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The Office of Budget and Finance 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. Glenn S. Gerstell
Chairman
Board of Directors
District of Columbia Water and Sewer Authority
5000 Overlook Avenue, S.W.
Washington, D.C. 20032

October 21, 2004

Dear Chairman Gerstell and WASA Board Members:

I am pleased to submit for your review and consideration the FY 2004 – FY 2013 Capital Improvement Program (CIP). This document sets forth a 10-year, $2.0 billion capital program (on a cash disbursements basis). We believe this book provides an enhanced framework for monitoring budgets and the progress of capital project completion, and also serves as a valuable tool for evaluating our performance by the financial markets and other stakeholders.

We start off this year's capital budget review process on a high note – for the second consecutive year, we have surpassed our capital disbursements target, spending 106 percent of the revised FY 2004 budget, after spending 101 percent of the revised FY 2003 capital budget. (I would note that all projects remain within their lifetime budgets.) This success is due in large part to the direction provided by the Board, particularly through the detailed reviews performed by the Operations and Finance and Budget Committees.

This year's CIP is $220 million more than last year's plan. As discussed in Section I and in more detail throughout the document, the increase is due primarily to the addition of the lead service line replacement program and increased digester costs, which were approved by the Board in two separate actions during FY 2004. In addition to these major projects, the CIP includes the early years of the proposed CSO LTCP as discussed in more detail below.

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 capital program at Blue Plains is well underway, with eleven large projects currently under construction, totaling over $550 million in lifetime budgets. These projects include the additional dewatering facility upgrade, primary and secondary treatment facility upgrades, additional chemical systems, rehabilitation of the influent grit and screening facility, nitrification / denitrification facilities, gravity thickening facilities, process computer control system, filtration and disinfection facilities, and biological sludge thickening facilities.

Over the next year, we will continue design of the largest single project in our CIP, the new digester facilities, with a lifetime budget of $311 million. These facilities are projected to begin construction in FY 2006, and when fully operational, will result in substantial operating savings.

Combined Sewer Overflow Service Area: As of the date of this letter, we remain in litigation with the EPA and the U.S. Department of Justice (DOJ) on our proposed CSO Long-Term Control Plan, originally submitted to the EPA in 2002. The focus of the litigation remains the implementation schedule. However, in the weeks prior to publication of this document, we have reopened settlement negotiations with the federal government as we are anxious to move forward with the proposed CSO LTCP. As part of these negotiations, we are discussing shorter implementation schedules, which will result in accelerated and higher rate increases than under our current proposed plan. Pending conclusion of the negotiations (or if the negotiations are not successful, continuation of litigation against the federal government), we continue to include the early years of the proposed LTCP to our ten-year CIP and ten-year financial plan (totaling approximately $190 million with inflation), assuming a forty year schedule. In addition, we continue to move forward with those projects that were already in the CIP. While we are currently discussing shorter implementation schedules with DOJ, until a final Board-approved settlement is reached, it is recommended that we continue to show a forty-year plan and that no funds beyond the $143 million (disbursements basis) incorporated in the current CIP and initial facilities planning be committed or spent until such time as the following is accomplished:

1. EPA & DOJ approve the final LTCP in a manner that is acceptable to the Board;
2. EPA, DOJ, and WASA agree on the implementation plan and schedule;
3. A Board-approved financing plan is adopted; and
4. A judicially enforceable agreement is executed between EPA, DOJ, and WASA governing the implementation of the LTCP.

The impact on our ratepayers of the proposed LTCP is significant. The projected capital cost of the LTCP is $1.265 billion in 2001 dollars; including inflation, this increases to $2.6 billion (assuming an implementation period of 40 years). As discussed in more detail in Section I of the operating budget document, shorter implementation schedules will result in accelerated and higher rate increases than under our current proposed plan.

While we continue these negotiations, we are aggressively moving forward with the $143 million of projects that were included in the settlement of a lawsuit against WASA regarding implementation of the federal CSO Nine Minimum Controls program (the “EarthJustice” lawsuit). These projects, which were previously budgeted and planned by WASA prior to the lawsuit, are projected to reduce combined sewer overflows by approximately forty percent when completed. We have completed the installation of new fabridams at a total cost of

approximately $10.3 million, and are in design on three pumping stations (Main & O; Potomac, and Poplar Point) and in constructionon the new East Side pumping station. We have also begun the procurement process to select a firm to begin facilities planning, with the selection scheduled to be complete in spring 2005.

