011); transmission main improvements (FY 2013 - FY 2015) and rock creek blow-off valve replacements (FY 2017 - FY 2019). There will be significant improvements to the Little Falls Pump Station, including a crane over haul, HVAC upgrades and motor control upgrades (FY 2010 - FY 2015). Improvements are also scheduled for the Great Falls Intake buildings (FY 2014 - FY 2015).

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 2009 Approved Life Budget	17,721,379
FY 2010 Proposed Life Budget	22,072,713
Increase/(Decrease) to Approved Life Budget:	4,351,334

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	146	1,853	129	2,208	1,591	1,396	2,695	4,677	4,092	3,280	
Commitments Budget	146	1,853	129	2,208	1,591	1,396	2,695	4,677	4,092	3,280	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

<u>Phase</u>	<u>Start Date</u>
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. Current projects include the conversion from chlorine to sodium hypochlorite; renovation of the old pumping station into a visitors center and SCADA/instrumentation improvements, among others. Future projects include building renovations/improvements (FY 2011 - FY 2019) for the administration building, east building, intake building, maintenance building, south connection building and west filter building; flocculation/sedimentation basin no. 3 & no. 4 improvements (FY 2018 & FY 2019); carbon facility tank renovations (FY 2014 & FY 2015); chemical building electrical upgrades (FY 2012 & FY 2013); clearwell cleaning & disinfection (FY 2012 - FY 2016); Dalecarlia instrumentation; (FY2013 FY 2018); fire protection system improvements (FY 2011 & FY 2012); fuel line replacements (FY 2016); GIS System (FY 2014 - FY 2016); roadway improvements (FY 2012 & FY 2013); roof replacements (FY 2017 & FY 2018); sample line replacement (FY 2011); SCADA upgrades (FY 2019); security improvements (FY 2010) and wash water tank renovations (FY 2018).

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 2009 Approved Life Budget	29,693,593
FY 2010 Proposed Life Budget	42,879,047
Increase/(Decrease) to Approved Life Budget:	13,185,454

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	8,505	8,285	2,341	2,176	3,572	2,890	1,169	2,742	3,897	7,296	
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	8,505	8,285	2,341	2,176	3,572	2,890	1,169	2,742	3,897	7,296	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

<u>Phase</u>	<u>Start Date</u>
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. Future projects are Georgetown mixing improvements (FY 2018 & FY 2019) and the 30MG clearwell mixing improvements that spans FY 2011 through FY 2019.

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 2009 Approved Life Budget	1,512,140
FY 2010 Proposed Life Budget	1,966,138
Increase/(Decrease) to Approved Life Budget:	453,998

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	955	133		389			64	422			
Commitments Budget	955	133		389			64	422			

(projected disbursements do not include contingencies)

(dollars in thousands)

**Approved
FY 2008-2017**

Capital Improvement Program

SECTION IX

Capital Equipment

Operators at Blue Plains sludge pumping station are changing the flow direction by turning large overhead valves connected to chains.



District of Columbia
Water and Sewer
Authority

IX

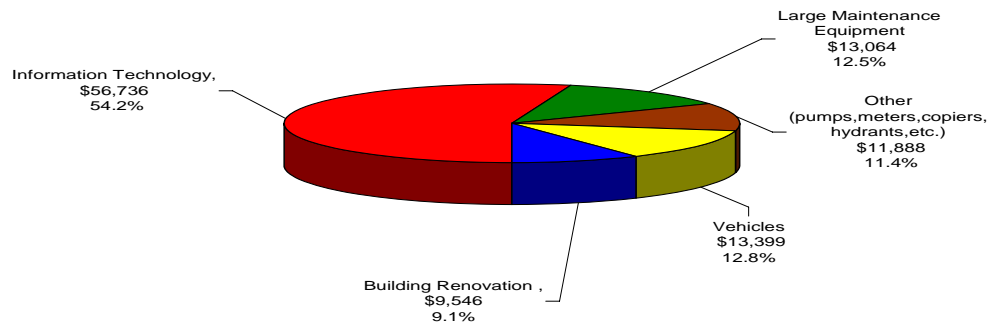


CAPITAL EQUIPMENT

DC WASA's Capital Equipment budget totals approximately \$104.6 million for FY 2008 – FY 2017 plan, an increase of approximately \$3 million compared to the last ten-year plan. Over fifty percent of spending in the capital equipment area continues to be on major information technology projects, including the document management system (budget of \$2.9 million) and the asset management system (budget of \$6.4 million). DC WASA continues its commitment to scheduled replacement of its vehicle fleet with a budget of \$13.4 million, representing almost thirteen percent of the ten-year plan. Finally, maintenance of large equipment at Blue Plains and in the major water and sewer pumping stations totals \$13.1 million, or twelve percent of the ten-year plan.

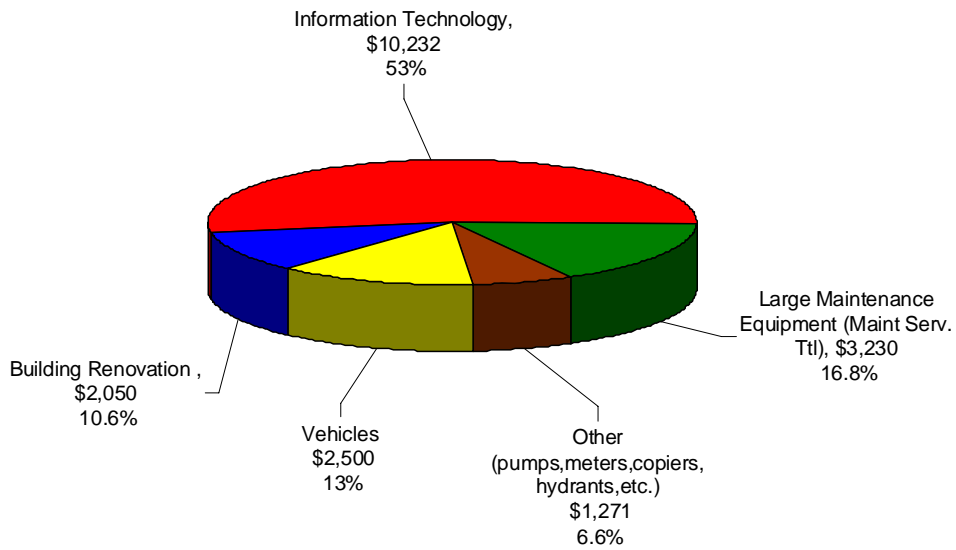
The revised FY 2009 budget at \$19.3 million is \$3.9 million higher than the FY 2009 approved budget. This variance is primarily attributable to the budget increases in: the Fleet Management department to comply with the policy of replacing aging vehicles; Information Technology (IT) managed programs – addition of new programs – ERP systems (to ensure that DC WASA's reporting system remain current and efficient) and Network Storage System Renewal (to ensure safe archival and retrieval of DC WASA's increasing data): these increased disbursements are partly offset by the reduced disbursements in some projects as they near completion, and closure of others.

