District of Columbia
Water and Sewer Authority

Adopted January 10, 2008

Robin S. Martin, *Chairman*
Jerry N. Johnson, *General Manager*

Approved FY 2007-2016 Capital Improvement Program

2007-16

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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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DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

5000 OVERLOOK AVENUE, S.W., WASHINGTON, D.C. 20032

Mr. Robin B. Martin
Chairman
and Members, Board of Directors
District of Columbia Water and Sewer Authority
5000 Overlook Avenue, S.W.
Washington, D.C. 20032

October 25,2007

Dear Chairman Martin and WASA Board Members:

I am pleased to submit for your review and consideration our proposed capital budgets. This year the budget includes: $3.1 billion for our FY 2007 – FY 2016 Capital improvement Program (disbursement basis); $6.2 billion for life time budget and a Capital Authority request of $585.9 million. This book provides a framework for the budget development and monitoring process, and a gauge of the progress of capital projects. It also serves as a valuable tool for evaluating our performance by the financial markets and other stakeholders.

This year's CIP is $880 million higher than last year's plan. The increase is primarily attributable to the newly proposed Blue Plains Total Nitrogen Program (BTN). BTN includes capital projects that are required for nitrogen removal and wet weather flow treatment, thus enabling the Blue Plains Advanced Wastewater Treatment Plant to comply with the United States Environmental Protection Agency's modification to the National Pollutant Discharge Elimination System (NPDES) permit.

SIGNIFICANT ISSUES AND INITIATIVES

Projects in WASA's CIP are broken down into seven service areas, including Wastewater Treatment, Combined Sewer Overflow, Stormwater, Sanitary Sewer, Water, Washington Aqueduct, and Capital Equipment.

Wastewater Treatment Service Area: The lifetime budget for the Wastewater Treatment Service Area is $2.3 billion dollars, reflecting a $941 million net increase over last year's budget. The cost of implementing the BTN Program, which is necessary to meet Blue Plains' modified NPDES permit, accounts for almost all the budget increase. 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, 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 Processing Program 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 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, adding the permanent blower system for air-water wash of the effluent filters, and an upgrade to a raw wastewater pump station. In addition, piloting and conceptual design for additional nitrogen removal and improved treatment of excess flow is scheduled to begin in FY 2008.

Combined Sewer Service Area: The lifetime budget for the Combined Sewer Service Area is $2.2 billion, which includes the twenty-year Combined Sewer Overflow Long-Term Control Plan (CSO LTCP). 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.

We are nearing completion of approximately $140 million of projects that were included in the settlement of a lawsuit against WASA regarding implementation of the federal CSO Nine Minimum Controls program. These projects, which were budgeted and planned by WASA prior to the lawsuit, are projected to reduce combined sewer overflows by 40 percent.

In addition, we have undertaken the rehabilitation of our major pumping stations to increase their capacity and improve their condition. We are also underway with engineering to separate additional combined sewer areas in Anacostia and Rock Creek and to complete studies to add Low Impact Development (LID) at several WASA facilities.

Stormwater Service Area: The lifetime budget for the Stormwater Service Area is $43.7 million, a slight decrease from last year. As in last year's budget, we have not included funding for stormwater pumping rehabilitation projects. This year's budget includes additional funding for on-going Department of Sewer Services (DSS) projects and DC Department of Transportation (DDOT) stormwater projects, done on behalf of WASA, starting in FY 2016.

Stormwater in the District of Columbia remains a challenge for District policymakers and for the agencies with the responsibility for managing an array of program activities as well as maintaining and improving the infrastructure (catch basins, underground facilities, pump stations, etc.). The District recently created the Department of the Environment (DOE), and continues to negotiate with the Environmental Protection Agency to address some of these matters. We are also continuing to evaluate stormwater issues independently while we work with the Executive Office of the Mayor, the City Council and relevant government agencies to develop reasonable and workable solutions.

Sanitary Sewer Service Area: We continue to focus on several significant initiatives that will improve our sewer system. Lifetime

budgets in the Sanitary Sewer Service Area total $273 million, an increase of $24 million over last year's CIP. The increases represent the establishment of a new project to address the Low Area Trunk Sewer in response to an unanticipated structural collapse (Project DR) and the creation of a new program to address Sewer Laterals and Mains which require significant investment to return to good working order (Project EU).

- *Sewer System Assessment* – In FY 2003, we initiated our first comprehensive assessment of the sewer system. The purpose of the assessment is to inspect approximately 4 percent of the sewer system and 80 percent of high priority sewers. Based on the study to date, we have begun major rehabilitation of the outfall sewers (major sewers that convey wastewater from the major pumping stations to Blue Plains). During FY 2008, we will continue the evaluation of the sewer system to determine its condition, verify adequate capacity, and develop new capital projects, as appropriate. An average of approximately $5 million in annual funding is included in the CIP for the next 4 years for capital projects that will be recommended by the comprehensive assessment.

- *Sewer System Improvements* – This year's CIP budget includes funds for major system improvements. During FY 2008, WASA will continue the comprehensive evaluation of the sanitary and combined sewer systems as well as design management for sewer pumping station rehabilitations.

Water Service Area: The lifetime budget for the Water Service Area is $1 billion, an increase of $25 million from last year's CIP. 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 replacement.

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.

Holistic Approach

The holistic approach results in the replacement of critical components of the water and sewer system while replacing lead service lines in the same area. Utilizing this holistic approach to water infrastructure work (replacement of water mains, lead services, valves, hydrants, etc.) offers significant advantages:

- Better coordination of public outreach
- Savings in procurement, management and construction costs
- Better control over operation of water distribution system
- Improved coordination of construction activities.

Water System Initiatives

We continue to focus on water quality and improvements to the District's aging infrastructure. As evidence of that commitment, we have budgeted over $317 million (cash disbursements basis) for water distribution system improvements (including lead) in the ten year plan, a substantial portion of which are for water quality-related initiatives and infrastructure improvements. Following are some of the major investments we are making in the water system.

Water-Mains - This budget provides for a variety of water quality-related work, primarily in the small main area. Highlights of the work under this program by project category include:

- *Valve Replacement* **–** Broken valves can create unknown dead ends as well as delay critical capital and repair projects that improve water quality. Since 2001, almost $37 million has been programmed for valve replacements. This budget provides funds for replacement of 200 valves; construction is already completed or underway for over 112 valves.
- *Water Main Rehabilitation* – We are committed to improve the water system and ensure that it is reliable. This includes ensuring that there is adequate water pressure, system flows, as well as improved water quality. Our budget provides for repairs of large and small water mains. We are also replacing various transmission mains in the system, including a 20-inch water main at Minnesota Avenue S.E and installing water mains to reinforce the supply to the Fort Stanton Reservoirs and the McMillan Water Treatment Plant.

  Construction is underway to replace small diameter mains in the new pressure zone east of the Anacostia river, with construction scheduled for completion in FY 2009. Higher pressures combined with older mains in this area makes replacement necessary. Our holistic approach provides that for a given block where lead service replacement is required, we will also assess the condition of the small diameter main in the street. The goal is to complete all improvements to a block at one time to minimize disruption and costs. If the condition warrants replacement, we will also replace the water main, valves and hydrants as required. We continue to coordinate our efforts with the District Department of Transportation (DDOT) to accomplish all road and sidewalk reconstruction or resurfacing at the same time.

Fire Hydrants – We have committed a lifetime budget of $26.5 million to fund replacement/upgrade of fire hydrants in the District, which are one of our most critical water distribution system assets. To date (Oct 2005 through Oct 2007) we have replaced over 893 hydrants, with 500 replacements planned for FY 2008 and we plan to replace approximately 3,600 fire hydrants under the five year program.

Water System Facilities Planning

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 the 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.

DCWASA began updating the 2000 Facility Plan in 2007 and will finish in summer FY 2008; we will use this information as a part of next year's budget preparation cycle. This will provide an opportunity to review and update priorities for the overall system upgrade, as well as timing for various projects.

Water-Main Management Program

DCWASA water system contains approximately 1,300 miles of pipe, of which, approximately 1,060 miles are 12-inch diameter and smaller. Small diameter water-mains may not be considered critical from a supply and transmission standpoint, but they account for over 80 percent of the pipes in the system. Currently the Authority has a program 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 replacement of appurtenances, such as valves, fire hydrants and house service lines.

Based on recent studies, we plan to construct several new storage facilities to support changing development patterns, provide additional water pressure to certain areas of the District, and ensure emergency backup service. The lifetime budget for this type of work is $32 million and the most immediate need is for two million gallons of elevated storage tank in the southern portion of the Anacostia First High Service Area (to serve areas in the vicinity of Specialty Hospitals of Washington – Hadley, Greater Southeast Hospital, Saint Elizabeth's Hospital, and Congress Heights). In addition, we will proceed with additional studies for several new storage facilities.

Future fiscal year small diameter water main replacement projects will follow this holistic approach.

Lead Service Replacement Program – In the light of lead levels now being below Federal limits, with the addition of orthophosphate, our Board is seriously considering either eliminating, or making major changes to the very expensive Lead Service Replacement program. Based on a recent review, the total number of lead service lines identified in the District may be between 33,000 and 35,000. Beginning in FY 2003 through FY2007, we have replaced 14,000 of these lead services. We will replace the remaining lead services by FY 2016. The lifetime budget for this program is $438 million.

To-date approximately 4,900 customers have signed up to replace their portion of the service line. In FY 2007, we started providing homeowners with postcard reminders to encourage them to return their private property lead service replacement agreements; and, in FY 2008 we will also use automatic phone call reminders. We will continue our partnerships with Wachovia

Bank and the District's Department of Housing and Community Development; these entities offer programs to help low-income property owners to finance their private side lead service replacement work.

In order to reduce impacts and costs to ratepayers, LSR construction work continues to be included in sewer laterals, small valves and water main repair work. This year, the LSR Program has substantially increased the number of fire hydrant replacements within the limits of current and upcoming LSR blocks and continues to coordinate closely with the Hydrant Replacement Program team.

In FY 2008 we will continue to work closely with the Washington Aqueduct to monitor any planned changes to the water supply. In addition, we will continue our ongoing relationship with the District's Department of Health (DOH) and with expert public health advisors from the George Washington University School of Public Health. WASA continues to research technology changes and review regulatory changes for any potential impacts to the LSR Program.

In July of 2007, management developed options for completing the LSR Program and presented them to the WASA Board. We continue to review future options for completing the LSR Program. In FY 2008 we will focus on developing plans to invite formal public comment on the LSR program. We will also continue to consult with the DOH, regulatory agencies, academic and other interested parties including stakeholders.

***Metering* –** The meter installation/Automated Meter Reading Program is 98.9% complete, representing approximately 120,000 customer locations. Access, scheduling and safety issues have hindered the completion of this project; however; we continue to work with customers to complete remaining installations.

Washington Aqueduct: The Washington Aqueduct, managed by the U.S. Army Corps of Engineers, provides wholesale water treatment services to WASA and its partners in Northern Virginia, Arlington County and Falls Church. WASA purchases approximately 76 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan treatment plants, and thus is responsible for 76 percent of the Aqueduct's operating and capital costs. Under federal legislation and a memorandum of understanding enacted in 1997, 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 WASA's share of Washington Aqueduct projects totals $170 million or $5 million less than last year's 10-year plan of $175 million. This change is due primarily to projects being completed and closed.

OTHER CONSIDERATIONS

Currently, there are a number of important emerging issues that we are closely monitoring to ensure reliable service to our customers and avoid surprises. We look beyond our current ten-year plan for projects or operational changes that may be necessary to address regulatory as well as other emerging issues.

Chesapeake Bay Initiative & New NPDES Permit

The 1987 Chesapeake Bay Agreement called for a 40 percent voluntary nitrogen reduction by its signatories by year 2000. The District of Columbia was the first signatory in the region to meet this voluntary commitment due to significant improvements by DCWASA at Blue Plains. The EPA Chesapeake Bay Program continued to set new nutrient limits for all jurisdictions and began to make these limits mandatory instead of voluntary by including these requirements in NPDES permits. A modification to Blue Plains' NPDES Permit, which became effective on June 4, 2007, included a requirement to operate the wastewater treatment plant to meet a total nitrogen effluent limit of not more than 4,689,000 pounds per year. At an average annual flow of 370 mgd, this is equivalent to 4.2 mg/l. In the fact sheet developed by EPA related to the permit modification, EPA concedes that "the Blue Plains facility is not currently designed to achieve the limit on a consistent basis. In order to do so, it is anticipated that new and/or retrofitted treatment technologies must be installed at the Blue Plains facility. Therefore, EPA intends to establish a schedule for compliance with the nitrogen limit in a separate enforceable document". DCWASA is currently in negotiations with EPA to modify the current CSO consent decree; one of the modifications would be to include the schedule for compliance with the nitrogen limit.

DCWASA developed a BTN Program to incorporate the requirements of the Chesapeake Bay Program and the Long Term Control Plan in a coordinated approach. This plan was reviewed by EPA and presented to the public and received favorably by all due to the water quality benefits of the proposed plan. The estimated cost of this program is $950 million in 2007 dollars.

TMDLs and Impact on CSO LTCP

In December 2004, WASA reached an agreement with the environmental plaintiffs, the U.S. Environmental Protection Agency, and the U.S. Department of Justice on the CSO Long-Term Control Plan (LTCP), a major milestone in WASA and the District's history. This agreement has been formalized in a judicial consent decree entered by the U.S. District Court in March 2005. The agreement calls for WASA to complete the LTCP over a twenty-year period. The judicial consent decree includes provisions to modify the selected CSO controls and schedules included in the decree. Modifications may be requested because of changes in the technical, regulatory, financial and institutional bases used to develop the LTCP. Currently, WASA is in the process of evaluating a modification request for the Blue Plains Excess Flow Treatment Facilities that are part of the selected CSO controls included in the decree. This modification will be required to accommodate a new total nitrogen effluent limit of 4.2 mg/l that EPA has included in the Blue Plains NPDES Permit, which has been appealed by WASA and others.