Whatever the final implementation schedule is, the benefits of our long-term plan are significant -- when fully implemented, combined sewer overflows are projected to 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. As noted above, WASA's $143 million (disbursements basis) of previously planned projects will result in an approximately 40 percent reduction in combined sewer overflows, and the completion this past spring of the fabridams alone are projected to result in a 24 percent reduction. The plan includes a variety of improvements planned throughout the District to improve the quality of the Anacostia and Potomac Rivers and Rock Creek:

- Four large storage tunnels, which will allow the storage of flows from storm events until they can be gradually sent to Blue Plains for advanced treatment
- Pumping station improvements
- Targeted separation of combined sewers in several sections of the District to include Anacostia
- Consolidation and elimination of 13 of 59 outfalls, including 4 outfalls on the Anacostia River
- Funds for low impact development (LID) at WASA facilities and to encourage LID across the District

Stormwater Service Area: This year's CIP reflects a significant decrease in projected stormwater capital project spending. This is due primarily to the elimination of the stormwater pumping rehabilitation projects from WASA's CIP, assuming that the District's Department of Transportation (DDOT) takes responsibility for this infrastructure, based on recent discussions with them. On a related note, we have also begun discussions with the District on transferring other stormwater costs to the stormwater enterprise fund. Finally, in our role as stormwater administrator, we are working with other participating agencies to evaluate the potential operating and capital budget impacts of the District's new stormwater permit. Additional details on the new permit are found in Section I of the operating budget document.

Sanitary Sewer Service Area: Major initiatives in the sanitary sewer area are the continued rehabilitation of pumping stations, including Rock Creek, Upper Anacostia, and Earl Place stations. This area also includes the rehabilitation and permanent odor control improvements for the Potomac Interceptor, budgeted at $40 million.

During FY 2005, WASA will continue the comprehensive evaluation of the sanitary, stormwater, and combined sewer systems, which will be accomplished through the services of an engineering project management consultant. The project is scheduled for completion in 2007.

Water Service Area: While recent focus has been on lead, WASA has long been focused on water quality, and has budgeted close to $573 million for water distribution projects (including lead) over the ten year plan, a significant portion of which are related to water quality. Since our creation in 1996, we have completed the following projects:

- *Water Storage Facility Rehabilitation* – All WASA storage facilities were drained, cleaned, and inspected in 1997, and because of this process, five underground reservoirs and three elevated tanks were rehabilitated for a total cost of $12 million. Going forward, our CIP anticipates draining and cleaning each storage facility on a 5-year basis, consistent with AWWA standards.

- *Elimination of Dead Ends & Cross Connections* – We successfully eliminated close to 4,300 cross connections for a total cost of approximately $19.5 million, and no known cross connections remain in our system. We have also made good progress in eliminating dead ends, and expect to complete this work over the next two years. We will continue our annual flushing program to help ensure that good water quality is maintained while we complete this work.

- *Cleaning & Lining & Replacement of Water Mains* – We have completed cleaning and lining of 13 miles of water mains for a total cost of approximately $9 million. In addition, we have replaced over 8 miles of unlined cast iron mains. Going forward, since many of the unlined cast iron mains may be reaching the end of their useful lives, it will be determined if replacement is more economical than cleaning and lining. Over the next ten years, we have budgeted approximately $50 million for replacement and rehabilitation of water mains.

- *Flushing* – Each year, we unidirectionally flush approximately 500 miles of the water distribution system at high velocities to rid it of sediment and debris. As part of the lead program, in conjunction with the Aqueduct, we will have completed unidirectional flushing of the entire system this year. Based on the results of this year's flushing program as well as the results of increased water quality monitoring, a revised flushing program will be developed before the next flushing season.

- *Valve Replacement* – Broken valves can create dead ends as well as delay critical capital projects that improve water quality. To date, we have replaced close to 2,500 valves at a cost of approximately $12.5 million. Based on the number of old valves that continue to fail, it may be necessary to spend an additional $10 million on this program over the next ten years. We intend to establish a comprehensive ongoing valve operations and maintenance program over the coming year.