CAPITAL EQUIPMENT DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES FY 2008 – FY 2017 (\$ in 000's)

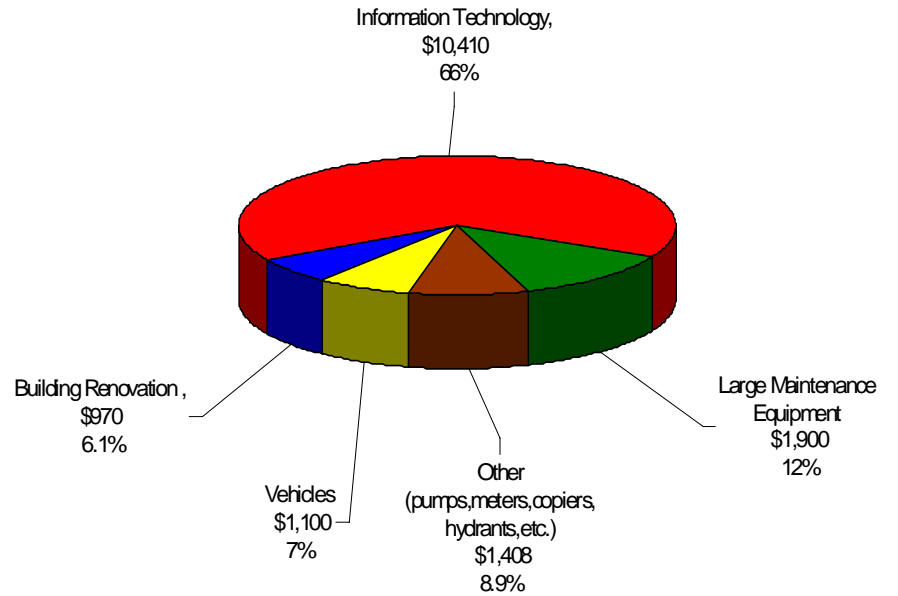


**CAPITAL EQUIPMENT DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES
 FY 2009 Revised vs. FY 2010 Approved
 (\$ in 000's)**

2009 Revised



FY 2010 Approved



FY 2009 Revised = \$19,283 FY 2010 Approved = \$15,788

Equipment Purchases

Equipment purchases are made by the Departments of Wastewater Treatment, Water Services, Sewer Services, Customer Service, Fleet Management, Facilities and Security, Information Technology, and Maintenance Services. Amounts shown below are 10-year disbursement totals.

Department of Wastewater Treatment - \$0.6 million

Capital equipment expenditures for this department are for laboratory equipment purchases to maintain a certified laboratory.

Department of Water Services - \$8.4 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 2009 revised and FY 2010 proposed budgets largely remain the same as those carried out by the department in previous years for fire hydrant and water service replacements.

Department of Sewer Services - \$2.9 million

This department is responsible for replacing catch basins, manhole covers and frames, and rehabilitating regulators and outfall gates. The FY 2008 -2017 budget plan reflects a major thrust for buying Flow Meter Sensors.

Department of Fleet Management - \$13.4 million

A major emphasis is placed on coordinating equipment purchases with the realigned needs of the Authority as Internal Improvement Plans implemented in prior years continue to be carried out over the next few years. The past few years have focused efforts on the larger equipment such as backhoes and dump trucks, to ensure that the critical equipment necessary to support the organizations responsibilities is available and in good, safe working order. This year's budget focuses on replacing many of the infrastructure vehicles within the organization, including 6 crew cabs, maintenance vans, flushing vans and pickup trucks ranging in age from 8 to 14 years. Fleet will also add one T.V. Crawler truck and one STETCO dump truck.

Department of Facilities - \$9.5 million

Capital equipment activities for this department include HVAC system and plumbing maintenance at various locations, fencing, landscaping, elevator maintenance, and fire suppression and detection systems. Additionally, the organization has established a five year reassessment and replacement schedule for its photocopier requirements which began with equipment purchased in FY04, such that this 10-year disbursement schedule includes funding of \$2.8 million for two iterations of copier purchases. In addition, a major budget increase has been allocated for a DC WASA-wide fire suppression and detection systems for compliance with all current regulations.

Department of Maintenance Service - \$13.1 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 the High Priority Rehab Program over the past several years, which ensures that large equipment will function properly until its scheduled replacement in the Capital Improvement Program. High Priority Rehab includes work on the Gravity Thickener turn table and main drive units, pumps for Eastern Ave Pumping Station, a Water Clutch Assembly for the Westfalia centrifuge and the Grit Process Blower. They will also be supporting the Solids building conveyor system and lime lines while the Department of Engineering and Technical Services designs and implements adjustments to the process to use the recommended smaller size lime pellets, thus achieving a better coalescence of the lime and sludge in the stabilization process and ultimately decreasing the amount of lime required.

Department of Information Technology - \$ 57.8million

We focus all of our technology initiatives on improving the quality of service to our customers and Organizational effectiveness. Our website, www.dcwasa.com, for example, has been a major success. The recently redesigned site provides a user interface that allows customers to more easily and quickly find information. In addition, the site has been restructured to include “best of breed” technologies, for enhanced overall website quality. Our enhanced interactive voice response system (IVR) has allowed customers the ability to pay their bill by Checking or Savings accounts. Additional enhancements undertaken include enhanced multi-lingual support and the ability to generate call campaigns based on need. For example, the IVR system supported a calling campaign designed to inform our customers of the migration to Automated Meter Reading systems and how to best provide the appropriate service modifications. The Authority has taken critical steps to upgrade www.dcwasa.com, as well as our IVR system in preparation for continued growth and activity to best support our customer communications.

Our focus over the past few years has been on implementing the Board-approved Information Technology Strategic Plan. The plan, approved in FY 2002, and revised in FY 2005, lays out a vision for the delivery of information technology services at DC WASA, and a methodology for prioritization of all technology projects (which includes an assessment of cost savings and productivity growth).

Technology projects include those that focus on improvements in Information security, infrastructure and the use of Information Technology throughout DC WASA to improve the delivery of services to our customers and operational efficiency.

In FY 2008, we focused our efforts on continuing to improve our operations by better integrating people and processes through technology. A few key examples of this effort that are already underway or will begin in the near future include:

- Total Enterprise Asset Management System (TEAMS-Maximo) – During FY2008, we continued to implement additional aspects of TEAMS: Integration between TEAMS-Maximo and the DC WASA Financial System was completed to accommodate “inside-the-fence” reordering of inventory items to support the maintenance and repair of plant and pumping station equipment.

Additionally, we developed and implemented functionality to leverage TEAMS to allow scheduling, tracking and managing of catch basin cleaning. As well, we implemented TEAMS to accommodate the Investigative Water Capacity Tests process in cases where FEMS requests that DC WASA perform flow tests on hydrants in certain areas of the city to determine water pressure and capacity. In support of DC WASA’s backflow preventer management program, we implemented improved Workflow to handle the routing and management of preventive and corrective maintenance records created for backflow preventers.