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 is scheduled to be submitted in December 2007 and the final facility Plan is due for submission to EPA in September 2008.

The 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 Anacostia water quality objectives which are the basis of the LTCP. WASA will be in a better position to determine the impact on the LTCP once the EPA completes the issuance of new TMDLs scheduled, no later than the summer of 2008.

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 predominantly in DCWASA capital projects such as steel, copper, aluminum, and cement. Additionally, there is a less-competitive contractor environment in which contractors are more fully employed and bid on fewer, more select projects. An additional contributing factor is high inflation in energy prices and petroleum based products such as plastics, roofing products, and asphalt.

Another factor affecting project costs is the more active role by the surety industry in risk assessment on projects for which they will issue performance bonds, resulting in placing more stringent conditions on project owners. This tends to decrease the bidder pool for projects, and increase the bid prices. We will continue to monitor these inflationary pressures and the bidding environment, and assess their impact on our capital improvement program budget, and planning. There is also the possibility that, following consultation with the Board, we may seek a legislative relief to the surety issues.

Anacostia Waterfront Development & Nationals Ballpark

Construction for the new Nationals Ballpark (or Nationals Park) is underway. The "baseball district" encompasses two major sewer pumping stations, which are critical parts of our infrastructure. Our Department of Sewer Services, Fleet Management and related facilities are directly across from the new stadium. These facilities house over 200 employees and contractors as well as a significant portion of our 570-piece vehicle fleet.

In the past few months we have worked with the Office of the Deputy Mayor for Planning and Economic Development evaluating the potential relocation of these facilities to other sites in the District and have included $42.5 million in this year's budget to cover the estimated costs of relocation and development of a new site. We expect full reimbursement for all related costs by the District, and expect no impact on DCWASA 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 DCWASA access to physical assets that cannot

be relocated. We have established a framework for discussions, and negotiations are well underway with relevant parties, including the Office of the Deputy Mayor for Planning and Economic Development and the Office of the Attorney General, and we routinely communicate with other stakeholders, including the Sports and Entertainment Commission, the Executive Office of the Mayor and the District Council

Biosolids Management Program

The Board, in October 2006, accepted Management's recommendation to reject the Egg Shaped Digester Facility bid due to the high bid price and placed the project on hold. Furthermore, the Board accepted management's recommendation that continuous monitoring be undertaken in four areas: 1) construction bidding environment; 2) regulatory initiatives that could impact the viability of land application; 3) maturing of evolving technologies; and 4) DCWASA's related financial position. With this, and other information collected over the next three years, a revised strategy for long-term biosolids management will be developed. The status of this effort will be reported to the Board every six months during the time period.

DCWASA's award-winning Biosolids Management Program has been recognized by the U.S. Environmental Protection Agency which gave its highest national award for biosolids management for our outstanding operations, technological advances, and promotion of the beneficial uses of municipal wastewater biosolids.

Land Application of Biosolids

Currently, biosolids generated at Blue Plains are land applied at farms, mine reclamation sites, forest land, and tree farms. The majority of the sites are in Virginia, with a small percentage (~3 percent) in Maryland. In late FY 2007, the Commonwealth of Virginia adopted legislation imposing a fee for biosolids land applied in the State. The annual cost of this fee, is projected at $800,000. Maryland biosolids user fees amount to approximately $70,000 annually. In addition, we continue to monitor other pending regulatory changes in Virginia that could limit our ability to land apply this product. In line with the Board's strategic goal of developing a state-of-the-art biosolids management program, we are pursuing a number of other alternative recycling solutions including geographical diversification to Pennsylvania, expanded use of biosolids in silviculture, mine reclamation and site restoration. We are also supporting research efforts that could help spur the use of biosolids as a product.

IMA Negotiations

In 1985, the District signed the Blue Plains Intermunicipal Agreement (the IMA) with the "Users" of the Blue Plains Wastewater Treatment Plant facilities. The User group consists of District of Columbia, Fairfax County in Virginia, and Montgomery and Prince George's Counties 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 program at the Blue Plains facility; the three surrounding counties comprise approximately 60 percent of the Blue Plains capacity.

Some of the terms in the 1985 IMA expire in 2010. For example, the IMA states that capacity allocations at 370 mgd (peak capacity) remain in effect until 2010. In order to allow ample time to renegotiate any User issues, the Users began negotiations during FY 2006 and will continue discussions until all parties reach a new agreement.

ACKNOWLEDGEMENTS

I would like to acknowledge the WASA Board of Directors for their steadfast commitment, over the years, to building a world-class entity, and setting clear priorities for the Authority to ensure that we meet our customers' service delivery expectations.

I would also like to extend a special thanks to the WASA employees who have helped prepare this document. Special thanks go to staff in the Departments of Engineering and Technical Services, Information Technology, Public Affairs, and Office of the Chief Financial Officer for their hard work and dedication that made this document possible.

Sincerely,

Jerry N. Johnson
General Manager

District of Columbia
Water and Sewer Authority

Approved FY 2007-2016 Capital Improvement Program

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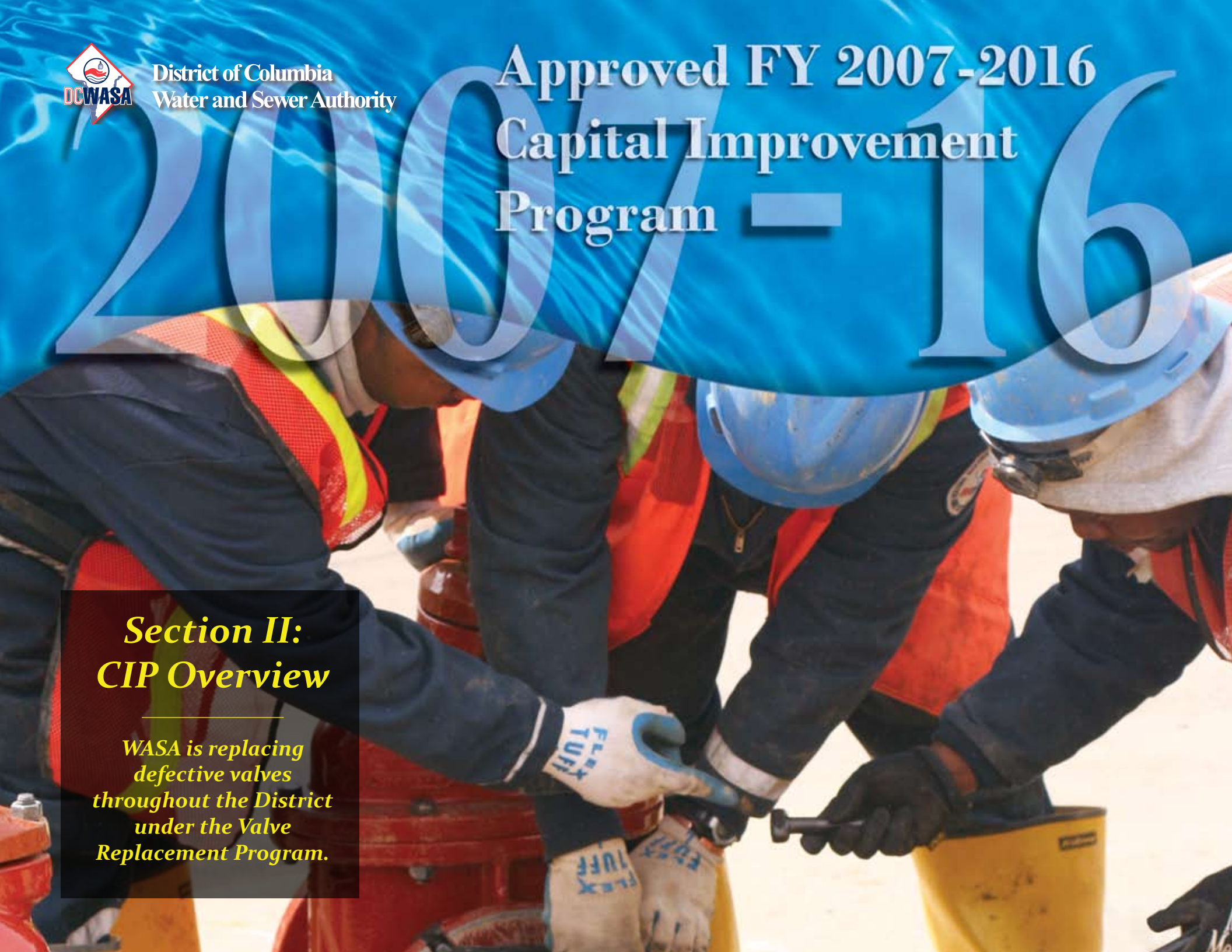
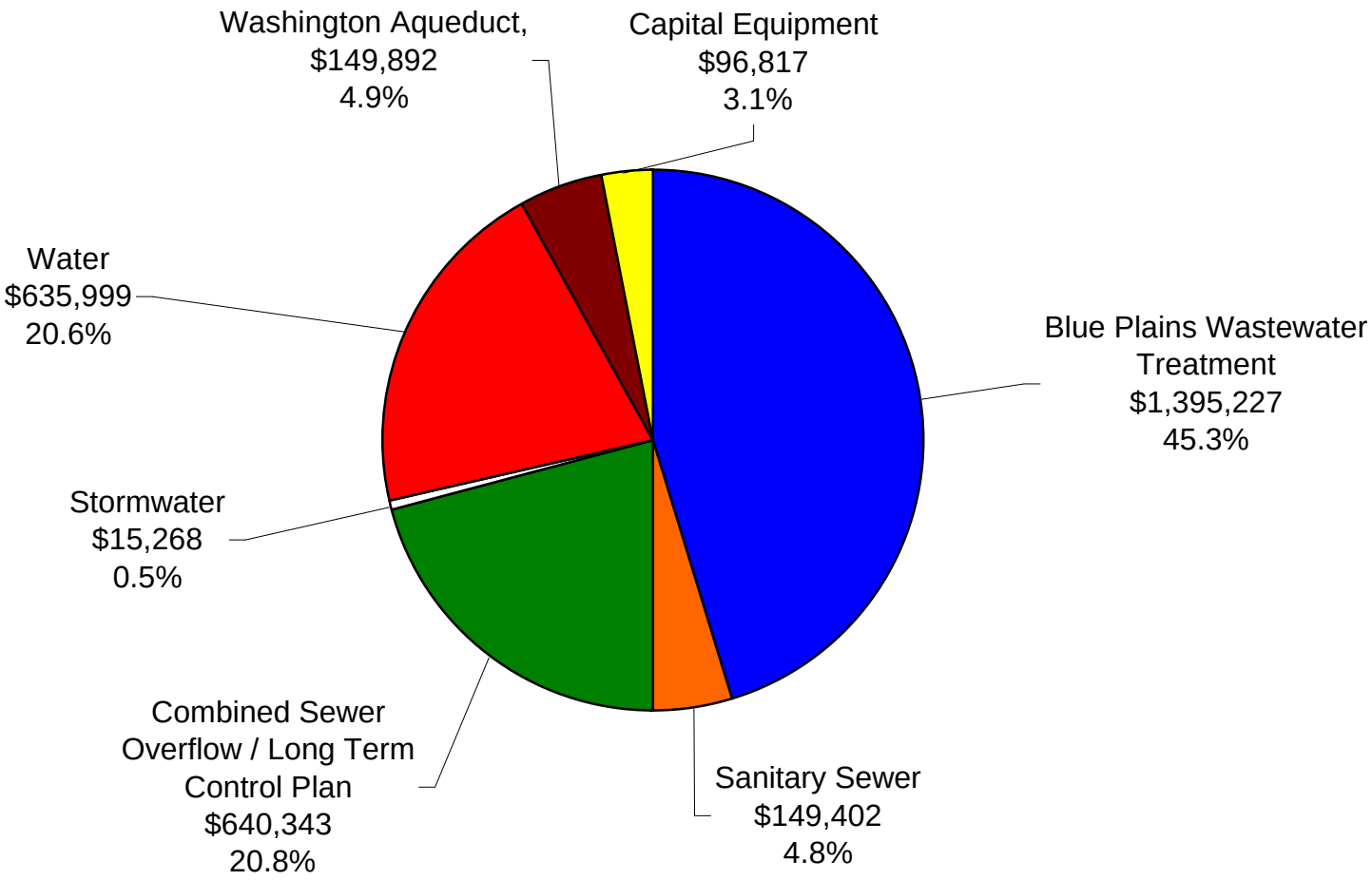


Section II: CIP Overview

WASA is replacing defective valves throughout the District under the Valve Replacement Program.

FY 2007 - FY 2016 Capital Improvement Program
($ in 000's)



Total $3.1 billion (Cash Disbursements)

FY 2007 – 2016
CAPITAL IMPROVEMENT PROGRAM OVERVIEW

WASA's ten-year capital improvement program (CIP) totals $3.1 billion (cash disbursements basis), approximately $880 million more than last year's plan. As discussed in Section I and in more detail throughout this document the increase is, primarily, attributable to the newly proposed Blue Plains Total Nitrogen Program (BTN). BTN includes capital projects that are required for nitrogen removal and wet weather flow treatment, thus enabling the Blue Plains Advance Wastewater Treatment Plant (BP AWWTP) to comply with the United States Environmental Protection Agency's (EPA) modification to the National Pollutant Discharge Elimination System (NPDES) permit, reducing the total nitrogen effluent limit to 4.7 million pounds per year (equivalent to 4.2 mg/l at 370 mgd average annual flow).