Lead Program -- The most significant change in this year's CIP is the addition of the $300 million lead service line replacement program, adopted by the Board in July 2004. Under this program, WASA will replace the publicly-owned share of all lead service lines over the next six years. In FY 2004 alone, we replaced 1,793 lead service lines, in excess of our commitment and the Lead and Copper Rule requirement. As described in more detail in Section I of the operating budget document, we have developed a detailed implementation plan that continues to assure compliance with the lead administrative order, including filter distribution and customer communications, among other tasks, all of which are included in the $300 million capital budget for this program.

Washington Aqueduct: The Washington Aqueduct is facing a significant regulatory issue regarding disposal of solids from the treatment process, as described in more detail below. WASA and its partners in Northern Virginia are actively involved in the identification alternative approaches to the issues that have been raised. Our interactive and cooperative efforts on this critical project are one example of the strong supplier-customer relationship we now have with the Aqueduct due to the implementation of the new operating agreement in FY 1997.

Currently, solids that settle out from water at the Dalecarlia Treatment Plan and Georgetown Reservoir are periodically discharged to the Potomac River during high river flow conditions. The NPDES permit received by the Aqueduct requires development of a plan to remove 85 percent of incoming sediments and not return them to the Potomac River. The Aqueduct, WASA and the other wholesale customers are working with the EPA to identify technological alternatives available to meet this requirement. The Aqueduct has tentatively identified projects to address this requirement, with costs totaling approximately $50 million (WASA share only), with construction scheduled to begin in FY 2007. This projected cost has been included in our CIP. The costs and schedule for improvements are dependent on the final design of this project.

Capital Equipment Service Area: Our CIP includes $91 million for various capital equipment projects. Information technology projects total $44 million, or 52 percent of the capital equipment plan, with major projects including the implementation of a new asset management system, security-related upgrades, and a new document management system. The capital equipment budget also provides for the ongoing replacement of vehicles in our fleet, totaling $11 million over ten years.

FUTURE CONSIDERATIONS

The CIP and the proposed CSO LTCP continue to be the primary drivers of our long-term financial picture and projected rate increases for our customers. While the proposed CIP is comprehensive in its scope, we also closely monitor emerging issues (such as potential regulatory changes) that could require significant adjustments in our CIP and operations. We also have in place extensive planning tools that help us identify issues and projects that extend beyond the current ten-year period. These emerging issues include:

Chesapeake Bay Agreement changes – The 1987 Chesapeake Bay Agreement calls for a 40 percent voluntary nitrogen reduction by its signatories by 2000. The District of Columbia was the first signatory in the region to meet this voluntary commitment due to significant improvements by WASA at Blue Plains. The Chesapeake Bay Program, an initiative of EPA, is currently evaluating the costs and benefits of increasing the targeted level of nutrient removals, and making these reductions mandatory instead of voluntary. If these new targets are implemented, WASA could be required to invest an estimated $300 to $500 million in capital improvements at Blue Plains, assuming voluntary compliance. If mandatory compliance is required through inclusion in a future NPDES permit, these estimated costs could double.

Clean Air Act –Blue Plains is working with EPA and the District to be classified as a minor source of air pollutants under the Clean Air Act. The new digesters and associated improvements are being carefully evaluated to gauge the impact on air emissions and potential air permits and any resulting impact on capital expenditures. The reclassification of the District of Columbia as a “severe” non-attainment area for ozone heightens the need to carefully consider the impact of future improvements on air emissions at Blue Plains.

Sanitary Sewer Overflows & CMOM – The EPA is developing a sanitary sewer overflow (SSO) policy to regulate overflows of the sanitary sewer system, including dry weather overflows. A component of this policy is the development of minimum capacity, management, operation, and maintenance standards (CMOM) that potentially could be incorporated into NPDES permits. We are currently evaluating the proposed policy and potential impacts on WASA as part of our overall sewer system assessment.