- Permitting Application Tracking System (PATS-Maximo) This included implementation of the first phase of DC WASA’s Permitting Process Improvements which consisted of deploying of PATS-Maximo to support permit and permit-related activities. PATS will help DC WASA streamline its processes, reduce delays caused by interoffice mail delivery, reduce paperwork and will provide visibility and performance measures of permit-activities. Additionally we also automated, DC WASA’s public space permitting management process.

- Geographical Information System (GIS) – DC WASA’s GIS is a valuable tool that enables employees to look-up information, via the intranet, on our infrastructure; e.g., the exact location of the infrastructure, corresponding street and premise data. Using GIS, employees have the added benefit of locating buildings, roads, sidewalks, parks, which have been loaded to assist personnel in locating assets. IN FY 2009, we will begin reaping the benefits of all the work that has gone in the conversion of water network inventory paper maps to digital data that started in FY 2007 and will be completed during the 1 quarter of FY 09. Preparing this asset inventory and system map is the first of the EPA recommended best practices to implement asset management for water utilities

In FY 2008, when we started using GIS to track the catch basin cleaning process coupled with TEAMS-Maximo. In FY 2009, we will also start maintaining the water and sewer network inventories using GIS and to track development project locations. We will also work on improving the overall integration of the FEMS Mobile Fire Hydrant Inspection in the business processes to reduce the amount of manual work required to capture, dispatch and track the repairs identified by the survey. In April 2009, we will go live with the Impervious Area Billing system that provides the tools required to determine the amount of impervious area on individual properties but it will bring a whole new realm of possibilities because of the extensive cleanup work that will have gone in the premise

spatial location data. This will allow us to support new map-centric dashboards for Automated Meter Reading (AMR) and many other business processes. We will also look into using route planning tools to help reduce the fuel cost of our service work.

▪ Enterprise Records and Document Management System (ERDMS) - In FY 2005, DC WASA initiated this system to assist with lifecycle management of documents. In FY 2006, an evaluation and analysis was conducted of DC WASA documents and processes.

Additionally, as part of ERDMS initiatives, in FY 2007 and FY 2008, DC WASA completed several major milestones, including a Records Management Plan, development of ERDMS Policies, Procedures, and Guidelines, and. The ERDMS Policies, Procedures, and Guidelines were developed through an extensive process including appraisal of industry standards and practices, dozens of interviews with DC WASA staff representing all departments, an Authority document inventory identifying 14,000 cubic feet of documents, and multiple review and revision cycles.

Additionally, a major milestone completion in the ERDMS initiative was the selection of an ERDMS application solution. Along with standard document management capabilities including searching, version control, check-in check-out, workflow, records management classifications, retention and disposition, and email management; the selected ERDMS product also provides integrated support for managing engineering documents such as AutoCAD drawings.

In FY 2007 and FY 2008, implementation of the following Enterprise Record Management initiatives was completed:

- Accounts Payables Document Management System – DC WASA went live with the ERDMS to provide Accounts Payable document management and facilitate access by departments to invoice images and associated documents. This system is integrated with WFS, eliminating duplicate data entry when documents are scanned and streamlining the invoice approval process. Invoice approvers viewing an invoice entry in the WFS workflow can now retrieve the corresponding invoice image with the click of a button.
- HR Personnel Files Management – In the beginning of FY 2008, we went live with an ERDMS system to securely store and manage digitized HR Personnel Files. Legacy Personnel Files have been scanned, providing backup and recovery capabilities for these critical documents; and the paper files will be shipped off-site for improved space utilization. A day forward scanning process has been implemented to capture, digitize and store new records.
- Knowledgelink- (Engineering Document Management and Control) – In FY-08 we went live with engineering e-Library Phase I. The project addresses the key requirements associated with maintaining engineering documents and developing a repository and redesigned business processes associated with the life cycle of engineering documents (e.g. design documents, as-builts, etc.) related to our large facilities and equipment.

This Phase included cleaning up, indexing, inventorying, and digitizing all documents generated by the Primary Treatment Facilities Upgrade. Additionally a new Management of Change process was introduced in parallel with the Engineering *e-Library* to ensure that ongoing changes to the Blue Plains Advanced Wastewater Treatment Plant are reflected in the real time documentation.

The Engineering *e-Library initiative* will enable quick and easy search and retrieval of records, as well as an assurance that records being retrieved are the most up to date approved records available – translating into greater efficiency and improved service quality.

- *Customerlink (Customer Service Document Management and Control)* – This initiative is in progress and is scheduled to go live in two phases. Phase I, scheduled to go live in Q1 2009, will create an electronic repository, search portal and business process for maintaining Customer Service Call Center – LSR records. Phase II, which is scheduled to go live in Q2 2009, will digitize and import Customer Service Collections records and implement an automated records management policy for Customer Service Collections Records, additionally, an automated scanning solution for Customer Service – LSR Records will be implemented.

- *Interactive Voice Response (IVR) system* – In FY 2008 we developed and applied updates to our IVR system including such key features as providing customers the ability to pay their bill by Checking or Savings accounts and the integration of HR eRecruitment. Additional enhancements undertaken include multi-lingual support and the ability to generate call campaigns based on need. For example, the IVR system supported a calling campaign designed to inform our customers of the migration to Automated Meter Reading systems and how to best provide the appropriate service modifications. The Authority has taken critical steps to upgrade our IVR system in preparation for continued growth and activity to best support our customer communications. Upcoming enhancements will improve voice recognition capabilities and double capacity for concurrent calls, increasing the customer's ability to efficiently get account information, pay their bills, request payment terms/extension as well as have access to information about the Authority's services. Also during FY 2009, several enhancements are scheduled to be completed such as Voice over IP technology advancements which increase reporting and customer service, and support of our Impervious Surface Area billing changes.

- *DCWASA.COM* – In FY 2008 the Authority developed and began the application of a process for implementing a continuous website improvement cycle. The new model of engagement improves customer service by allowing for better overall website quality and ensuring current information is available online. Particular attention was paid to evaluation and using best of breed web technologies. Phase I included the redesign of the site according to current published web Best Practices. This has been accompanied by a thorough analysis and modifications of website content structure to better meet our site visitor expectations. The Authority will continue this process during FY 2009 with a number of steps as part of Phase II, including an improved basic site design structure and increasing the number of interactive flash media used on the site, as well as a new flexible Content Management System.

- *Supervisory Control and Data Acquisition (SCADA)* – In FY 2007, the Authority began its SCADA replacement project to address the immediate concerns on the reliability of the failing legacy SCADA system (DAQ). In FY 07 we incorporated the nine DC WASA water distribution facilities as well as a interconnection with Washington Aqueduct Division into the new system.

Additionally new Anacostia Pumps Station three Sewer Pumping Stations, four Storm Water Pump Stations and nine CSO Fabridam facilities have been integrated into the new SCADA system. In FY 09, the total replacement of the old SCADA system will be completed along with implementation of SCADA information Portal (DASH BOARD).

In future we are planning to extend the system by incorporating Water Pressure Monitoring Sites, Sewer Metering Sites, and Potomac Interceptor Sites. These additional capabilities will provide the Authority with enhanced system visibility to promote accurate metering and billing, as well as real-time predictive system modeling for proactive operations management.