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 $2.3 billion dollars, reflecting a $941 million net increase over last year's budget. The cost of implementing the Total Nitrogen Program accounts for almost all 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, 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 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 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, adding the permanent blower system for air-water wash of the effluent filters, and an upgrade to Raw Wastewater Pump Station 1. In addition, planningplanning, piloting and conceptual design for the BTN is scheduled to begin in FY 2008.

In FY 2007 the following long-term upgrade construction projects were placed in service:

- Filtration and Disinfection Facility – replacement of filter underdrains, media, and washwater troughs to prepare filters for conversion to air-water wash system. All 40 filters and all the media have been replaced and are in service.

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 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.

COMBINED SEWER

The lifetime budget for the Combined Sewer Service Area is $2.2 billion, which includes the twenty-year CSO 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 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).

We are nearing completion of approximately $140 million of projects that were included in the settlement of a lawsuit against WASA regarding implementation of the federal CSO Nine Minimum Controls program. These projects, which were budgeted and planned by WASA prior to the lawsuit, are projected to reduce combined sewer overflows by 40 percent. Of these projects, the rehabilitation, in FY 2004, of twelve inflatable dams, 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. In addition, we have experienced over 40 percent reduction in floatable debris discharged into the Anacostia and Potomac rivers. Additional projects (Outfall Sewer rehabilitation-Project D2) have been identified under the current sewer assessment program and funded for $30 million in the CIP in order to meet the 1076 mgd plant flow requirement (see project sheet for additional details).

We have undertaken the rehabilitation of our major pumping stations to increase their capacity and improve their condition: three of these stations are in the construction phase, while the fourth (Poplar Point Pumping Station) is in the design phase and is 70% complete. Construction of the current phase of each of the Pumping Stations is scheduled to be completed by calendar year 2009. In addition, since the determination has been made that the Main and O Street pumping stations will remain at the present location despite the stadium construction currently underway, additional long-term rehabilitation projects have been scheduled to rehabilitate the pump stations. Additional improvements are scheduled for the Potomac Pumping Station as well. We are also in the process of separating additional combined sewer areas in Anacostia and Rock Creek. Additionally, we are completing studies to add Low Impact Development (LID) at several WASA facilities.

We are at the mid-point in the development of a Facility Plan for the Anacostia River CSO control projects. Alternative tunnel alignments have been developed and are being evaluated. Geotechnical investigations and soil borings are underway and the results will be used for the selection of an alignment and design of the tunnels. Hydraulic studies are also being made and coordination underway with other projects such as the South Capitol and 11th Street Bridges and future development at Poplar Point. Our Facility Plan includes a strategy for public outreach to the appropriate parties on right of way and permitting requirements, water front development efforts, and neighborhood issues. An initial draft of the Facility Plan is scheduled to be submitted in December 2007 and the final Facility Plan is due for submission to EPA in September 2008. However, the 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 Anacostia water quality objectives which are the basis of the LTCP. WASA will be in a better position to determine the impact on the LTCP once the EPA completes the issuance of new TMDLs scheduled no later than the summer of 2008.

STORMWATER

The lifetime budget for the Stormwater Service Area is $43.7 million, a slight decrease from last year. As in last year's budget, we have not included funding for stormwater pumping rehabilitation projects. This year's budget includes additional funding for on-going projects, starting in FY 2016. There have been on-going discussions between WASA and DC Department of Transportation (DDOT) regarding the responsibility for the storm water infrastructure, including the maintenance and cleaning of the catch basins. These structures are integral components of roads and highways in the District, whose sole purpose is to drain out the city to avoid street and basement flooding. As such these are seen by WASA as responsibilities of DDOT.

Stormwater in the District of Columbia remains a challenge for District policymakers and for the agencies with the responsibility for managing an array of program activities as well as maintaining and improving the infrastructure (catch basins, underground facilities, pump stations, etc.). The District recently created the Department of the Environment (DOE), and continues to negotiate with the Environmental Protection Agency to address some of these matters. We are also continuing to evaluate stormwater issues

independently while we work with the Executive Office of the Mayor, the City Council and relevant government agencies to develop reasonable and workable solutions.

SANITARY SEWER

Lifetime budgets in the Sanitary Sewer Service Area total $273 million, an increase of $24 million over last year's CIP. The increases represent the establishment of a new project to address the Low Area Trunk Sewer in response to an unanticipated structural collapse (Project DR) and the creation of a new program to address Sewer Laterals and Mains which require significant investment to return to good working order (Project EU).

The lifetime budget for the Potomac Interceptor increased by $3.2 million, to $44.4 million, in order to fund a complete inspection of the 50 mile pipeline over the next 10 years. In October 2000, WASA completed interim improvements to the Potomac Interceptor to address odor complaints and has been maintaining it pending permanent odor control improvements which will begin in FY 2008 and is scheduled to be completed in FY 2011. In addition to the odor control improvements, we have almost completed designing significant structural improvements to two large pipe segments of the Potomac Interceptor in Fairfax and Loudoun Counties, with construction scheduled to begin in FY 2008.

WATER

The lifetime budget for the Water Service Area (including Meter Replacement / AMR installation) is $1.1 billion, an increase of $30.6 million from last year's CIP. 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 replacement.

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 includes appurtenances necessary for proper system operation, inspection, and repair. 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

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 the 14 projects included in the Facilities Plan have been completed or under construction. Also, in 2004, the lead service replacement program was included in the capital improvement program.

DCWASA began updating the 2000 Facility Plan in 2007 and will finish in summer FY 2008; we will use this information as a part of next year's budget preparation cycle.

In light of recent issues, related to fire suppression, at the beginning of FY 2008, the Board directed management to study the small main issue. We will complete this study in November 2007. The study may serve to identify small mains that need replacement. Our main replacement 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.

WASHINGTON AQUEDUCT

The Washington Aqueduct, managed by the U.S. Army Corps of Engineers, provides wholesale water treatment services to WASA and its partners in Northern Virginia, Arlington County and Falls Church. WASA purchases approximately 76 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan treatment plants, and thus is responsible for 76 percent of the Aqueduct's operating and capital costs. Under federal legislation and a memorandum of understanding enacted in 1997, 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 WASA's share of Washington Aqueduct projects totals $170 million or $5 million less than last year's 10-year plan of $175 million. This change is due primarily to projects being completed and closed.

CAPITAL EQUIPMENT

The Capital Equipment budget totals $100.8 million for FY 2007 – FY 2016 plan, an increase of $5 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 $3.1 million) and the asset management system (budget of $5.0 million). WASA continues its commitment to scheduled replacement of its vehicle fleet with a budget of $12.9 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 $11.6 million, or twelve percent of the ten-year plan.

CIP DEVELOPMENT AND APPROVAL PROCESS

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 WASA departments with responsibility for managing the capital projects as well as finance and budget staff and executive management. The CIP is integrated into WASA's ten-year financial plan; because of its size, it is the primary driver of WASA's projected rate increases over the next ten years.

This review process lasts over several months and culminates with the presentation of the updated CIP to 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, 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 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. WASA's request for capital authority is ultimately made to and approved by the U.S. Congress.

FACILITIES MASTER PLAN AND OTHER FACILITIES PLANNING TOOLS

The Water and Sewer Facilities Master Plan provides a twenty-year framework for developing, analyzing and evaluating changes to the CIP and includes projects currently in the ten-year CIP as well as proposed projects projected to begin after completion of the current ten-year planning period. It describes current conditions and presents a vision of the needs for the water and sewer systems and the actions planned to meet those needs.

WASA has also developed more detailed facilities plans for specific areas including; a Biosolids Management Plan for dealing specifically with biosolids issues, and Water Systems and Liquid Processing Facilities Plans for use as project planning tools in those areas.

An update of the FY 2000 Water Facility Master Plan is underway, and will be completed in FY 2008.

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 WASA's enabling legislation, Congressional appropriation authority is required before any capital design or construction contract can be entered into. The FY 2009 request totals $585.9 million, and reflects the following:

- Remaining authority from prior years' appropriations;
- Projected commitments in FY 2008 and FY 2009;
- Planned FY 2010 and FY 2011 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 2010 and FY 2011 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: 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 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 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 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 WASA's CIP are managed by an internal WASA operating department. WASA's CIP also includes some projects which are managed by outside organizations. It is advantageous for 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 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 WASA, but the U.S. Army Corps of Engineers actually manages those projects.

Priority – 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 WASA's NPDES permit requirements.

2B. Board Policy, 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 requirememt

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 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 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 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 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 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.

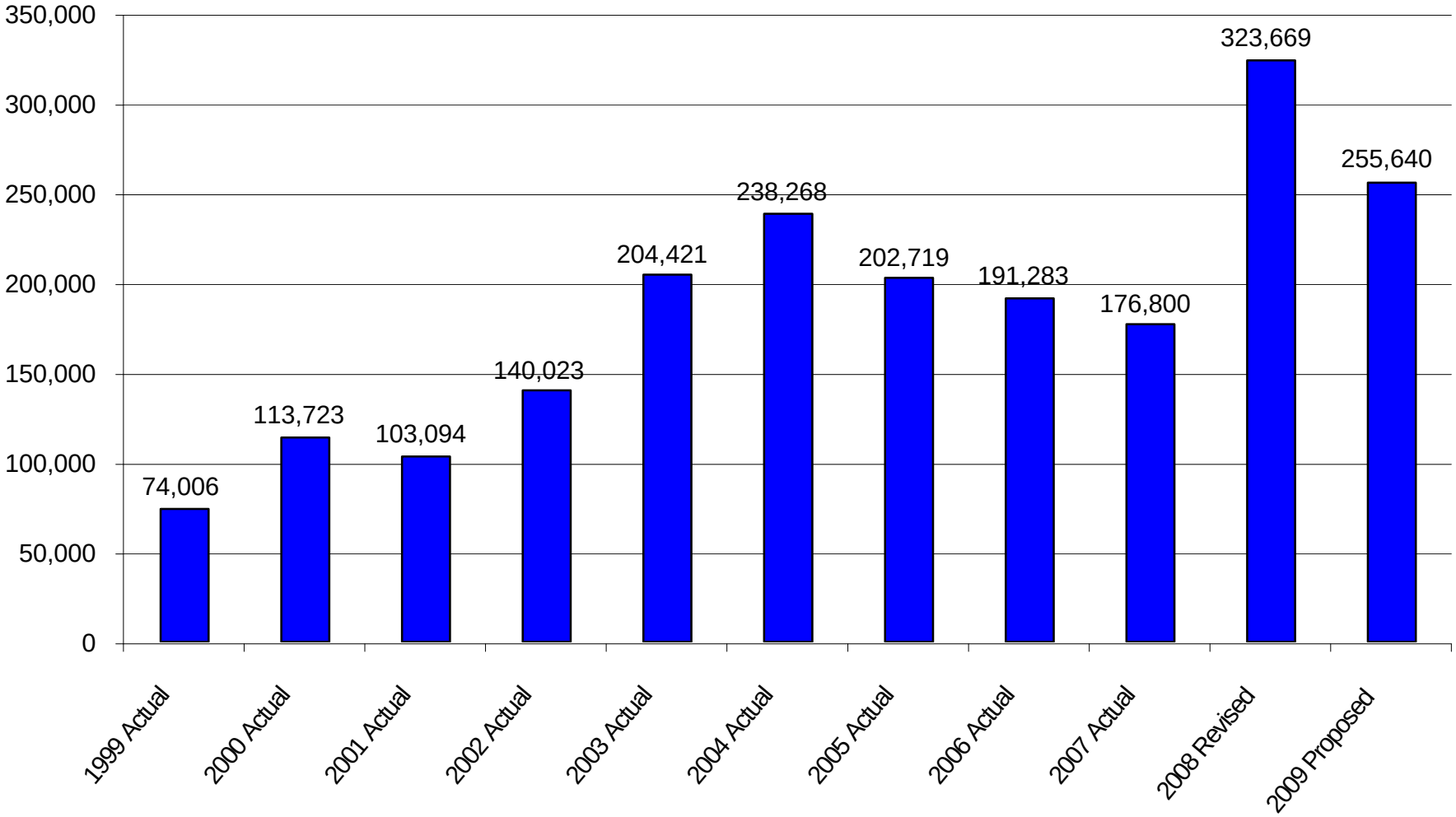
Disbursements / Commitments Budgets – projected disbursements and commitments for various projects are shown by fiscal year in which they are anticipated. Commitments budgets are based on total project budgets, which reflect the fully loaded, anticipated costs of a project, including project contingencies.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

CAPITALIZATION POLICY

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 1999 - FY 2009
($ in 000's)



FY 2007 - FY 2016 PROJECTED CAPITAL IMPROVEMENT PLAN - DISBURSEMENTS BASIS ($ in 000's)