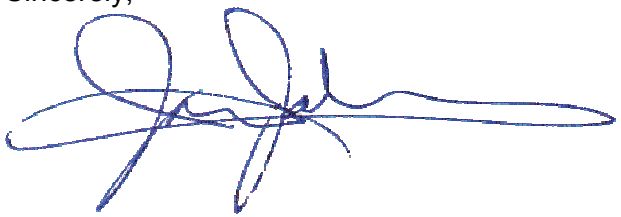
Facilities Master Plan and New Projects – WASA has developed a Facilities Master Plan that covers a twenty-year planning horizon, stretching ten years beyond the current ten-year CIP. This plan serves as a framework and planning guide for the CIP, and identifies potential long-term projects and issues that may result in additional capital projects. The last Facilities Master Plan was prepared in FY 1998; an update is currently underway and is scheduled to be complete in FY 2005. The current Facilities Master Plan identifies a number of significant projects that will need to be undertaken in the years following the current ten-year planning period, including:

- ***Blue Plains projects*** – In FY 2014, we have identified $84 million in additional projects that will be added to the CIP as this year falls into the ten-year planning period. These projects include spent washwater treatment, to treat the recycled washwater from the Filtration and Disinfection Facility in a separate sidestream process rather than the current practice of returning the washwater upstream in the plant, upgrading Raw Wastewater Pump Station 2, and further additional chemical systems and process computer control systems work. The need for and extent of these projects will be defined by a strategic plan/facility planning effort currently under way for the plant, which will consider Chesapeake Bay Program initiatives, possible NPDES permit revisions, and treatment impacts due to the CSO LTCP pump out.

- ***Sewer system assessment*** – In FY 2003, we initiated our first comprehensive assessment of the sewer system. While we have included limited funding in the CIP (approximately $5 million annually), the results of this study, projected to be complete in 2007, will allow us to identify specific projects and a spending plan for improvements to the sewer system. It is anticipated that sewer system rehabilitation will require an increasing level of future investment**.**

ACKNOWLEDGEMENTS
I would like to extend a special thanks to the WASA employees who have prepared the CIP. 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.