- *Information Security Program;* - During FY 09, we continued to formally implement (and document) a comprehensive risk management process that will enable the Authority to identify, analyze, prioritize, and ultimately manage the risks to business and fulfill its mission to protect customers, the public, and the environment. The output of this process will be a risk report that provides assurance to stakeholders that appropriate controls are in place for mitigating risk considering asset value and the Authority's overall risk tolerance level. Additionally DC WASA will continue the implementation of the protection requirements defined in the Information Systems Security Architecture as part of the ongoing SCADA project. This will ensure the Authority's most critical assets are protected appropriately (to support Water Distribution for fire-flow and customer consumption, and sewerage collection & removal).

- *Field Service Management System (Mobile Computing)* - In FY 2008, we successfully deployed a mobile solution for hydrant inspections for DC FEMS. Based on the lessons learned in this project we will be designing similar applications for the DWS crews for various core service groups such as the valve crews and the hydrant crews. We also plan to deploy the existing GIS viewer application to the pilot groups to help us understand the requirements of GIS/GPS technology in the field. In FY2008, the vehicular based mobile computing hardware components were selected and have been deployed for Phase II of the pilot to the DETS inspectors, a limited number of DSS crews and Water Services repair crews with good results opening the door for further deployments in FY 2009.

- *Telephone System Upgrade* - In FY 2008, DC WASA selected a new generation telephone system to replace its legacy phone system. The new Alcatel-Lucent solution will utilize a single infrastructure for Voice, Data, and Video offering greater mobility and system redundancy. Additionally, an enhanced Customer Contact application/solution will be implemented to better support DC WASA's Customer communication.

Over the next two years we will continue to focus our efforts on the Board's strategic plan to ensure that our use of technology ensures even better service to our customers.

Capital Equipment Technology Projects

In addition to carrying out its own technology projects, such as Web Development and Network Renewal, the Department of Information Technology supports technology projects that are managed by departments throughout the Authority. A recap of the most significant efforts underway within the Technology Projects area follows.

Asset Management System - \$5 million

The Asset Management System is a major DC WASA-wide undertaking, which began in FY 2004. This project was originally planned to be a water and sewer infrastructure asset management system that would complement the recently implemented maintenance management system. After a full year of assessment in FY 2003, this system is now planned to encompass the entire organization and integrate technology already in place at DC WASA (customer information and billing, maintenance management, financial management systems), as well as technology planned for the future, such as geographic information, electronic maps, and process control computer systems. Implementation and integration will span four years. The first operational phase of this system went live in October 2005.

EMAP Phases I and II - \$0.2 million

In order to prepare for integration into the asset management system, DC WASA's as-built maps and drawings need to be brought up to date and totally incorporated into an electronic environment. Phase I addresses 'as-builts' for all of DC WASA's infrastructure outside of Blue Plains, and Phase II encompasses 'as-builts' at the treatment plant.

Audio Visual, Video Conferencing, and TV Camera Equipment - \$0.43 million

In a continued effort to bring beneficial technology advancements to the way we work, the Department of Information Technology has upgraded the Audio Visual equipment in the Board room, redeploying the current monitors as event calendars in the second and third floor reception areas, and acquiring TV camera and Video Conferencing Equipment. This equipment is scheduled to be replaced every three years.

Radios - \$1.8 million

At the end of FY 2003, DC WASA deployed new radios for use with the District's 800 MHz system, replacing a 20-year old system. This system has increased geographic coverage, and allows departments to communicate with each other across the Authority. The budget is intended to maintain the operability of the system

Document Management System –\$ 2.9 million

In 2004 DC WASA completed an assessment of its document management needs, and has developed a comprehensive plan that is being implemented.

ERP System - \$4.7 million

In 2000 DC WASA implemented its Financial System and in 2001 implemented its Customer Information System. When these systems were implemented DC WASA made a decision, based on organizational readiness and the solutions available at that time, not to go with ERP (Enterprise Resource Program....this program allows software systems to interface) System, but to utilize the option of selecting "best-of-breed" systems. In the past 10 years DC WASA has matured to a different level, and based on the organizational readiness-- and the solutions now available-- DC WASA will utilize an ERP System.

Payroll/Human Resources System - \$0.3 million

This project is also managed by the Office of the Chief Financial Officer, with the support of the Information Technology Department. During FY 2007 re-engineering of the on-line forms used by employees to access payroll and benefit information in the Payroll/HR system is scheduled to take place. Ongoing updates and enhancements are budgeted through the 10-year program, now that the major implementation activities have been completed.

Customer Information and Billing System - \$1.0 million

The Customer Service Department manages the customer information and billing system project, supported by the Information Technology Department. The system went into service in June 2001, and continued updates to the system are scheduled throughout the life of the 10 year disbursement plan.

Redundant Data Center - \$2.5 million

In keeping with the Information Technology Strategic Plan, DC WASA 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 switch from the computers and servers located within the COF building to the Redundant Data Center without data loss and with minimal down time.

Network Storage System Renewal- \$2.9 million

A 4 yr replacement plan has been developed for Network infrastructure equipment, as well as Intel servers and enterprise SUN servers for Asset Management, GIS, Document management. The following upgrades will take place to support this plan: Purchase

additional servers to further standardize server technology, upgrade backbone routers, access switches, and log monitoring products, and consulting services for technology implementation.

Field Services Management System – \$3.3 million

The FY 2009 budget submission includes a continued effort which place computers in the Field Services vehicles to streamline will call dispatch and job completion reporting.

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 2009 reflect only FY 2008 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 2017. This is due to the generally annual nature of purchases and projects occurring in the Capital Equipment service area of DC WASA's capital program.

FY 2008 - FY 2017 Capital Equipment Disbursements
(\$ in 000's)

Equipment Type	FY 2008 Actuals	FY 2009 Revised	FY 2010 Approved	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY '08 - FY '17 Total	Project Sheet Ref.
Wastewater Treatment												
Safety Equipment	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10	EB5
General Equipment	37	-	-	-	-	-	-	-	-	-	37	EB5
Lab Equipment	30	23	285	30	30	30	30	30	30	30	548	EB5
Metering & Recording Devices	14	-	-	-	-	-	-	-	-	-	14	EB5
Total	\$91	\$23	\$285	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$609	
Water Services												
Water Service Replacement	\$340	\$340	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$260	\$2,760	EA2
System Valve Replacements	167	270	270	225	225	225	225	225	225	225	2,282	EW1
Lab Eqp & Flow Monitors [Online]	25	-	-	-	-	-	-	-	-	-	25	EX8
Fire Hydrant Replacements	400	400	300	300	300	300	300	300	300	300	3,200	EX8
Hydraulic Valve Operating Units	90	-	-	-	-	-	-	-	-	-	90	EX8
Total	\$1,022	\$1,010	\$830	\$785	\$785	\$785	\$785	\$785	\$785	\$785	\$8,357	
Sewer Services												
Sewer Pipes/Fittings	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$300	EA4
Sewer Inspection Equipment	-	-	40	-	-	-	-	-	-	-	40	EA4
Manhole Covers/Frames	33	33	33	33	33	33	33	33	33	33	330	EA4
Regulator and Gate Rehabilitation	10	10	10	10	10	10	10	10	10	10	100	EA4
Sewer Cleaning and Repair Equip	55	55	55	55	55	55	55	55	55	55	550	EA4
Portable Pumps	75	30	20	20	20	20	30	20	20	20	275	EA4
Flow Meters/Sensor Replacement	25	50	75	75	75	100	100	100	100	100	800	EA4
Catch Basin Tops/Frames/Covers	60	30	30	30	30	30	30	30	30	30	330	EA4
Portable 4 Type Gas Meter [Safet	10	-	-	-	-	-	-	-	-	-	10	EA4
Safety Equipment	50	-	-	-	-	-	-	-	-	-	50	EA4
Explosion Equipment	40	-	-	-	-	-	-	-	-	-	40	EA4
SCADA Upgrade at Remote Statio	97	-	-	-	-	-	-	-	-	-	97	ER2
Total	\$485	\$238	\$293	\$253	\$253	\$278	\$288	\$278	\$278	\$278	\$2,922	
Fleet Management												
Vehicles	\$2,100	\$2,500	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$13,399	EB6
Total	\$2,100	\$2,500	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$13,399	