	FY 2007 Actuals	FY 2008 Revised	FY 2009 Proposed	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total FY '07 -'16
Wastewater Treatment											
Liquid Processing Projects	$31,439	$40,531	$56,285	$32,256	$13,484	$1,522	$1,571	$2,348	$6,053	$11,544	$197,035
Plantwide Projects	11,443	17,007	14,135	10,452	3,746	9,935	7,929	2,645	926	1,133	79,350
Solids Processing Projects	8,813	7,302	10,304	26,276	25,256	34,610	55,726	64,767	43,096	27,295	303,444
BTN - Total Nitrogen Program	-	5,151	9,847	22,593	29,565	145,619	241,664	138,550	95,952	126,457	815,398
Sub-total	**51,695**	**69,990**	**90,571**	**91,577**	**72,050**	**191,686**	**306,891**	**208,310**	**146,028**	**166,428**	**1,395,227**
Sanitary Sewer											
Sanitary Collection Sewers	208	107	848	841	-	-	-	-	-	-	2,004
Sanitary On-Going Projects	5,006	4,623	6,630	6,624	5,993	3,433	3,716	3,998	4138	4,264	48,425
Sanitary Pumping Facilities	958	1,523	1,532	358	3	-	-	-	0	-	4,373
Sanitary Sewer Projects Program Management	2,167	2,363	2,134	2,966	3,031	2,661	2,367	1,671	1439	1,440	22,240
Sanitary Interceptor/Trunk Force Sewers	6,402	6,654	19,975	21,107	8,607	3,649	2,096	1,816	1591	461	72,359
Sub-total	**14,741**	**15,270**	**31,118**	**31,897**	**17,634**	**9,744**	**8,179**	**7,485**	**7,167**	**6,166**	**149,402**
Combined Sewer Overflow / Long Term Control Plan											
CSO Program Management	1,389	464	21	2	-	-	-	-	-	-	1,876
Combined Sewer Projects	34,242	37,064	23,373	27,898	8,194	3,252	614	-	-	882	135,519
Long-Term Control Plan-											
Anacostia Tunnel [1]	7,084	8,914	9,175	19,981	19,973	38,373	53,561	88,329	124,805	123,675	493,871
Potomac Tunnel	-		-	-	-	-	-	-	2,024	6,749	8,773
Rock Creek Tunnel	-	-	-	-	-	-	-	-	-	305	305
Sub-total	**42,715**	**46,442**	**32,569**	**47,881**	**28,167**	**41,624**	**54,175**	**88,329**	**126,829**	**131,611**	**640,343**
Stormwater											
Stormwater Extensions/Local Drainage	128	79	449	-	-	-	-	-	-	-	656
Stormwater On-Going Program	-	312	186	243	278	281	285	297	308	361	2,550
Stormwater Pumping Facilities	42	0	-	-	-	-	-	-	-	-	42
DDOT Stormwater Program	-	34	8	85	89	90	92	95	98	87	678
Stormwater Projects Program Management	646	993	823	795	646	446	112	-	-	-	4,461
Stormwater Trunk/Force Sewers	837	821	1,715	685	-	1,061	889	867	5	-	6,879
Sub-total	**1,653**	**2,240**	**3,181**	**1,808**	**1,012**	**1,878**	**1,378**	**1,259**	**411**	**448**	**15,268**
Water											
Water Distribution Systems	11,074	14,931	29,971	28,019	23,266	18,227	14,595	15,065	13,881	18,918	187,946
Water On-Going Projects	5,696	8,998	6,416	4,643	3,003	1,365	3,229	3,552	3,635	3,846	44,382
Water Pumping Facilities	4,743	15,762	8,701	1,113	31	-	-	-	-	-	30,350
DDOT Water Projects	315	841	237	1,831	2,040	2,040	1,195	1,248	1,291	1,288	12,325
Water Storage Facilities	17	40	46	2,757	1,755	1,093	6,857	2,421	143	352	15,482
Water Projects Program Management	2,394	2,012	1,979	1,972	2,168	2,474	2,447	2,456	2,466	1,626	21,993
Water Lead Program	24,730	37,833	24,832	41,814	40,665	41,979	42,989	41,149	11,498	2,543	310,032
Meter Replacement /AMR Installation	2,465	2,911	1,685	897	897	1,047	897	897	897	895	13,488
Sub-total	**51,434**	**83,328**	**73,868**	**83,046**	**73,825**	**68,224**	**72,208**	**66,787**	**33,811**	**29,468**	**635,999**
Washington Aqueduct	**2,298**	**90,072**	**11,030**	**5,148**	**6,798**	**7,465**	**6,864**	**6,534**	**6,607**	**7,076**	**149,892**
Capital Equipment	**12,264**	**16,327**	**13,303**	**12,028**	**8,968**	**6,692**	**6,345**	**7,940**	**6,478**	**6,473**	**96,817**
Total FY 2009 WASA Capital Improvement Program	**$176,800**	**$323,669**	**$255,640**	**$273,384**	**$208,454**	**$327,313**	**$456,041**	**$386,644**	**$327,332**	**$347,671**	**$3,082,948**

[1] Disbursements for the Anacostia Tunnel are subject to review by the Board-Committees (due to ongoing discussions with EPA), and, therefore, may potentially be reduced, or put on hold.

FY 2007 - FY 2016 Capital Improvement Plan

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

	FY 2008 Approved	FY 2008 Revised / FY 2009 Proposed	Variance
Wastewater Treatment			
Liquid Processing Projects	541,207	569,911	28,704
Plantwide Projects	295,594	264,458	(31,136)
Solids Processing Projects	562,747	555,763	(6,984)
Blue Plains Total Nitrogen Removal (BTN)	-	950,000	950,000
Sub-total	**1,399,548**	**2,340,132**	**940,584**
Sanitary Sewer			
Sanitary Collection Sewers	10,966	10,966	0
Sanitary On-Going Projects	65,827	86,146	20,319
Sanitary Pumping Facilities	22,882	22,999	117
Sanitary Sewer Projects Program Management	38,530	37,045	(1,485)
Sanitary Interceptor/Trunk Force Sewers	110,791	115,666	4,875
Sub-total	**248,996**	**272,822**	**23,826**
Combined Sewer Overflow			
CSO Program Management	17,754	17,579	(175)
Combined Sewer Projects	224,959	339,664	114,705
Long-Term Control Plan- Total			0
Blue Plains	36,846	296	(36,550)
Anacostia Tunnel	1,372,545	1,372,545	-
Potomac Tunnel	418,700	418,700	-
Rock Creek Tunnel	70,342	70,342	-
Sub-total	**2,141,146**	**2,219,126**	**77,980**
Stormwater			
Stormwater Extensions/Local Drainage	2,333	2,333	0
Stormwater On-Going Program	7,125	7,762	637
Stormwater Pumping Facilities	1,173	1,173	0
DDOT Stormwater Program	4,230	4,426	196
Stormwater Projects Program Management	9,630	9,630	-
Stormwater Trunk/Force Sewers	19,850	18,405	(1,445)
Sub-total	**44,341**	**43,729**	**(612)**

FY 2007 - FY 2016 Capital Improvement Plan

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

	FY 2008 Approved	FY 2008 Revised / FY 2009 Proposed	Variance
Water			
Water Distribution Systems	289,447	317,342	27,895
Water Lead Program	438,486	438,486	0
Water On-Going Projects	71,090	72,455	1,365
Water Pumping Facilities	100,263	96,199	(4,064)
DDOT Water Projects	33,691	35,530	1,839
Water Storage Facilities	32,112	32,359	247
Water Projects Program Management	28,179	25,944	(2,235)
Meter Replacement /AMR Installation	47,336	52,910	5,574
Sub-total	**1,040,604**	**1,071,225**	**30,621**
Washington Aqueduct	**175,475**	**170,391**	**(5,084)**
Capital Equipment	**95,845**	**100,840**	**4,995**
Total WASA CIP Lifetime (see notes)	**5,145,955**	**6,218,265**	**1,072,310**

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 2006 will be dropped from the CIP next year.

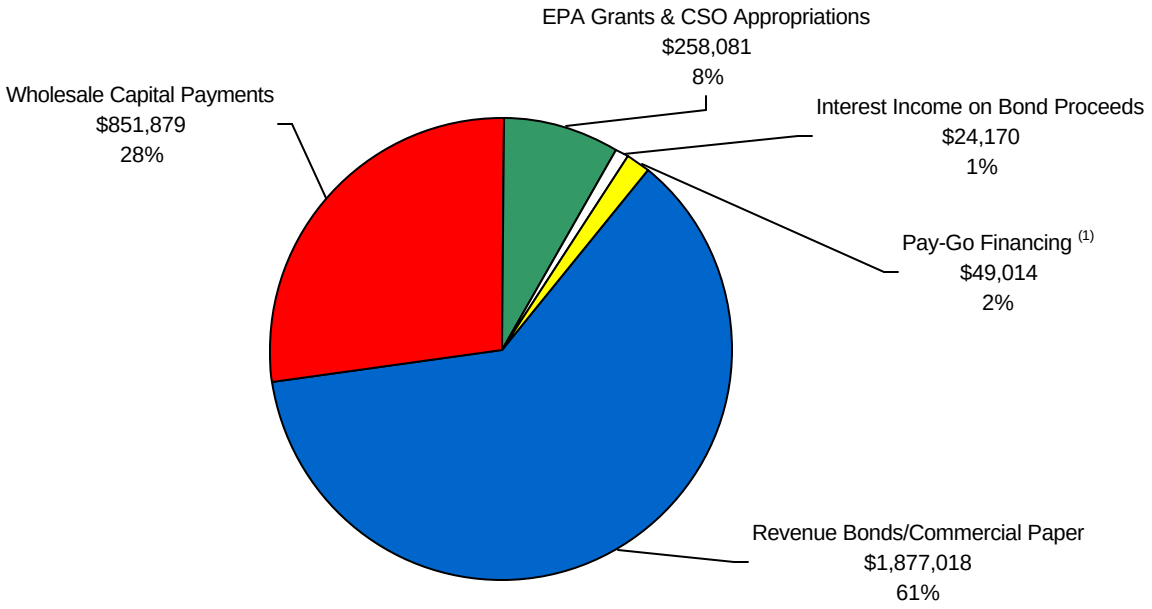
2 These budgets do not include inhouse labor costs, which historically have averaged $7 to $8 million annually and are applicable to, primarily, the time charged to capital projects by employees in the Departments of Engineering, Sewer Services, and Water Services.

Fiscal Year 2009 Capital Authority Request
($000's)

Service Areas	Fiscal Year 2009 Capital Authority Request
Blue Plains Wastewater Treatment	486,141
Sanitary Sewer System [1]	0
Combined Sewer Overflow [1]	0
Stormwater [1]	0
Water System	88,769
Washington Aqueduct (WASA share)	2,249
Capital Equipment	8,743
Total	585,902

[1] The authority request is zero, as, existing (currently available) capital authority in these service area is in excess of projected commitments in FY 2008, FY 2009, FY 2010 and FY 2011.

FY 2007 - 2016 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 $118.6 million in FY 2008. These transfers reduce the amount of new debt issuance.

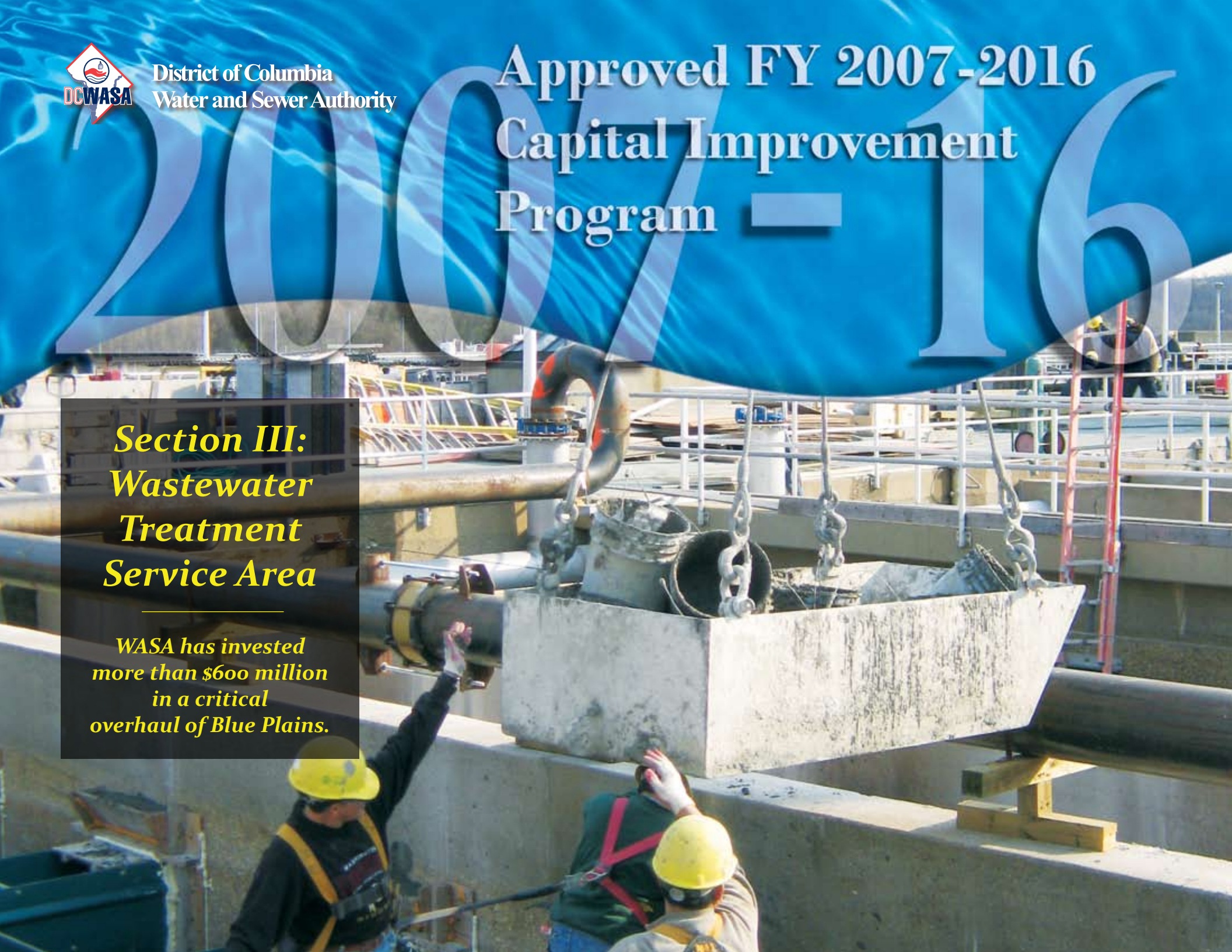
Capital Improvement Program
Dropped or Closed Project Listing

Activity Group	Project Title	Service Area	Cost at Completion
Closed Projects:			
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
Dropped Projects:			
TT	504H6 - OUTFALL PH ADJUSTMENT FAC	Wastewater Treatment	$2,270,856
YR	700F3 - BP-SITE, MECH, ELEC. PROJECT	Wastewater Treatment	2,709,327
TE	504C2 - ELECTRICAL POWER SYSTEM 69KV	Wastewater Treatment	3,252,560
TG	504D1 - DSLF ODOR CONTROL SYSTEM	Wastewater Treatment	24,567,615
A1	Capitol Hill Relief Sewer	Stormwater	1,445,240
P7	FY 2006 - DDOT Stormwater Projects	Stormwater	0
E1	FY2001 - DWS Water Projects	Water	5,103,133
E5	FY2005 - DWS Water Projects	Water	3,339,469
PQ	Bryant Street Pump Station Paving	Water	2,258,619
			$44,946,819

District of Columbia
Water and Sewer Authority

Approved FY 2007-2016 Capital Improvement Program

2007-16



Section III: Wastewater Treatment Service Area

WASA has invested more than $600 million in a critical overhaul of Blue Plains.