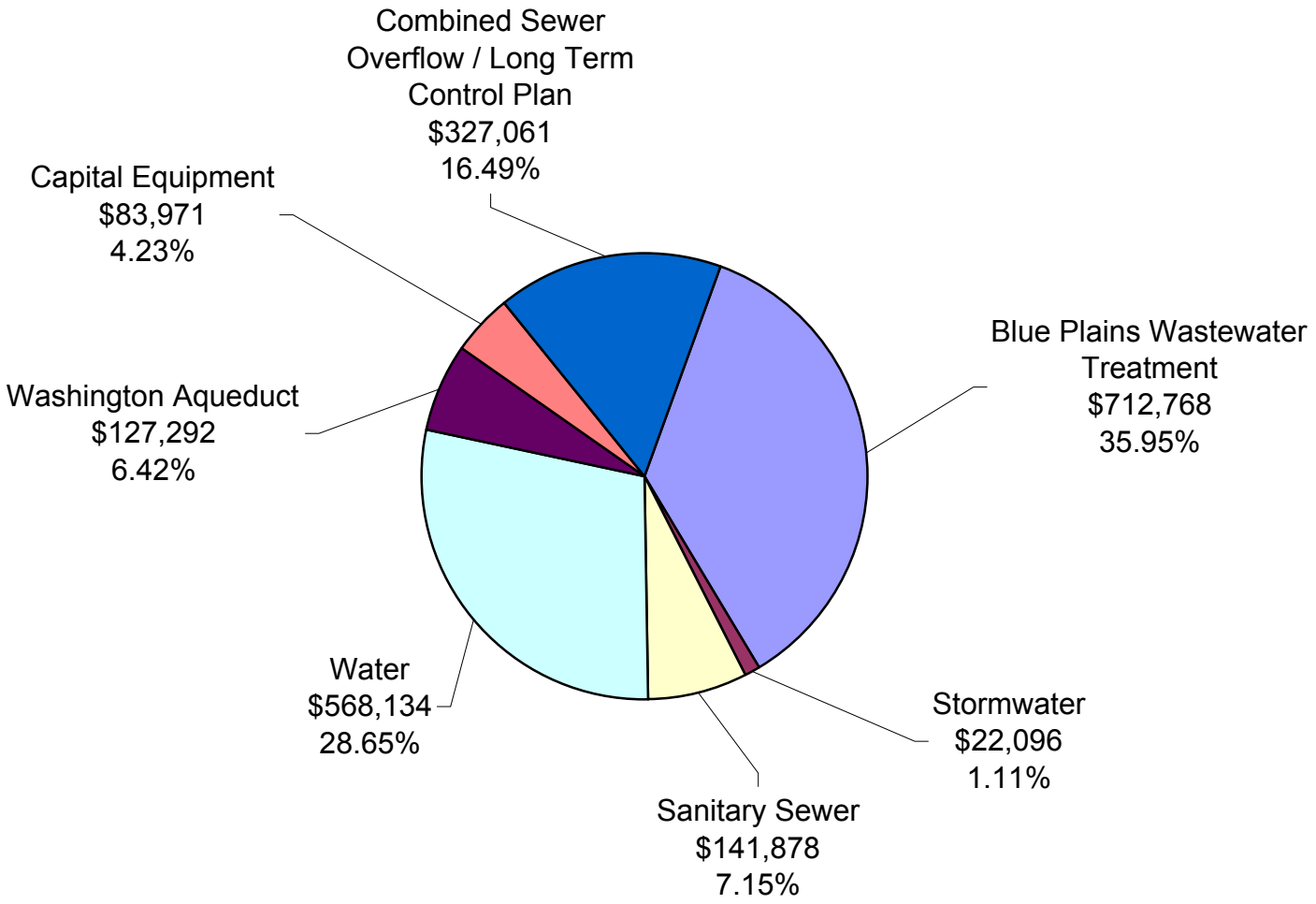
Sincerely,



Jerry N. Johnson
General Manager

FY 2004 - FY 2013 Capital Improvement Program

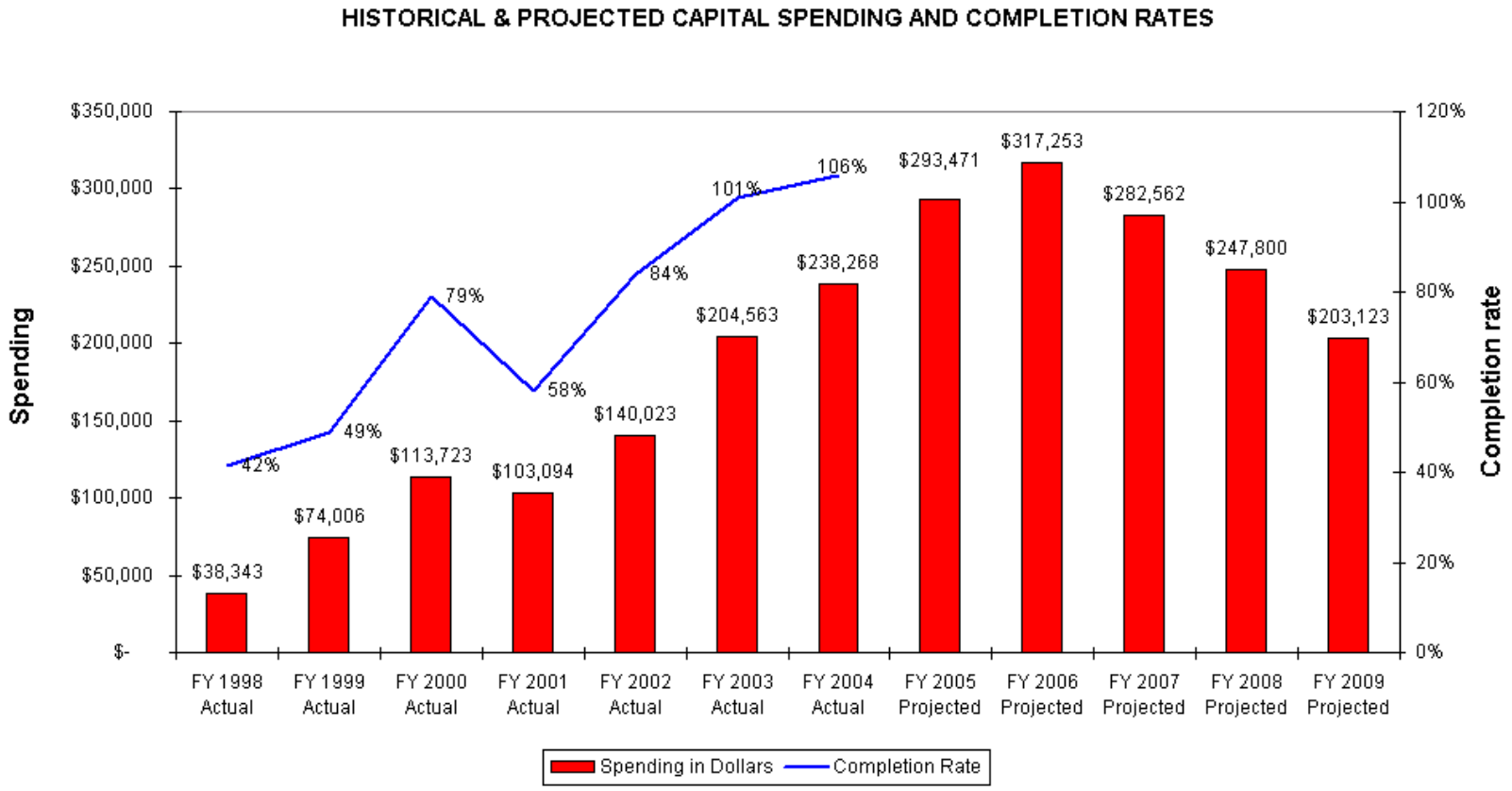
($ in 000's)