FY 2008 - FY 2017 Capital Equipment Disbursements
(\$ in 000's)

Equipment Type	FY 2008 Actuals	FY 2009 Revised	FY 2010 Approved	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY '08 - FY '17 Total	Project Sheet Ref.
Facilities												
HVAC at Various Locations	\$350	\$225	\$225	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$1,500	EF3
Photocopier Purchase	-	500	200	200	600	200	200	200	200	500	2,800	EF5
WASA-wide fire suppress/detectio	110	450	75	75	75	75	75	75	75	75	1,160	EF7
Plumbing at Various Locations	-	400	25	25	25	25	25	25	25	25	600	EX6
Furniture and Fixtures	200	150	200	150	150	150	150	150	150	150	1,600	EX6
Facilities Improvements	230	200	200	150	150	150	150	150	150	150	1,680	EX6
Rollup Doors	36	100	20	-	-	-	-	-	-	-	156	EX6
WASA-wide Fencing	-	25	25	-	-	-	-	-	-	-	50	EX6
Total	\$926	2,050	970	700	1,100	700	700	700	700	1,000	\$9,546	
Information Technology												
Desktop Replacements	\$550	\$672	\$610	\$550	\$559	\$672	\$562	\$565	\$550	\$559	\$5,849	EA6
Cable Renewal	200	175	175	150	150	150	150	150	150	150	1,600	EA7
Telephone System Renewal/Repla	1,545	845	100	100	100	100	100	100	100	100	3,190	EA8
Software Applications/Licenses	225	200	225	130	130	130	130	130	130	130	1,560	EB1
Messaging Services	10	50	225	10	10	50	225	10	10	50	650	EB2
Windows 2003 Migration/ Upgrade	30	60	180	30	30	30	30	30	30	30	480	EB3
Radios	78	100	1,000	530	30	30	30	30	30	30	1,888	EB4
Redundant Data Center	500	410	60	60	500	200	60	60	500	200	2,550	EB8
Network System Renewal	571	825	700	815	600	600	600	765	600	600	6,676	EC4
Audio Visual System - IT	16	50	70	60	25	30	60	25	30	60	426	EC6
Interactive Voice Response	170	100	50	20	20	20	20	20	20	20	460	EC7
EMAP Phases I and II	22	85	100	-	-	-	-	-	-	-	207	ED1
SQL Upgrade	-	225	175	10	10	10	10	10	10	10	470	EG1
Enterprise File System Archiving	-	100	300	10	250	150	10	10	150	10	990	EG2
Network Storage System Renewal	103	650	650	125	125	125	425	525	125	125	2,978	EG3
ERP System	-	250	2,000	2,450	-	-	-	-	-	-	4,700	EG4
HR on-line forms-Re-engineer	4	-	-	-	-	-	-	-	-	-	4	EH1
Succession Planning	-	50	50	30	-	-	-	-	-	-	130	EH2
AMR Enhancements	-	550	50	50	200	50	50	50	50	50	1,100	EM5

FY 2008 - FY 2017 Capital Equipment Disbursements
(\$ in 000's)

Equipment Type	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY '08 - FY	Project
	Actuals	Revised	Approved								'17	Sheet
											Total	Ref.
E Contract/Procurement Mgt Syste	17	-	160	200	-	-	-	-	-	-	377	EP3
Network Systems Security	166	200	75	50	30	50	30	50	30	50	731	ET1
Intranet	107	175	75	75	75	75	75	75	75	75	882	ET2
Handheld Inventory	156	90	150	50	50	50	50	50	50	50	746	ET5
Enterprise Backup Solution	100	100	100	450	100	100	100	100	100	100	1,349	ET7
Video Conferencing	-	10	150	10	10	10	200	10	10	10	420	ET8
Field Services Mgmt System (Autc	713	500	600	600	685	50	50	50	50	50	3,348	ET9
Web-Site Development	56	400	100	125	75	75	75	75	75	75	1,131	EX7
Financial Management System	158	580	150	-	-	-	-	-	-	-	888	EZ1
Customer Information & Billing Sys	347	300	200	100	100	-	-	-	-	-	1,047	EZ2
Payroll/HR System	45	30	30	30	30	30	30	30	30	30	315	EZ4
Maintenance Management System	17	-	-	-	-	-	-	-	-	-	17	EZ5
Document Management System	866	800	650	300	50	50	50	50	50	50	2,916	EZ8
Asset Management System	1,000	1,300	1,100	1,300	535	85	85	85	85	85	5,660	EZ9
Fleet Management System	-	100	-	-	-	-	-	-	-	-	100	EZ9
Automated Security - Visitor Acces	-	50	100	50	-	-	-	-	-	-	200	EY3
Web EOC	-	-	50	50	-	-	-	-	-	-	100	EY4
Oracle Upgrade	-	200	-	-	200	-	-	200	-	-	600	EY5
Total	\$7,772	\$10,232	\$10,410	\$8,520	\$4,679	\$2,922	\$3,207	\$3,255	\$3,040	\$2,699	\$56,735	
Maintenance Services												
Shop Equipment and Plant Lightin	\$120	\$130	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$350	EA9
Major Pump Rebuild/Replacement	700	1,000	500	200	200	200	200	200	200	200	3,600	EC1
Large Electric Motors	500	500	400	200	200	200	200	200	200	200	2,800	EC2
High Priority Rehab Program	614	1,000	500	200	100	100	100	100	100	100	2,914	EC3
Centrifuge Rebuild / Replace	300	600	400	300	300	300	300	300	300	300	3,400	EM4
Total	\$2,234	\$3,230	\$1,900	\$900	\$800	\$800	\$800	\$800	\$800	\$800	\$13,064	
Total Capital Equipment	\$14,630	\$19,283	\$15,788	\$12,288	\$8,747	\$6,615	\$6,910	\$6,948	\$6,733	\$6,692	\$104,633	

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: **EB5 Laboratory Metering and Recording Equipment**
Managing Department: Wastewater Treatment **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annually occurring purchase of laboratory equipment and metering devices.
Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - 41.35%
 EPA -
 WSSC - 45.84%
 Fairfax - 8.38%
 Loudoun/PI - 4.43%



FY 2009 Approved Budget	416,000
FY 2010 Proposed Budget	609,000
Increase/(Decrease) to Approved Budget:	193,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	91	23	285	30	30	30	30	30	30	30	
Commitments Budget	91	23	285	30	30	30	30	30	30	30	

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	2,671,000
FY 2010 Proposed Budget	2,760,000
Increase/(Decrease) to Approved Budget:	89,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	340	340	260	260	260	260	260	260	260	260	
Commitments Budget	340	340	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 2008 - 2017 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

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
Annual program for system valve replacement.