WASTEWATER TREATMENT

WASA operates the Blue Plains Advanced Wastewater Treatment Plant, the world's largest advanced wastewater treatment facility. At Blue Plains, we provide 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.

Since the FY 2000, WASA has been removing nitrogen in its Biological Nutrient Removal (BNR) process and has consistently meeting met the NPDES permit goal of 7.5 mg/l of total nitrogen. However, in In June 2007, United States Environmental Protection Agency (EPA) issued a modification to the permit and now reducing the total nitrogen effluent limit is to 4.7 million pounds per year (equivalent to 4.2 mg/l at 370 mgd average annual flow). The capital projects required for Blue Plains to achieve the new permit limit are proposed for addition to included in the current Capital Improvement Program (CIP). Construction for the new projects, required for nitrogen removal and wet weather flow treatment, is scheduled to be completed by in FY 2014 and FY 2018, respectively.

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 about 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 rriver. 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 applied to agricultural land in Maryland and Virginia.

The lifetime budget for the Wastewater Treatment Service Area is $2.3 billion dollars, reflecting a $941 million net increase over last year's budget. The cost of implementing the BTN Program accounts for almost all 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, WASA strives to reduce biosolids odors, both, onsite and in the final product leaving Blue Plains.

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 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 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, 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, planningpiloting and conceptual design for the newly proposed Total Nitrogen Program (BTN) is scheduled to begin in FY 2008.

In FY 2007 the following long-term upgrade construction projects were placed in service:

- Filtration and Disinfection Facility – replacement of filter underdrains, media, and washwater troughs to prepare filters for conversion to air-water wash system. All 40 filters and all the media have been replaced and are in service.

Long-term upgrade projects now under construction include:

- Nitrification-Denitrification Facilities Upgrade- to upgrade and / or replace equipment that is at the end of its useful life.
- Raw Wastewater Pump Station 1- Upgrade to the Raw Wastewater Pump Station to replace equipment that is at the end of its useful life and improve reliability.
- Process Control 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 – $570 million *(project pages III-8 to III-24)*

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 now underway include:

- *Raw Wastewater Pumping Station 1 Upgrade (Project UD) $14.1 million*– This project will rehabilitate pumping equipment and appurtenances in one of the two stations that pump incoming wastewater into the plant. Final design was started in FY 2005 and completed in FY 2006. Construction began in FY 2007.
- *Grit Chamber Facilities Upgrade (Project TF) $69.8 million* – This project provides for the construction of an automated, continuous grit removal system in all sixteen chambers. 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.
- *Biological Nutrient Removal (Project TK & TQ) $141.3 million* – This project funds multiple construction contracts to demonstrate and implement Biological Nutrient (Nitrogen and Phosphorus) 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 bids were received, a contractor was selected and construction began in FY 2007. Project TK is combined with Project TQ in a single construction contract. 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 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) $50.4 million* – This project is for improvement of denitrification-related process components primarily in the reactors. This project will result in lowered maintenance and energy costs due to improved efficiency.
- *Filtration and Disinfection Facilities Upgrade (Project UC) $64 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. This project was split into two contracts in order to expedite the full rehabilitation of the facility, which has experienced filter failures. The first contract, completed in FY 2007, restored all the filters to operability with new filter underdrains and media. The second contract, 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* – Replaces motors and variable speed drives on selected pumping units with design starting in FY 2011.
- *Nitrification / Denitrification Facilities Phase II upgrades (Project BR) $50.4 million* - Rehabilitation of lower priority items identified in the concept design forin the Facility upgrade, such as 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. This project will also be used to make process improvements to existing facilities to enable WASA to meet the final total nitrogen permit limit.
- *Primary Treatment Facilities Phase II (Project BQ) $14.8 million* – Structural repairs to the primary sedimentation tanks.

- *Grit Chamber Facilities Phase II (Project BP) $5.5 million* – Upgrade the grit chamber building structures and facilities including structural, architectural and building system renovation of office and storage spaces in each building.

Plantwide Facilities Program – $264.5 million *(project pages III-25 to III-42)*

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 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 include:

- *Process Control and Computer System - Phases 1, 2 and 3 (Project TA) $61.3 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.
- *Plantwide Fine Bubble Aeration System* - (*Project BI*) *$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 a second portion of the project, i.e., expansion of Secondary Reactors 5 & 6, has been deleted from Project BI the project and is, now, included in Project E9 (Total Nitrogen Removal Facilities). The expansion of Secondary Reactors 5 & 6 remains necessary; however, it will be included in the total nitrogen removal project because the specific components of the expanded reactors will be planned and designed with the overall upgrades to the Secondary Treatment process that are needed to achieve the new nitrogen permit limit.
- Expansion of Secondary Reactors 5& 6 will be included with the overall upgrades to the Secondary Treatment process upgrades that are needed to achieve the new nitrogen permit limits.
- *Central Operations Facility Renovations – (Project AZ) $15.5 million* - This project provides 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.

Solids Processing Program – $555.8 million *(project pages III-43 to III-51)*

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; these are, then, 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 Program 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 lead led to a decision by the WASA Board of Directors to defer the project. The decision by the 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. Both assessments concluded that the unusually tight construction market, an abnormal spike in material costs and the project length were major factors in limiting bids and doubling increasing the cost. Moreover, an evaluation of bids on other heavy wastewater-related construction projects in the D.C. metro area show similar cost increases that are well above estimates.

As part of its ongoing biosolids management program, WASA will continue to monitor the construction market, regulatory initiatives and evolving wastewater treatment technologies. This information willwill be used to develop a revised strategy for long-term biosolids management that will be presented in the form of an updated Biosolids Management Plan to the WASA Board in FY 2008. We have evaluated a wide range of biosolids processing options and have narrowed the options to four processing options. Each of the options involveinvolves anaerobic digestion, consistent with the1999 BMP. WASA is investigating various other types of digestion vessels that would be less expensive to construct than the egg shaped digesters...

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.

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. This project is expected to be 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, other solids processing operations, and improved biosolids quality.

- *Area Substation No. 6 (Project EV) $17.6 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. The design for this work was included in the Egg-Shaped Digester Project construction bid documents. However, it will be repackaged and bid separately because of the urgent need for this work.

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

- *Gravity Thickening Facility Upgrade (Project BX) $14.8 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 Total Nitrogen Removal Program – $950 million *(project pages III-52 to III-55)*

This program provides for new facilities, and upgrades to existing facilities that are needed at Blue Plains, to meet the new total nitrogen discharge limit that has been included in WASA's NPDES permit. Projects included in this Program were identified through a strategic planning process that resulted in development of 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. The estimated capital cost for this project, in FY 2007 dollars, is $800 million, which (with contingencies and escalation to the mid-point of construction) works out to was not part of the Planthe $950 million amount included in the proposed CIP. This program includes the following projects:

- *Enhanced Clarification Facilities - (Project E8) $240 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.
- *Total Nitrogen Removal Facilities (Project E9) $350 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) $90 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. WASA is currently participating in research ofto 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 updated Biosolids Management Plan.

- *Wet Weather Peak Mitigation(formerly known as the Blue Plains Tunnel) – (Project EG) $270 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

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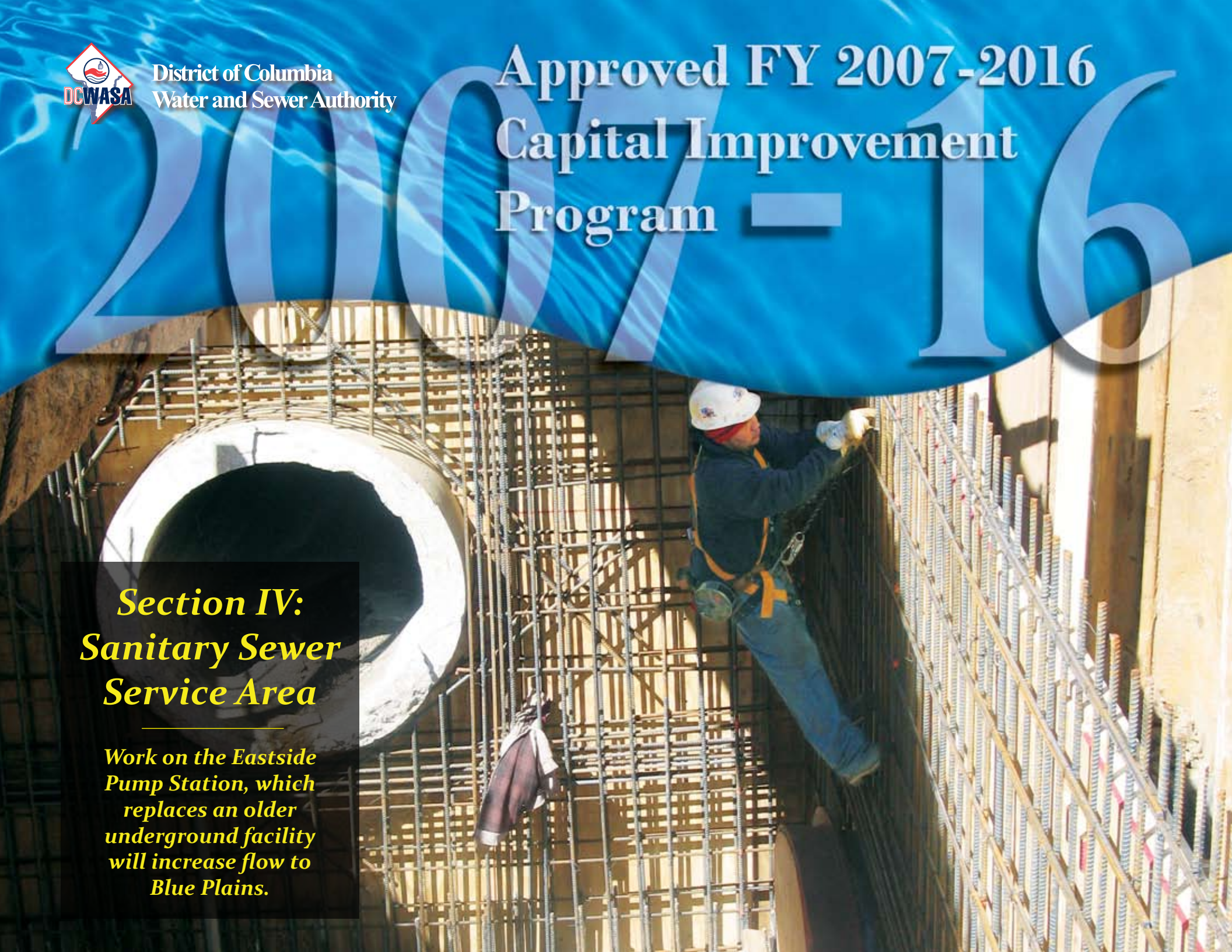

Section IV: Sanitary Sewer Service Area

Work on the Eastside Pump Station, which replaces an older underground facility will increase flow to Blue Plains.

SANITARY SEWER

WASA is responsible for wastewater collection and transmission in the District of Columbia, including operation and maintenance of the sanitary sewer system. WASA's sanitary sewer system includes approximately 600 miles of large interceptor sewers and smaller gravity collection sewers. WASA is also responsible for sewer lateral connections from the sewer mains to the property lines of residential, government, and commercial properties. In addition, 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 2008, WASA will continue the evaluation of the sewer system to determine its condition, verify adequate capacity, and develop and develop new capital projects, as appropriate. A five-year contract (EPMC-IIIA, which was to ill end in FY 2007 but has been extended into FY2008), is providing the first stage of recommended projects to be included in the CIP, 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, known historical problems, and locations such as under buildings. A second contract (EPMC-IIIB) will then be brought on board to continue the inspections and assessments.

An average of approximately $3 6 million in annual funding is included in the CIP for the next 4 years for capital projects that will be recommended by the comprehensive assessment. Projects that have been identified in previous fiscal years that will continue to be addressed includes the Rehabilitation of Georgetown Sanitary Sewers, which entails the replacement of existing sewers found to have numerous structural defects, and the Pope Branch Sewer Rehabilitation, which is being developed as a cooperative effort with several District agencies. In general, projects in the existing sanitary sewer service area program provide for replacement or rehabilitation of the system as well as needed extensions to this system for development and growth.

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 2008.

- 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 – $86 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.

New Project to this service area in FY 2008:

- Sewer Lateral Rehabilitation and Main Lining – Project EU – This project has been created as a comprehensive program to accelerate repair and replacement of approximately 650 sewer laterals which have experienced multiple backups in recent history, and 30 mains which require lining.