FY 2004 – 2013
CAPITAL IMPROVEMENT PROGRAM OVERVIEW

MAJOR CHANGES & INITIATIVES

We have made significant progress over the last two years on our ten-year capital improvement program. Capital spending reached record highs in FY 2003 & FY 2004, with cash disbursements surpassing targeted levels, as shown in the chart below. This success is due, in large part, to the direction provided by the Board, particularly through the detailed reviews performed by the Environmental Quality and Operations and Finance and Budget Committees. We expect that this high level of spending will continue for the next five years, as shown in the chart below.



WASA's ten-year capital improvement program (CIP) totals $2 billion (cash disbursements basis), approximately $220 million more than last year's plan. As discussed in Section I and in more detail throughout the document, the increase is due primarily to the addition of the lead service line replacement program and increased digester costs, which were approved by the Board in two separate actions during FY 2004.

The most significant change in this year's CIP is the addition of the $300 million lead service line replacement program, adopted by the Board in July 2004. Under this program, WASA will replace the publicly-owned share of all lead service lines over the next six years. In FY 2004 alone, we replaced 1,793 lead service lines, in excess of our commitment and the Lead and Copper Rule requirement. As described in more detail in Section I, we have developed a detailed implementation plan that continues to assure compliance with the lead administrative order, including filter distribution and customer communications, among other tasks, all of which are included in the $300 million capital budget for this program.

As in prior years, the ten-year plan includes the early years of the proposed Combined Sewer Overflow Long-Term Control Plan (CSO LTCP), assuming a forty-year implementation schedule. As of the date of this document, we remain in litigation with the EPA and the U.S. Department of Justice (DOJ) on our proposed plan, originally submitted to the EPA in 2002. The focus of the litigation remains the implementation schedule. However, in the weeks prior to publication of this document, we reopened settlement negotiations with the federal government as we are anxious to move forward with the proposed CSO LTCP. As part of these negotiations, we are discussing shorter implementation schedules, which, if approved, will result in significantly higher capital disbursements over the ten year period and higher rate increases than under our current plan (See Sections I and IV for additional details). Until a final Board-approved settlement is reached, it is recommended that we continue to show a forty-year plan in our CIP, and that no funds be committed or spent beyond the $143 million incorporated in the current CIP as well as initial facilities planning for the proposed plan.

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 $1.3 billion dollars, reflecting a $75 million net increase over the July 2004 Board-approved budget, due primarily to the addition of several new projects in the late years of the plan for primary treatment facilities upgrades, nitrification / denitrification facilities upgrades, and grit chamber facility upgrades. The 10-year disbursement budget is $713 million, an increase of $13 million over the July plan. It is important to note that the budgets in this area reflect the $53 million increase in digester costs due to Class A digestion that was approved by the Board in March 2004.