Impact on Operations:
This Project will have no effect on the operating budget

Funding by User (percent):

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



FY 2009 Approved Budget	2,738,000
FY 2010 Proposed Budget	2,282,000
Increase/(Decrease) to Approved Budget:	-456,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	167	270	270	225	225	225	225	225	225	225	
Commitments Budget	167	270	270	225	225	225	225	225	225	225	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: **EX8 Water Service Utility Equipment**
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 2009 Approved Budget	3,546,000
FY 2010 Proposed Budget	3,315,000
Increase/(Decrease) to Approved Budget:	-231,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	515	400	300	300	300	300	300	300	300	300	
Commitments Budget	515	400	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 2008 - 2017 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

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
Annual rehab and replacement of catch basins, and manholes.

Impact on Operations:
This project will have no effect on the operating budget.

Funding by User (percent):

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



FY 2009 Approved Budget	2,474,000
FY 2010 Proposed Budget	2,825,000
Increase/(Decrease) to Approved Budget:	351,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	388	238	293	253	253	278	288	278	278	278	
Commitments Budget	388	238	293	253	253	278	288	278	278	278	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: ER2 SCADA Upgrade at Remote Stations
Managing Department: Sewer Services **EPMC:**
Priority: IT Best Practice (Life Cycle Management)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Upgrades to the wireless System Control functionality at points not located within the Blue Plains facility, and is funded by a special Homeland Security grant.

Impact on Operations:
 Ongoing annual maintenance and system support.

Funding by User (percent):

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



FY 2009 Approved Budget	518,000
FY 2010 Proposed Budget	97,000
Increase/(Decrease) to Approved Budget:	-421,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	97										
Commitments Budget	97										

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annually occurring WASA-wide vehicle and equipment purchases.
Impact on Operations:
 Newer vehicles should result in lower operating costs.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	12,883,000
FY 2010 Proposed Budget	13,399,000
Increase/(Decrease) to Approved Budget:	516,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	2,100	2,500	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	
Commitments Budget	2,100	2,500	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: EF3 HVAC at Various Locations
Managing Department: Facilities **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annual program to repair and replace HVAC equipment within DCWASA.

Facilities maintains the heating, ventilation and air conditioning of both manned and un-manned structures within the purview of the DCWASA 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 replacement 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 2009 Approved Budget	1,599,000
FY 2010 Proposed Budget	1,850,000
Increase/(Decrease) to Approved Budget:	251,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	350	225	225	150	150	150	150	150	150	150	
Commitments Budget	350	225	225	150	150	150	150	150	150	150	

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: EF5 Photocopier Purchase
Managing Department: Facilities **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Periodic program for replacement of DCWASA-owned copiers at the end of their useful lives.

DCWASA purchased new copiers in FY2004. The copier program calls for the assessment and replacement of copier equipment in 5 year cycles, based on repair costs, usage, and fitness for required tasks. In FY2009 DCWASA will perform it's next copier cycle, adjusting the types, speeds and capabilities of equipment which is reaching the end of its useful life according to the needs of the User areas. DCWASA will continue to use any equipment found to still be within it's useful life.

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 2009 Approved Budget	2,800,000
FY 2010 Proposed Budget	2,800,000
Increase/(Decrease) to Approved Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget		500	200	200	600	200	200	200	200	500	
Commitments Budget		500	200	200	600	200	200	200	200	500	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority

FY 2008 - 2017 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: EF7 WASA-wide fire suppression/detection
Managing Department: Facilities **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 WASA facilities.

During FY2008 the TIC library dry chemical fire suppression system will be installed, and the discontinued HALON system will be removed. A DCWASA-wide assessment of the ADA compliance of all Fire Suppression systems will also be conducted, with all compliance tasks of which WASA personnel are capable also being performed.

During FY2009 any remaining ADA compliance tasks requiring specialty skills will be completed.

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 2009 Approved Budget	527,000
FY 2010 Proposed Budget	1,760,000
Increase/(Decrease) to Approved Budget:	1,233,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	110	450	150	150	150	150	150	150	150	150	
Commitments Budget	110	450	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 2008 - 2017 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: EX6 Facilities Improvements
Managing Department: Facilities **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annual program for maintenance of WASA-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 2009 Approved Budget	4,110,000
FY 2010 Proposed Budget	4,086,000
Increase/(Decrease) to Approved Budget:	-24,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	465	875	470	325	325	325	325	325	325	325	
Commitments Budget	465	875	470	325	325	325	325	325	325	325	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Budget	5,832,000
FY 2010 Proposed Budget	5,849,000
Increase/(Decrease) to Approved Budget:	17,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	550	672	610	550	559	672	562	565	550	559	
Commitments Budget	550	672	610	550	559	672	562	565	550	559	

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

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Budget	1,520,000
FY 2010 Proposed Budget	1,600,000
Increase/(Decrease) to Approved Budget:	80,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	200	175	175	150	150	150	150	150	150	150	
Commitments Budget	200	175	175	150	150	150	150	150	150	150	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Budget	3,131,000
FY 2010 Proposed Budget	3,190,000
Increase/(Decrease) to Approved Budget:	59,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,545	845	100	100	100	100	100	100	100	100	
Commitments Budget	1,545	845	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 2008 - 2017 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 2009 Approved Budget	1,658,000
FY 2010 Proposed Budget	1,560,000
Increase/(Decrease) to Approved Budget:	-98,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	225	200	225	130	130	130	130	130	130	130	
Commitments Budget	225	200	225	130	130	130	130	130	130	130	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Enhancements to current version of e-mail system and future upgrades.
Impact on Operations:
 Ongoing annual maintenance renewal and technical support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	714,000
FY 2010 Proposed Budget	650,000
Increase/(Decrease) to Approved Budget:	-64,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	10	50	225	10	10	50	225	10	10	50	
Commitments Budget	10	50	225	10	10	50	225	10	10	50	

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Windows server migration/upgrade based on 4-year life cycle.
Impact on Operations:
 Ongoing annual maintenance renewal and technical support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	474,000
FY 2010 Proposed Budget	480,000
Increase/(Decrease) to Approved Budget:	6,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements											
Budget	30	60	180	30	30	30	30	30	30	30	
Commitments											
Budget	30	60	180	30	30	30	30	30	30	30	