Pumping Facilities – $23 million (*project pages IV-27 to IV-30*)

This program includes projects required for the rehabilitation or replacement of existing Sanitary Sewer pumping stations as well as projects for the engineering and construction of new Sanitary Sewerwastewater pumping facilities, as needed to enhance reliability and integrity of WASA's sanitary sewer system. In addition, a Security Upgrade (Project 'CX') is scheduled to begin in mid-FY 2007, which will place interior and exterior cameras throughout 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' Pumping station, as described in more detail below.

The current program includes projects to rehabilitate three existing Sanitary Sewerwastewater 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 procurement is underway.
- Earl Place - Project 'L5' – The facility was placed in service in November 2006.

Sanitary Sewer Service Area - Management – $37 million (*project pages IV-31 to IV-32*)

During FY 2008, WASA will continue the comprehensive evaluation of the sanitary and combined sewer systems, as well as design management for sewer pumping station rehabilitations, as described in more detail below.

- Sanitary Sewer Program Management & Planning (EPMC-IIIA) – Project 'AU' - This Project allows WASA to assess 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 pending federal regulations addressing sanitary sewer overflows.

- Design Management for Sanitary Sewer Pumping Stations -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, scheduled to begin 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 beginning in FY 2008. The resultant information will assist in the scheduling and prioritization of sewer main line and lateral repair work.

Interceptor/Trunk Sewer/Force Sewers – $116 million (*project pages IV-33to IV-39*)

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 $12.3 million in FY 2008 for capital project design (A4) that may be identified as part of the comprehensive assessment of the sewer system.

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. 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. Costs have increased significantly on this project due to larger equipment needed to control odors, high architectural costs related in part to historical preservation requirements of the National Park Service, and difficult access to construction locations. Ongoing activities include:

  - 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 is almost complete and construction bidding will take place in early FY 2008; construction is expected to begin in late FY 2008.

  - 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.

- Odor Control Projects – Project 'N7'

  - Interim Odor Controls – As an interim step, 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 2008.

  - Permanent Odor Controls – WASA plans to install a permanent odor control system that includes a forced air/activated carbon filter system. This project will cost approximately $14 million. The conceptual design was completed in FY 2003. During the past three years, WASA has been seeking the requisite National Park Service permit, performing associated environmental assessments, and coordinating with the community. The National Park Service has issued a Finding of No Significant Impact in 2004 and permits are expected in the near future. Design of the project is ongoing, and the schedule calls for construction to begin in FY 2008 and to be completed in FY 2011.

- Upper Potomac Interceptor Rehabilitation – Project 'G4' - This project involves the repair of a major portion of the trunk sewer. This project was initially delayed due to inadequate capacity in the Upper Potomac Interceptor Relief Sewer, which is now available. The design will is scheduled to be completed in FY2008, and construction is anticipated to start in early 2009.

- Future Sewer System Upgrades – Project A4

  - Tide Gate Replacements - Design is almost complete, with construction to start in mid FY 2008 with completion in mid 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 is complete with construction scheduled for early FY 2008 and completion 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 and 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 Sewer Rehabilitation - Design started in early FY 2007, with construction scheduled to start in late mid FY 2008 and completion in mid FY 2009. This project is for the rehabilitation and relocation of several sanitary sewers that currently are exposed to the stream waters of Watts Branch, a tributary to the Anacostia River. Currently, Watts Branch and portions of the surrounding Marvin Gaye Park are to to be restored under a separate project with US Fish and Wildlife, and the DC Department of the Environment (DDOE). This project is for the design and construction of necessary sanitary infrastructure improvements to be accomplished prior to the anticipated stream and park restoration. Approximately, 2,800 feet of sanitary sewer is to be rehabilitated or relocated from stream waters. With anticipated costs of $5.6 million, DCWASA has budgeted $2.9 million to address our infrastructure concerns. The difference ($2.7 million) will need to be funded by the Anacostia Waterfront Corporation (AWC).

  - In addition to the above mentioned projects, approximately $20.6 million is allocated for future projects in FY 2008 and FY 2009 and approximately $2 million a year thereafter until FY 2012. These funds are for projects being developed from the sewer assessment master facility plan that was completed in FY 2007 as well as for other currently undefined projects as inspection results are analyzed.

- '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 2,000 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, Lilly 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).

New Project to this service area in FY 2008:

- 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 and cleaning to be performed prior to expected rehabilitation. Necessary rehabilitation to be determined post inspection and cleaning.

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Section V: Combined Sewer Overflow Service Area

Soil borings are taken to determine the CSO tunnel alignments as part of the 20-year program to control combined sewer overflows.

COMBINED SEWER AREA (*project pages V-6 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, storm 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.

In December 2004, WASA reached agreement with the environmental plaintiffs, the U.S. Environmental Protection Agency, and the U.S. Department of Justice on the CSO Long-Term Control Plan (LTCP), a major milestone in WASA and the District's history. This agreement has been formalized in a judicial consent decree entered by the U.S. District Court in March 2005. The agreement calls for WASA to complete the LTCP over a twenty-year period. The judicial consent decree includes provisions to modify the selected CSO controls and schedules included in the decree. Modifications may be requested because of changes in the technical, regulatory, financial and institutional bases used to develop the LTCP. Currently, WASA is in the process of evaluating a modification request for the Blue Plains Excess Flow Treatment Facilities that are part of the selected CSO controls included in the decree. This modification will be required to accommodate a new total nitrogen effluent limit of 4.2 mg/l that EPA has included in the Blue Plains NPDES Permit, which has been appealed by WASA and others.

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 is scheduled to be submitted in December 2007 and the Final facility Plan is due for submission to EPA in September 2008.

The 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 Anacostia water quality objectives which are the basis of the LTCP. WASA will be in a better position to determine the impact on the LTCP once the EPA completes the issuance of new TMDLs scheduled for no later than the summer of 2008.

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, 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.

The $1.9 billion plan includes a variety of improvements throughout the District:

- $1.4 billion (Project CY) to construct an eight-mile tunnel system to control Anacostia River overflows, two side tunnels for flood control, a lift station and an interceptor, 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.

The Excess Flow Treatment Capacity effort within Blue Plains (Project BL, budget $37 million) has been removed from the Combined Sewer Service Area and consolidated into the new Total Nitrogen Program (BTN) of the Wastewater Service Area (Project EG, budget $270 million). This change more clearly reflects the enhanced vision of the Blue Plains Tunnel as serving the dual purposes of both containing outfalls during period of heavy rainfall and participating in compliance with the new Total Nitrogen Wet Weather Plan (TN/WW).

Construction is well underway with completion of approximately $170 million of projects ($140 million that were included in the settlement of a lawsuit against WASA regarding implementation of the federal CSO Nine Minimum Controls program, plus $30 million added this year, see 'D2' below). These projects, which were previously budgeted and planned by WASA prior to the lawsuit, are projected to reduce combined sewer overflows by 40 percent. Of these projects, the rehabilitation, in FY 2004, of twelve inflatable dams, 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 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 for all scheduled to be completed by calendar year 2009:

- Potomac Pumping Station rehabilitation (Project BB), with a lifetime budget of $18.6 million, includes 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. Completion of this phase of the station renovation effort is expected in FY 2009.

- Main & "O" Street Pumping Stations rehabilitation (Project K1) has a project lifetime budget of $75.9 million, and includes rebuilding and upgrading sanitary pumps, upgrading electrical and ventilation systems, replacing screens and, installing a screening handling system, and installing odor control systems. This renovation effort was undertaken prior to a final decision about the permanence of the pump station in light of the new stadium, and as such was not intended to address all of the facilities' components. After it was determined that the pump stations would remain in the same locations, Project EK was created to complete the renovations such that the stations would remain in service for the next 30 years. Completion of this phase of the station renovation is expected in FY 2009.

- East Side Pumping Station rehabilitation (Project K3), with a lifetime budget totaling $18.5 million, provides for a new, above-grade pumping station. The new station is operational and efforts at this location are substantially complete, including the demolition of the original subterranean pump station.

- Poplar Point Pumping Station rehabilitation (Project K4) has a lifetime budget of $6.6 million, and provides for improvements that include structural and architectural repairs, HVAC upgrades, the addition of an odor control system, and electrical and lighting upgrades. Design of the station is currently 50 percent complete.

- Outfall Sewer Rehabilitation – Project 'D2' – $30 Million - The Three-Party Consent decree requires WASA to assure that it can convey 1076 mgd to Blue Plains after September 2008. The Decree allows extension of this deadline if conditions, that were unknown at the time the Decree was signed, are found in the collection system and require corrective action. In anticipation of this deadline, WASA inspected the large diameter sewers which convey wastewater from the pumping stations to Blue Plains. The sewers are called the "Outfall Sewers" and all of the flow to Blue Plains is carried by these pipes. 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, WASA has requested approximately a 4 year extension of the requirement to convey 1076 mgd until the rehabilitation project is complete.

- Main & 'O' Pump Station Area Development Effort – Project 'DB' (Anacostia Waterfront Development & New Baseball Stadium) - In FY 2006, DC Council approved the DC Mayor's plan to build a $700 million baseball stadium for the new DC baseball team at the Anacostia Waterfront. The new Washington National's Baseball Stadium is under construction, and the "baseball district" encompasses critical portions of WASA's infrastructure, including two major pumping stations, the Authority's Department of Sewer Services, Fleet Management and related facilities located at the O Street Complex. WASA's sewer service and fleet operations, with over 150 employees and contractors and a significant portion of our 570-piece vehicle fleet, are headquartered at O Street, directly across from the location of the new stadium. In the past few months we have worked with the Office of the Deputy Mayor for Planning and Economic Development evaluating the potential relocation of these facilities to other sites in the District and have included $42.5 million in this year's budget to cover the estimated costs of at least a temporary relocation and the development of a new site. The District, through Anacostia Waterfront Development Corporation (AWDC), has agreed to pay for relocation of the said WASA facilities to a new site. We expect full reimbursement for all related costs by the District, and expect no impact on 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 WASA access to physical assets that cannot be relocated. We have established a framework for discussions, and negotiations are well underway with relevant parties, including the Office of the Deputy Mayor for Planning and Economic Development and the Office of the Attorney General, and we routinely communicate with other stakeholders, including the Sports and Entertainment Commission, the Executive Office of the Mayor and the District Council. As we evaluate these options, we will work to ensure

to the extent possible, the highest and best use of this property and that our ratepayers appropriately share in the revenue benefits.

Additional projects added during this year's budget cycle include:

- Potomac Pumping Station: Phase III – Project 'EJ' – This project continues the rehabilitation of the Potomac Pumping Station, replacing the existing screens and gate valve actuators, and adding an additional sluice gate between the pumps and the wet well. It also includes a replacement lighting system and a new fire detection and prevention system.

- Potomac Pumping Station Phase IV – Project 'EQ' – This project completes the Potomac Pump Station rehabilitation by providing for architectural improvements, painting throughout the station, new men's and women's ADA compliant restrooms, and odor control system, and variable frequency drives for the two large pumps.

- Swirl Facility Rehabilitation – Project 'EL' – This project provides a partial rehabilitation of the swirl facility by replacing deteriorated chemical pumps, deteriorated conduits and wiring in the screen and swirl rooms, and damaged components of the HVAC system. It also will repair structural damage done by chemicals, make repairs to the control system and chemical pump wiring, and repair the control system for the mixing chamber.

- Long Term Rehabilitation Main & O Pump Stations – Project 'EK' – It has been determined that the Main & O Street pump stations will remain in place and operational after the stadium is constructed. Rehabilitation efforts underway currently address immediate issues but were not designed to rehabilitate the pump stations in the manner of a 30 year upgrade. This project will replace as necessary, the Main Pumping Stations' sanitary pumps, motors and controls, all six storm pumps, motors and controls, and rebuild or replace various large gates in the channels, provide a new roof and upgrade the HVAC. It will also provide a new and separate pumping station for the low area sewer. At the O Street Pumping Station, this project will rehabilitate or replace its six storm pumps, motors and controls, and provide miscellaneous structural, architectural and electrical upgrades. Both stations will have site improvements.

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Section VI: Stormwater Service Area

Continued storm water pipe upgrades improve drainage of new development in the District.

STORMWATER

WASA is responsible for the design, construction and maintenance of certain public facilities that convey stormwater runoff to the Anacostia and Potomac rivers , Rock Creek, and other receiving streams. The stormwater system includes 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. Projects include extensions to the system, relief of certain storm sewers, as well as projects to rehabilitate or replace storm sewer systems that have experienced structural deterioration.

The lifetime budget for the Stormwater Service Area is $43.7 million, a slight decrease from last year. As in last year's budget, we have not included funding for stormwater pumping rehabilitation projects. This year's budget includes additional funding for on-going projects, starting in FY 2016. There have been on-going discussions between WASA and DC Department of Transportation (DDOT) regarding the responsibility for the storm water infrastructure, including the maintenance and cleaning of the catch basins. These structures are integral components of roads and highways in the District, whose sole purpose is to drain out the city to avoid street and basement flooding. As such these are seen by WASA as responsibilities of DDOT.

Stormwater in the District of Columbia remains a challenge for District policymakers and for the agencies with the responsibility for managing an array of program activities as well as maintaining and improving the infrastructure (catch basins, underground facilities, pump stations, etc.). The District recently created the Department of the Environment (DOE), and continues to negotiate with the Environmental Protection Agency to address some of these matters. We are also continuing to evaluate stormwater issues independently while we work with the Executive Office of the Mayor, the City Council and relevant government agencies to develop reasonable and workable solutions.