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
Radio system upgrade to next generation digital radio system and annual system enhancements.
Impact on Operations:
Ongoing annual maintenance renewal and City-Wide radio fee.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	551,000
FY 2010 Proposed Budget	1,888,000
Increase/(Decrease) to Approved Budget:	1,337,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	78	100	1,000	530	30	30	30	30	30	30	
Commitments Budget	78	100	1,000	530	30	30	30	30	30	30	

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
Implementation of plan to ensure data redundancy for WASA's mission critical systems.
Impact on Operations:
Ongoing annual maintenance renewal and system support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	2,709,000
FY 2010 Proposed Budget	2,550,000
Increase/(Decrease) to Approved Budget:	-159,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	500	410	60	60	500	200	60	60	500	200	
Commitments Budget	500	410	60	60	500	200	60	60	500	200	

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Budget	6,768,000
FY 2010 Proposed Budget	6,676,000
Increase/(Decrease) to Approved Budget:	-92,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	571	825	700	815	600	600	600	765	600	600	
Commitments Budget	571	825	700	815	600	600	600	765	600	600	

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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)

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Audio video system upgrades, primarily for Board Room, to accommodate technology changes.
Impact on Operations:
 Ongoing annual maintenance renewal and system support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	450,000
FY 2010 Proposed Budget	426,000
Increase/(Decrease) to Approved Budget:	-24,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	16	50	70	60	25	30	60	25	30	60	
Commitments Budget	16	50	70	60	25	30	60	25	30	60	

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 - 100.00%
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	530,000
FY 2010 Proposed Budget	460,000
Increase/(Decrease) to Approved Budget:	-70,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	170	100	50	20	20	20	20	20	20	20	
Commitments Budget	170	100	50	20	20	20	20	20	20	20	

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: **ED1 Electronic Maps**
Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

<u>Phase</u>	<u>Start Date</u>
Design:	
Construction:	4/1/2003
Project Completion:	9/30/2010

Project Description:
 Vectorization of as-built drawings for Department of Engineering and Technical Services. This project is being coordinated with WASA's new asset management system.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	211,000
FY 2010 Proposed Budget	207,000
Increase/(Decrease) to Approved Budget:	-4,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	22	85	100								
Commitments Budget	22	85	100								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 - 100.00%
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	460,000
FY 2010 Proposed Budget	470,000
Increase/(Decrease) to Approved Budget:	10,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	103	225	175	10	10	10	10	10	10	10	
Commitments Budget	103	225	175	10	10	10	10	10	10	10	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Budget	980,000
FY 2010 Proposed Budget	990,000
Increase/(Decrease) to Approved Budget:	10,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget		100	300	10	250	150	10	10	150	10	
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		100	300	10	250	150	10	10	150	10	

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Budget	2,525,000
FY 2010 Proposed Budget	2,978,000
Increase/(Decrease) to Approved Budget:	453,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget		650	650	125	125	125	425	525	125	125	
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		650	650	125	125	125	425	525	125	125	

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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
Project Description:
 System upgrade for financial management system and customer information system and convergence
Impact on Operations:
 Ongoing annual maintenance 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 2009 Approved Budget	4,950,000
FY 2010 Proposed Budget	4,700,000
Increase/(Decrease) to Approved Budget:	-250,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget		250	2,000	2,450							
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		250	2,000	2,450							

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title:
Managing Department: Information Technology **EPMC:**
Priority: IT Best Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Upgrade of on-line forms for HR functions such as new hires, terminations, promotions, 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 2009 Approved Budget	<input type="text" value="62,000"/>
FY 2010 Proposed Budget	<input type="text" value="4,000"/>
Increase/(Decrease) to Approved Budget:	<input type="text" value="-58,000"/>

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	4										
Commitments Budget	4										

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

District of Columbia Water and Sewer Authority

FY 2008 - 2017 Capital Improvement Program

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: EH2 Succession Planning
Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 This program provides support to executive and senior staff in fulfilling development needs

Impact on Operations:
 This project will have no impact on operating budget

Funding by User (percent):

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



FY 2009 Approved Budget	130,000
FY 2010 Proposed Budget	130,000
Increase/(Decrease) to Approved Budget:	0

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget		50	50	30							
Commitments Budget		50	50	30							

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Budget	850,000
FY 2010 Proposed Budget	1,100,000
Increase/(Decrease) to Approved Budget:	250,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget		550	50	50	200	50	50	50	50	50	
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		550	50	50	200	50	50	50	50	50	

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Budget	400,000
FY 2010 Proposed Budget	377,000
Increase/(Decrease) to Approved Budget:	-23,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	17		160	200							
Commitments Budget	17		160	200							

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 WASA systems.
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 2009 Approved Budget	500,000
FY 2010 Proposed Budget	731,000
Increase/(Decrease) to Approved Budget:	231,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	166	200	75	50	30	50	30	50	30	50	
Commitments Budget	166	200	75	50	30	50	30	50	30	50	

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Budget	753,000
FY 2010 Proposed Budget	882,000
Increase/(Decrease) to Approved Budget:	129,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	107	175	75	75	75	75	75	75	75	75	
Commitments Budget	107	175	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 2008 - 2017 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

<u>Phase</u>	<u>Start Date</u>
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 2009 Approved Budget	837,000
FY 2010 Proposed Budget	746,000
Increase/(Decrease) to Approved Budget:	-91,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	156	90	150	50	50	50	50	50	50	50	
Commitments Budget	156	90	150	50	50	50	50	50	50	50	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 DCWASA.
Impact on Operations:
 Ongoing annual maintenance and system support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	<u>1,349,000</u>
FY 2010 Proposed Budget	<u>1,349,000</u>
Increase/(Decrease) to Approved Budget:	<u>0</u>

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	100	100	100	450	100	100	100	100	100	100	
Commitments Budget	100	100	100	450	100	100	100	100	100	100	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Creation and maintenance of Video conferencing functionality at DCWASA.
Impact on Operations:
 Ongoing annual maintenance support.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	414,000
FY 2010 Proposed Budget	420,000
Increase/(Decrease) to Approved Budget:	6,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget		10	150	10	10	10	200	10	10	10	
Commitments Budget	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
		10	150	10	10	10	200	10	10	10	

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 DCWASA 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 2009 Approved Budget	3,690,000
FY 2010 Proposed Budget	3,348,000
Increase/(Decrease) to Approved Budget:	-342,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	713	500	600	600	685	50	50	50	50	50	
Commitments Budget	713	500	600	600	685	50	50	50	50	50	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:	9/30/2003

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	894,000
FY 2010 Proposed Budget	1,131,000
Increase/(Decrease) to Approved Budget:	237,000
CLOSED	

	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
Disbursements Budget	56	400	100	125	75	75	75	75	75	75	
Commitments Budget	56	400	100	125	75	75	75	75	75	75	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority

FY 2008 - 2017 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 WASA implemented its Financial System and in 2001 implemented its Customer Information System. When these systems were implemented WASA 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 WASA has matured to a different level and the industry has as well. WASA should consider a reassessment of business requirements after 10 years to look for a new system. Based on organization readiness and the Solutions now available, WASA should explore utilizing an ERP System. The assessment will include review of Financial System, Customer Information System, as well as Payroll 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 2009 Approved Budget	450,000
FY 2010 Proposed Budget	888,000
Increase/(Decrease) to Approved Budget:	438,000

Disbursements Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	158	580	150								
Commitments Budget	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
	158	580	150								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

<u>Phase</u>	<u>Start Date</u>
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. In FY09/10 a assessment will begin for ERP system to include customer information system and financial system.

Impact on Operations:

Ongoing annual maintenance and system support.

Funding by User (percent):

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



FY 2009 Approved Budget	1,246,000
FY 2010 Proposed Budget	1,047,000
Increase/(Decrease) to Approved Budget:	-199,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	347	300	200	100	100						
Commitments Budget	347	300	200	100	100						

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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. Project decrease reflects close out of prior implementation costs.

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 2009 Approved Budget	334,000
FY 2010 Proposed Budget	315,000
Increase/(Decrease) to Approved Budget:	-19,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	45	30	30	30	30	30	30	30	30	30	
Commitments Budget	45	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 2008 - 2017 Capital Improvement Program**

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: EZ5 Maintenance Management System
Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	6/1/2001
Project Completion:	10/15/2002

Project Description:
 Implementation of Maintenance management software for Blue Plains, including warehouse and maintenance work orders. This project is closed and incorporated into Asset Management (EZ9) budget.

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 2009 Approved Budget	53,000
FY 2010 Proposed Budget	17,000
Increase/(Decrease) to Approved Budget:	-36,000

CLOSED

	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
Disbursements Budget	17										
Commitments Budget	17										

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

<u>Phase</u>	<u>Start Date</u>
Design:	10/1/2002
Construction:	
Project Completion:	9/30/2011

Project Description:
 This project will provide a centralized electronic source for all critical WASA documents, allowing for better sharing among departments and transfer of information to future WASA 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 2009 Approved Budget	4,008,000
FY 2010 Proposed Budget	2,916,000
Increase/(Decrease) to Approved Budget:	-1,092,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	866	800	650	300	50	50	50	50	50	50	
Commitments Budget	866	800	650	300	50	50	50	50	50	50	

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

District of Columbia Water and Sewer Authority

FY 2008 - 2017 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

<u>Phase</u>	<u>Start Date</u>
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 WASA 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 - Indirect Cost

EPA -

WSSC -

Fairfax -

Loudoun/PI -



FY 2009 Approved Budget **5,869,000**

FY 2010 Proposed Budget **6,420,000**

Increase/(Decrease) to Approved Budget: **551,000**

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	1,000	1,300	1,100	1,300	535	85	85	85	85	85	
Commitments Budget	1,000	1,300	1,100	1,300	535	85	85	85	85	85	

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: **EY3 Automated Security-Visitor Access System**
Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	11/1/2008
Construction:	
Project Completion:	9/30/2011

Project Description:
Standardize the visitor and access system for each of the major facilities.

Impact on Operations:
Ongoing annual maintenance and technical support cost.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	0
FY 2010 Proposed Budget	200,000
Increase/(Decrease) to Approved Budget:	200,000

	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
Disbursements Budget	0	50	100	50							0
Commitments Budget	0	50	100	50							0

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: EY4 Web EOC
Managing Department: Information Technology **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	10/1/2009
Construction:	
Project Completion:	9/30/2011

Project Description:
 Crisis information management software that delivers real-time information to emergency responders.
Impact on Operations:
 Ongoing annual license maintenance cost

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	0
FY 2010 Proposed Budget	100,000
Increase/(Decrease) to Approved Budget:	100,000

	Pre FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Post FY 2017
Disbursements Budget	0		50	50							0
Commitments Budget	0		50	50							0

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

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 WASA.

Impact on Operations:

Ongoing annual license maintenance cost.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	0
FY 2010 Proposed Budget	600,000
Increase/(Decrease) to Approved Budget:	600,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	0	200			200			200			0
Commitments Budget	0	200			200			200			0

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 Capital Improvement Program**

Service Area Title: Capital Equipment
Program Title: Capital Equipment
Activity Group/Project Title: EA9 Shop Equipment and Plant Lighting
Managing Department: Maintenance Services **EPMC:**
Priority: Good Utility Practice

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annual program to repair and replace Shop Equipment and Plant Lighting.

Maintenance requires many small tools, rerouting pumps, testing and calibration equipment, drills, presses and other specialty tools to maintain the myriad types of equipment used within the DCWASA system.

In addition, there is a sizable lighting requirement for both safety and underground visibility requirements, whose periodic repair and replacement is covered by this program.

Impact on Operations:
 This project will have no effect on the operating budget.

Funding by User (percent):

DC - Joint Use - Indirect Cost
 EPA -
 WSSC -
 Fairfax -
 Loudoun/PI -



FY 2009 Approved Budget	173,000
FY 2010 Proposed Budget	350,000
Increase/(Decrease) to Approved Budget:	177,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	120	130	100								
Commitments Budget	120	130	100								

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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

Phase	Start Date
Design:	
Construction:	
Project Completion:	

Project Description:
 Annual program for the repair and replacement of Major Pumps at Blue Plains.

In addition to addressing problems which arise during the year, FY08 will include rebuilds of Spent Wash Water Pumps, High Pressure Reclaimed Effluent Pumps, and Filter Influent Pumps. FY09 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 2009 Approved Budget	3,536,000
FY 2010 Proposed Budget	3,600,000
Increase/(Decrease) to Approved Budget:	64,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	700	1,000	500	200	200	200	200	200	200	200	
Commitments Budget	700	1,000	500	200	200	200	200	200	200	200	

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

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 WASA facilities to maintain process systems and meet permit compliance. Repairs planned for FY 2009 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 2009 Approved Budget	2,911,000
FY 2010 Proposed Budget	2,800,000
Increase/(Decrease) to Approved Budget:	-111,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	500	500	400	200	200	200	200	200	200	200	
Commitments Budget	500	500	400	200	200	200	200	200	200	200	

(projected disbursements do not include contingencies)

(dollars in thousands)

**District of Columbia Water and Sewer Authority
FY 2008 - 2017 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 2009 Approved Budget	2,192,000
FY 2010 Proposed Budget	2,914,000
Increase/(Decrease) to Approved Budget:	722,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	614	1,000	500	200	100	100	100	100	100	100	
Commitments Budget	614	1,000	500	200	100	100	100	100	100	100	

(projected disbursements do not include contingencies)

(dollars in thousands)

District of Columbia Water and Sewer Authority
FY 2008 - 2017 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:**
Priority:
Project Description:
 Repair and replacement of Centrifuges at Blue Plains.
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 2009 Approved Budget	2,811,000
FY 2010 Proposed Budget	3,400,000
Increase/(Decrease) to Approved Budget:	589,000

	<u>Pre FY 2009</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Post FY 2017</u>
Disbursements Budget	300	600	400	300	300	300	300	300	300	300	
Commitments Budget	300	600	400	300	300	300	300	300	300	300	

(projected disbursements do not include contingencies)

(dollars in thousands)