District of Columbia Stormwater Permit and Enterprise Fund

Under the District of Columbia Storm Water permit Compliance Act (DC law 13-311), DCWASA was designated as the Administrator of the District's MS4 Administration. It was also charged with the responsibility to collect and dispense the Storm Water Enterprise Funds. WASA's primary function was to coordinate the activities of the storm water Task Force Agencies (DPW, DOT & DOE) to ensure that the District was in compliance with the requirements of the MS4 NPDES permit issued to the District of Columbia government.

In December 2005, the D.C. City Council enacted, and the Mayor approved, the "District Department of Environment Establishment Act". Section 103 E (2) of the Act providing for the transfer of the MS4 Administration from WASA to the District's DOE. The DOE assumed control of the MS4 Administrator in February of 2007 with WASA continuing to offer assistance to DOE with the transition.

Fees collected from the onset of the Program for the MS4 Enterprise Funds have been approximately $3 million per year; however, only half of the MS4 Task Force Agencies, DCWASA and DPW, have been fully utilizing the funding. Despite the reduction in expenditures, all of the reporting requirements of the permits have been met and more importantly, there has not been any significant reduction in storm water pollution control during this permit period. Under the permit issued in August 2004, DC is expected to undertake specific projects that would move the city towards compliance with the Total Maximum Daily Load (TMDL) requirements set for stormwater effluents by the DOE. The MS4 Administration has provided to EPA Region III, the Anacostia TMDL Compliance Plan and the Rock Creek TMDL Compliance Plan, as required by the permit, which is estimated at approximately $7 million per year to meet all the requirements of the permit. Efforts are underway by the government and WASA to identify specific projects, systems, management tools and funds that would be required to make significant progress in reducing storm water pollution.

EarthJustice (EJ) is contesting the 2004 MS4 NPDES permit on behalf of several environmental groups alleging that the permit does not require the District to meet certain water quality standards. Negotiations are ongoing between EJ, DC government (WASA also participates) and EPA to resolve the issues. This may require the District to undertake additional projects, costing more than the estimated $7 million needed to meet the permit.

Extension/Local Drainage Projects - $2.3 million *(project pages VI-5 to VI-7)*

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. The design will be completed during FY 2008, and construction is scheduled to begin later this year.

On-Going Stormwater Projects – $7.8 million *(project pages VI-8 to VI-21)*

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

Pumping Facilities - $1.2 million *(project pages VI-22 to VI-22)*

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, and all work had been deferred pending resolution of this issue.

DDOT Stormwater Projects – $4.4 million *(project pages VI-23 to VI-37)*

This program funds projects associated with DDOT road projects, which often require relocation of storm sewers, inlets or other structures. In general, 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), except the addition of $196,000 for the FY 2016 projects .

Stormwater Program Management - $9.6 million *(project pages VI-38 to VI-38)*

This area provides for design management and construction management of all storm sewage pumping stations requiring major rehabilitation or replacement, as well as long term planning. It also provides for funding for the sewer system program management consultant for work associated with the storm sewer system.

Trunk/Force Sewers – $18.4 million *(project pages VI-39 to VI-39)*

This program includes projects that replace undersized storm sewers, or replace or rehabilitate storm sewers that have reached their useful life or have experienced structural deterioration. In FY 2005, WASA completed construction on improvements to the Northeast Boundary sewer in Northeast Washington, which helped relieve localized flooding in this area. WASA started two projects to address drainage problems in FY 2007, one near Macomb Street in the Palisades neighborhood and another project near the Henson Ridge development in the southeast quadrant of the District. Additional projects will be developed based on the results of comprehensive sewer system evaluation, which is nearing completion by the engineering project management consultant after several years.

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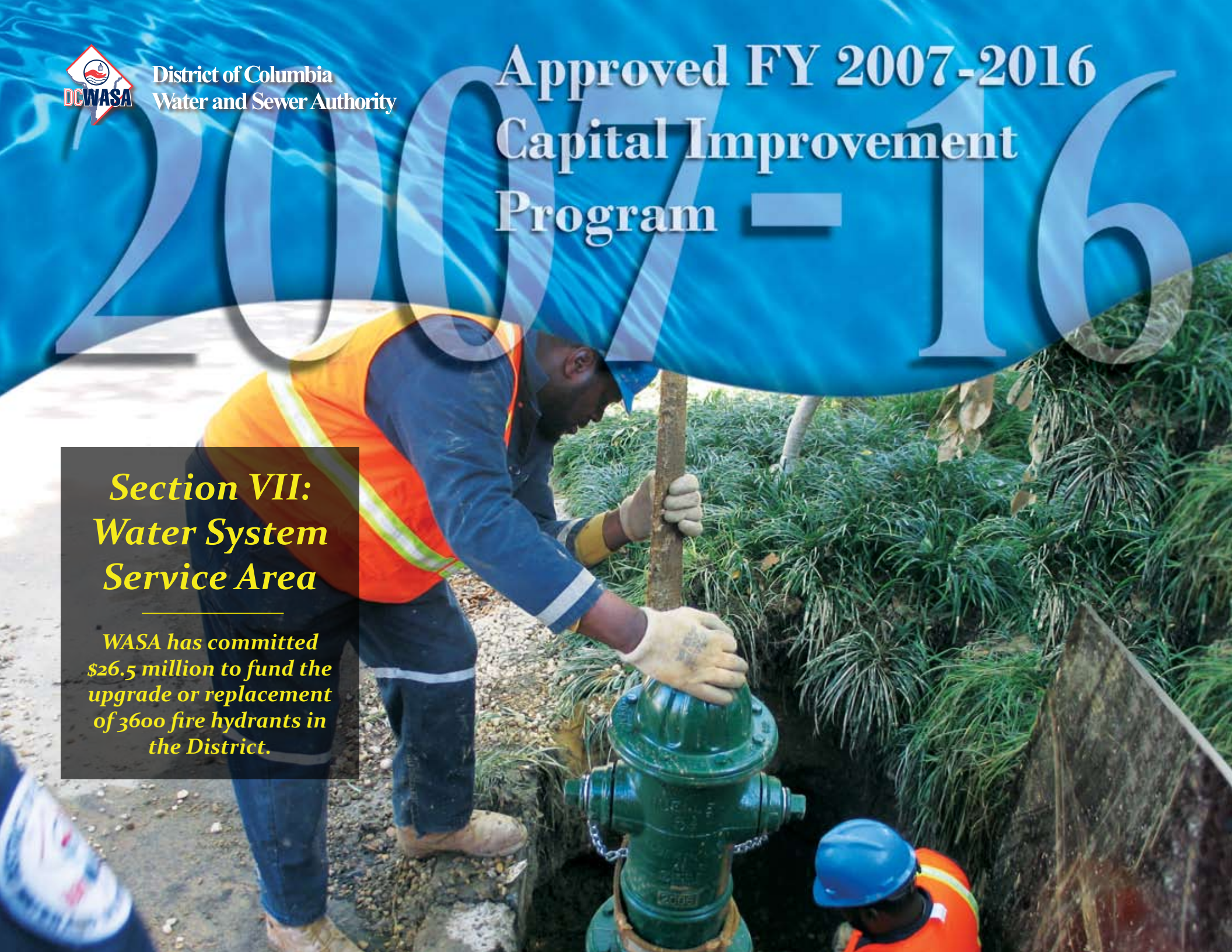
Section VII: Water System Service Area

WASA has committed $26.5 million to fund the upgrade or replacement of 3600 fire hydrants in the District.



WATER

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 includes appurtenances necessary for proper system operation, inspection, and repair. 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.

The lifetime budget for the Water Service Area (including Meter Replacement / AMR installation) is $1.1 billion, an increase of $30.6 million from last year's CIP. 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 replacement.

Water System Facilities Planning

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 the 14 projects included in the Facilities Plan have been completed or under construction. Also , in 2004, the lead service replacement program was included in the capital improvement program.

DCWASA began updating the 2000 Facility Plan in 2007 and will finish in summer FY 2008; we will use this information as a part of next year's budget preparation cycle.

In light of recent issues, related to fire suppression, at the beginning of FY 2008, the Board directed management to study the small main issue. We will complete this study in November 2007. The study may serve to identify small mains that need replacement. Our main replacement 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.

Water Distribution System – $317 million *(project page*s VII-8 to VII-40)

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 include:

- *Fire Hydrants* – We have committed a lifetime budget of $26.5 million to fund replacement/upgrade of fire hydrants in the District, which are one of our most critical water distribution system assets. To date (Oct 2005 through Oct 2007) we have replaced over 893 hydrants, with 500 replacements planned for FY 2008 and we plan to replace approximately 3,600 fire hydrants under the five year program.

- *Valve Replacements* - This involves replacing defective valves throughout the water distribution system. Operable valves are necessary to complete the annual flushing program, for routine and emergency system repairs, and for support of capital projects that require valve operation to isolate portions of the system. 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 FY2008.

- *Water Main Dead End Elimination* – This project will eliminate the potential for stagnant water accumulating at the end of water mains and will assist in maintaining water quality in the distribution system. Eliminating 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 and were substantially completed in FY2007.

- *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 is underway to install approximately 5,100 linear feet of 16-inch PVC water main in Michigan Avenue, NE to reinforce the supply to the McMillan Water Treatment Plant.

- *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 FY2009. 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 replacement of approximately 25,000 LF of small diameter water mains with the LSR work in one construction contract that will commence FY 2008. The concept for this approach is, for a given block where lead service replacement is required WASA will also assess the condition of the small diameter main in the street. If the condition warrants replacement, the main will be replaced. In addition, replacement of all valves and hydrants will be accomplished at the same time as required. Finally, through coordination with the District Department of Transportation, all required road and sidewalk reconstruction or road resurfacing will be accomplished at the same time. 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* – 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 – $72.4 million *(project pages* VII-41 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 restoration regulations required of WASA and other area utilities.

Water Pumping Facilities – $96 million *(project page*s VII-55 to VII-58)

This program includes several projects to rehabilitate or replace water-pumping stations in the system.

- The Anacostia Pumping Station (Project M7) will be replaced on the same site it presently occupies, and will include multiple sets of booster pumps that will service the southern portion of the Anacostia first high service area. Construction commenced in FY2007 and is schedule to be completed in FY2009 at a total project cost of $33 million.
- A major rehabilitation of the Bryant Street Pumping Station (Project M6) 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 FY2008. Work included replacing 11 high lift pumps, architectural improvements to the building, replacing heating, cooling and ventilating system, 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 cost of this project is $64.2 million; $2.2 million represents paving (Project PQ- Bryant Street Pump Station Paving) for Bryant Street.
- The Fort Reno Pumping Station (Project AY) will be upgraded to improve pressure in the fourth high service area in the northwest quadrant of the District. Twenty (20) water distribution pressure sensors were added to this construction contract to better monitor the system. Construction is currently scheduled to commence in FY2008 at a total project cost of $2.7 million.

DDOT Water Program – $35.5 million *(project pages* VII-59 to VII-75)

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 – **$32 million** *(project page*s VII-76 to VII-80)

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. Work with District authorities to obtain zoning approvals will be completed by early FY 2008 with design commencing in mid FY 2008, and construction scheduled to be completed in early FY 2011. 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 FY2008 (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.

Water Service Area - Management – $26 million *(project pages* VII-81 to VII-81)

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.

Lead Service Replacement Program – $438 million *(project pa*ges VII-82 to VII-82)

On February 1, 2006, the Board approved Resolution 06-27, which reaffirms its original goal of replacing approximately 23,000 lead water service lines by FY2010, and committed to replacing any additional lead water service lines above its original goal of 23,000 as soon as practical and by no later than FY2016. The following is additional information related to the LSR Program:

- In FY2007 the LSR Program surpassed its annual goal of 3,350 LSRs and has currently replaced over 3,500 lead services in public space. This was achieved by coordinating with DDOT's paving plan and efficiently selecting blocks with a high number of lead service lines outside DDOT's plan. The WASA LSR team is currently on track to meet the target of 3,000 lead replacements in FY2008.

- The July 2007 review of the lead inventory indicated that the total number of lead service lines identified in the District may be between 33,000 and 35,000. To-date (from FY2003 through FY2007) the program has replaced 14,000 of these lead services, leaving approximately 21,000 lead services to be completed by FY2016. A detailed review of the updated inventory will take place in early FY2008.

- In order to reduce impacts and costs to ratepayers, LSR construction work continues to be included in sewer laterals, small valves and water main repair work, as well as coordinating with DDOT's paving plan.
- To-date approximately 4,900 customers have signed up to replace their portion of the service line. In FY2007 the LSR Program implemented postcard reminders to encourage homeowners to return their Private Property Lead Service Replacement Agreements. In early FY2008 the LSR Program will implement automatic phone call reminders for homeowners to return agreements. The WASA LSR Program will also continue its partnerships with Wachovia Bank and the District's Department of Housing and Community Development in their programs to assist low-income property owners in financing the private side LSR work

In FY2008 we will continue to work closely with the Washington Aqueduct to monitor any planned changes to the water supply. We will also continue our ongoing relationship with the District's Department of Health (DOH) and with expert public health advisors from

the George Washington University School of Public Health. The WASA LSR team continues to research technology changes and review regulatory changes for any potential impacts to the LSR Program.

Metering – $52 million **(***project pages* VII-83 to VII-85)

The meter installation/Automated Meter Reading Program is 98.9% complete, representing approximately 120,000 customer locations under the original contract. In FY 2006, Flippo construction was contracted to complete the remaining installations that were turned back because of access issues. Flippo's contract expired on July 31, 2007. Out of approximately 3300 small meters (2" and smaller) to be completed under this contract, there are 1,224 left to be completed. Out of approximately 480 large meters (3" and larger) to be completed there are approximately 133 remaining. Access, scheduling and safety issues have hindered the completion process. The Authority will continue to aggressively attempt to complete the remaining installations utilizing a combination of contractors and WASA staff. The CIP continues to include out year funding for ongoing meter replacement and AMR system upgrades and maintenance.

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Section VIII: Washington Aqueduct

WASA purchases the drinking water it distributes from the Washington Aqueduct, a division of the U.S. Army Corps of Engineers.

WASHINGTON AQUEDUCT

The Washington Aqueduct, managed by the U.S. Army Corps of Engineers, provides wholesale water treatment services to WASA and its partners in Northern Virginia, Arlington County and Falls Church. 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, 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 WASA's share of Washington Aqueduct projects totals $170 million or $5 million less than last year's 10-year plan of $175 million. This change is due primarily to projects being completed and closed.

The Aqueduct CIP is broken into seven primary areas with specific Projects under each area:

Basin Waste Recovery/Residuals Disposal - $84 Million *(project pages VIII-5)*

The residual project is the single largest 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 dewaters the residuals on site and trucks them off-site for disposal.

Dalecarlia Pumping Station Improvements - $12.5 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 FY2010, HVAC improvements FY2010, Roof repairs FY2011, 2nd and 3rd high Pump and Motor replacement/rebuilds FY2012 and Elevator and Overhead Crane replacement FY2014. This effort ends with a SCADA upgrade and is expected to be completed in FY 2015.

Cabin John Bridge Repairs - $792 Thousand *(project pages VIII-7)*

Beginning in FY2010 and continuing into FY2015, the Aqueduct intends to initiate roadway and parapet repairs to the Cabin John Bridge infrastructure.

McMillian Water Treatment Plant Improvements - $ 23.7 Million *(project pages VIII-8)*

Over the next three years, the Aqueduct will be focusing on Instrumentations improvements, SCADA upgrade, Pumping Station motor drive improvements and Security Improvements surrounding Sodium Hypochlorite/Caustic chemical storage. Beginning in FY2010 and continuing through FY2011, the focus shifts to systems and facilities improvements including Fire alarm system, environmental, clearwell cleaning and disinfecting, maintenance flume and gatehouse, instrumentation, and HVAC improvements, as well as Annex Building 1 Renovation. FY2012 begins Security improvements and Chemical Building process improvements, and East Shaft Pump Replacements. FY2013 will see roadway repairs, and FY2014 will begin efforts on East Shaft Pumping station renovation, silt curtain replacement, and roof replacements. FY2015 anticipates demolition of the ESA building.

Appurtenant Transmission & Storage Facility - $17.7 Million *(project pages VIII-9)*

In FY2010, the Aqueduct intends to begin transmission maintenance improvements and Little Falls Pumping Station (LFPS) elevator and Overhead Crane replacement. Beginning FY2011 and continuing through FY2015, the Little Falls Pumping Station pump and motor replacement/rebuild will occur. In FY2012, Georgetown Reservoir improvements are scheduled to occur, as well as Little Falls Pumping Station HVAC and plumbing improvements. FY2013 and FY2014 will see finished water reservoir sealing, and conduit repairs, Hydro building and Champlain Ave. building renovations. FY2015 and FY2016 currently have Great Falls Intake Building improvements and reservoir/flood control improvements scheduled to occur.

Dalecarlia Water Treatment Plant Improvements - $29.6 Million *(project pages VIII-10)*

FY2007 will continue to see a lot of effort invested at Dalecarlia WTP, including clearwell cleaning and disinfection, SCADA upgrades, Security Improvements (including Sodium Hypochlorite/Caustic chemical storage), and Floc/Sediment basin improvements. In FY2008 and continuing through FY2014, the Aqueduct will conduct instrumentation improvements. FY2009 will see electrical renovations, which will end in FY2014. In FY2010 the Aqueduct will make Fire Alarm System improvements, as will as chemical building process improvements, which will continue through FY2014. From FY2011 through FY2015, the Aqueduct will be conducting Administrative building improvements. Maintenance building improvements are scheduled from FY2011 through FY2016. Also in FY2011 the Aqueduct plans roadway improvements, East Filter Building renovation (Phase II), and West Filter Building improvements. The Admin Building elevator will be replaced in FY2012. In FY2014 the Aqueduct will undertake Warehouse #6 improvements and washwater tank improvements. In FY2015 the Old PS Visitor Center renovation is scheduled to occur along with Water Quality Lab renovations.

Alternate Treatment Methods - $1.5 Million *(project pages VIII-11)*

In FY2008 the Aqueduct plans Process Testing and Studies on mixing improvements.

Financing of Aqueduct Capital Projects

The U.S. Army Corps of Engineers in accordance with Federal procurement regulations require 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 WASA. Over the last two 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 WASA briefed the Senate Homeland Security and Government Affairs committee staff. Additionally WASA and Washington Aqueduct staff provided DC Delegate Norton's office with the Administration's proposal. Although, neither of the Senate committees has acted on the proposal, Ms. Norton's office reportedly will offer it as an amendment to the Water Resources Development Act currently in conference.

While this is a significant improvement over current Corps practice, we continue to pursue other options that would be more favorable to 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

Approved FY 2007-2016 Capital Improvement Program

2007-16

Section IX: Capital Equipment

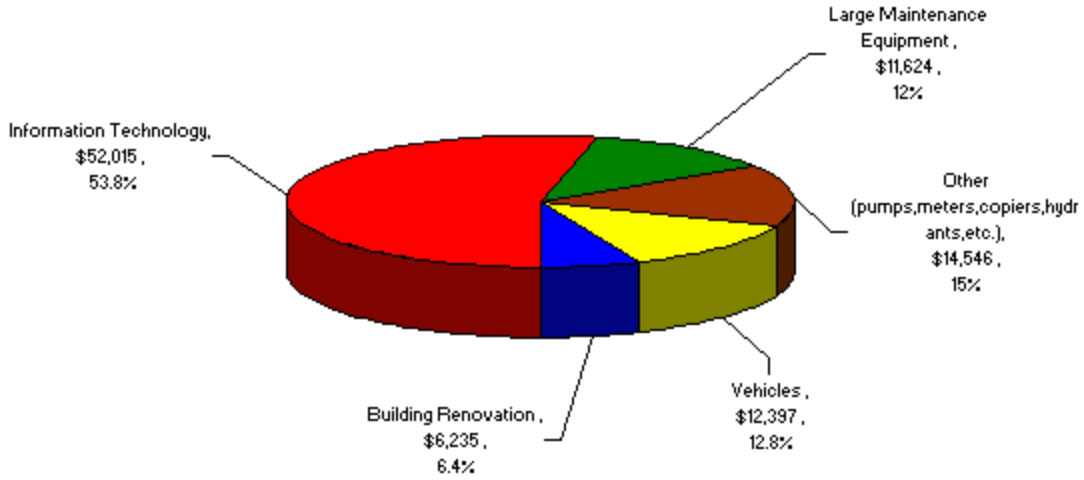
WASA's fleet of heavy equipment is used daily throughout the city as repairs and upgrades are made to the water and sewer system.

CAPITAL EQUIPMENT

WASA's Capital Equipment budget totals approximately $100.8 million for FY 2007 – FY 2016 plan, an increase of $5 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 $3.1 million) and the asset management system (budget of $5.0 million). WASA continues its commitment to scheduled replacement of its vehicle fleet with a budget of $12.4 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 $11.6 million, or twelve percent of the ten-year plan.

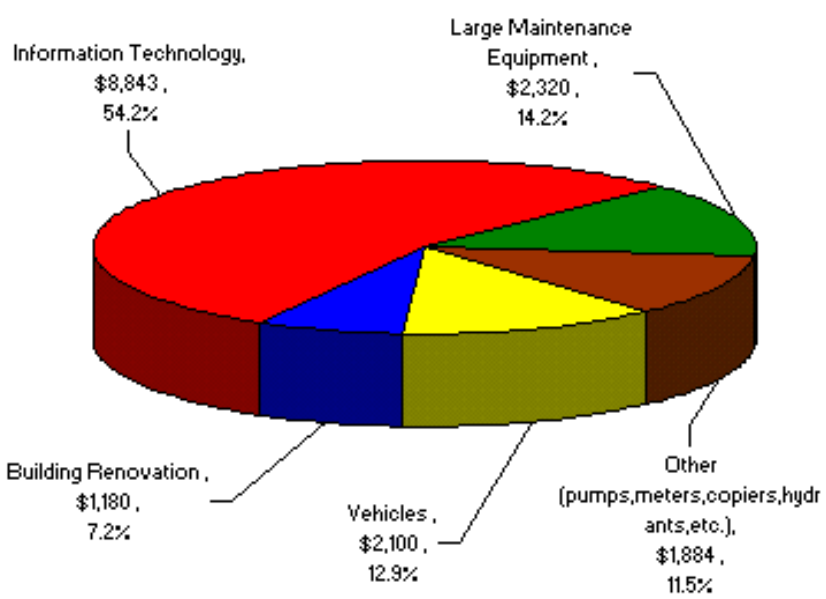
The revised FY 2008 budget (disbursements basis) at $16.3 million is $2.2 million higher than the FY 2008 approved budget (disbursements basis). This variance is primarily attributable to the budget increases in: the Fleet Management department to comply with the policy of replacing aging vehicles; Information Technology (IT) managed programs – addition of new programs – ERP systems (to ensure that WASA's reporting system remain current and efficient) and Network Storage System Renewal (to ensure safe archival and retrieval of 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 2007 – FY 2016
($ in 000's)

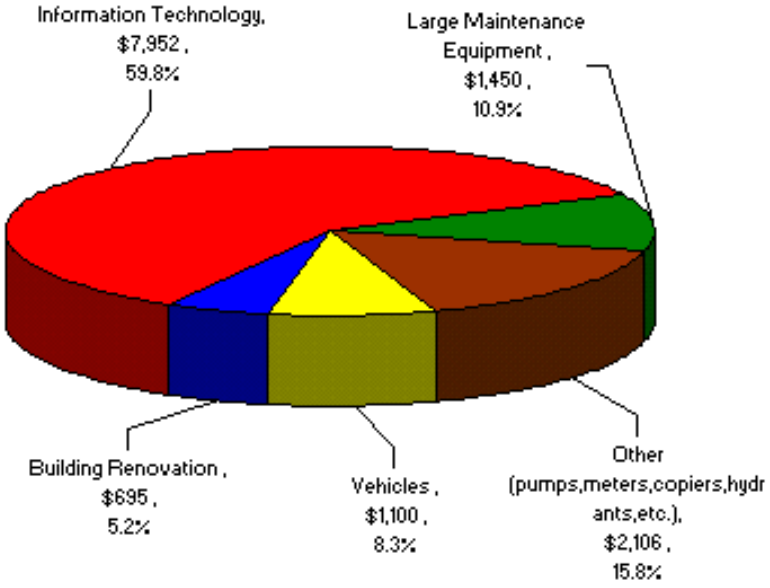


CAPITAL DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES
FY 2008 Revised vs. FY 2009 Proposed
($ in 000's)

FY 2008 Revised



FY 2009 Proposed



FY 2008 Revised = $16,327
FY 2009 Proposed = $13,303

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 - $0.5 million

Capital equipment expenditures for this department are for laboratory equipment purchases to maintain a certified laboratory.

Department of Water Services - $8.5 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 2008 revised and FY 2009 proposed budgets largely remain the same as those carried out by the department in previous years for fire hydrant and water service replacements.

Department of Sewer Services - $3.1 million

This department is responsible for replacing catch basins, manhole covers and frames, and rehabilitating regulators and outfall gates. The FY08 budget also reflects some new initiatives including a collaborative effort between IT and Sewer Services to transition the 30 year old SCADA system from DACS to Wonderware as was successfully done last year with the Water system, and fall protection in the fiberdam, meter and storm vaults to ensure employee safety. It will also fund the replacement of the 6-ton electric transport used to ferry the trash bins out of the Potomac Pump station with an explosion-proof unit. These special transports have engines specifically designed not to spark, thus decreasing the risk that a spark will set off the gases within the station.

Department of Fleet Management - $12.4 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 36 crew cabs, maintenance vans, flushing vans and pickup trucks ranging in age from 8 to 14 years. Fleet will also replace a pair of 1999 Sewer bucket machines and 7 dump trucks ranging in age from 13 to 18 years.

Department of Facilities and Security - $8.5 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. Facilities is in the process of evaluating the fire suppression and detection systems for compliance with all current regulations, and will be completing a WASA-wide assessment of all such systems during FY08, repairing all of the compliance deficiencies of which they are able. In FY09 they intend to contract repairs for any deficiencies requiring skills beyond the WASA staff, such that by the end of FY09 WASA will be in full compliance with all requirements related to fire suppression and detection.

Department of Information Technology - $ 52 million

In addition to managing WASA-wide technology projects, the Department of Information Technology is responsible for computer, printer, and other hardware purchases. The department has additional responsibilities for installing telecommunications equipment throughout the Authority, and for replacing copper cabling with fiber cabling. The 10-year spending plan for the Information Technology Department includes budget increases for existing projects: Telephone System renewal / replacement, Network System renewal, Asset Management System which supports GIS throughout the organization's operational infrastructure and the Document Management System; and new projects - PCCS-SCADA Lab , Succession Planning and E-procurement projects for the Human Resources and the Procurement department respectively.

Department of Maintenance Service - $11.6 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. FY 08's High Priority Rehab will include 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.

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 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 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, 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 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 - $0.45 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 - $0.5 million

At the end of FY 2003, 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 - $3.1 million

In 2004 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 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 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 WASA has matured to a different level, and based on the organizational readiness--and the solutions now available-- 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 - $1.2 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 - $2.7 million

In keeping with the Information Technology Strategic Plan, 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- $2.4 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 – $3.2 million

The FY 2008 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 2008 reflect only FY 2007 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 2016. This is due to the generally annual nature of purchases and projects occurring in the Capital Equipment service area of WASA's capital program.