Major projects under construction in FY 2004 included Primary and Secondary Treatment Facilities Upgrades, Additional Chemical Systems, Additional Dewatering, Process Control Computer System, Gravity Thickener Facilities, and Grit and Screen Facilities.

Construction is scheduled to start in FY 2005 for the Nitrification/Denitrification Facilities Upgrade. The new digesters project is also proceeding, with construction tentatively scheduled to begin in 2005 on foundations, digester vessels and silos. In 2006, it is anticipated that construction will begin on the process facilities necessary to complete the digester complex. All of these construction dates are dependent on zoning and Board approval of the design plans and construction contracts.

COMBINED SEWER

The lifetime budget for the Combined Sewer Service Area is $2.6 billion, consistent with last year's lifetime budget. This includes the proposed CSO LTCP, assuming a 40-year implementation schedule, although we are currently in litigation with EPA and DOJ on shorter implementation schedules. Similarly, on a disbursements basis, we have only included the early years of the proposed 40-year LTCP, totaling $190 million; the majority of the LTCP costs on a disbursements basis are not reflected in the current CIP or rates projections. As noted above, pending settlement of the outstanding litigation, WASA does not intend to begin any additional LTCP work beyond previously planned and budgeted projects as well as initial facilities planning until an EPA and Board-approved plan is in place.

This year's CIP continues to reflect the $143 million of projects that were included in the settlement of a lawsuit against WASA regarding implementation of the federal CSO Nine Minimum Controls program (the "EarthJustice" lawsuit). We have made good progress on these projects: we have completed the installation of new fabridams at a total cost of approximately $10 million, are in design on three pumping stations (Main & O; Potomac, and Poplar Point) and in construction on the new East Side pumping station. When complete, these projects will result in an approximately 40 percent reduction in combined sewer overflows, and the completion this past spring of the fabridams alone are projected to result in a 24 percent reduction. We have also begun the procurement process to select a firm to begin facilities planning on the proposed CSO LTCP, with the selection scheduled to be complete in spring 2005.

STORMWATER

The lifetime budget for the Stormwater Service Area is $46 million, a decrease of $49 million from last year. This significant decrease is due primarily to the elimination of the stormwater pumping rehabilitation projects from WASA's CIP. Over the last 1-2 years, we have been in discussions with the District's Department of Transportation (DDOT) regarding responsibility for this infrastructure and all work had been deferred pending resolution of this issue. The balance of the reduction in stormwater lifetime budgets is in DDOT stormwater projects done on behalf of WASA. A portion of WASA's stormwater work is coordinated with DDOT when projects are made necessary by DDOT's work in the streets that often requires relocation of storm sewers, inlets, or other

structures. We have reduced the lifetime budgets in this area based on an analysis of actual spending and work completed over the last three to five years, which has been significantly less than budgeted. The remaining projects in the Stormwater Service Area are for replacing undersized, aged or deteriorated sewers, as well as installation of new sewers to serve new or redevelopment.

In FY 2005, we will continue the comprehensive sewer system assessment, begun in 2003. This assessment will determine the condition of the system, verify that we have adequate capacity, analyze potential new regulations and their impact on our infrastructure needs and CIP, and develop new capital projects as appropriate. This assessment is scheduled to be complete in FY2007.

SANITARY SEWER

Lifetime budgets in the Sanitary Sewer Service Area total $195 million, approximately the same level as last year's plan. Increases in the Potomac Interceptor project have been offset by reductions in other sewer rehabilitation projects, pending completion of the comprehensive sewer system evaluation in FY 2007, as discussed in more detail below. The 10-year disbursements plan in this service area is $142 million, a $13 million increase over last year's plan as we enter into construction on a number of rehabilitation projects.

We completed improvements to the Potomac Interceptor to address odor complaints on an interim basis, and completion of final design of permanent odor control improvements is scheduled for FY 2005, with construction scheduled to begin thereafter. The costs of this project have increased substantially 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 construction locations. In addition to the odor control improvements, we are in the process of designing significant structural improvements to two large pipe segments of the Potomac Interceptor in Fairfax and Loudoun Counties. The project is scheduled to be bid in FY 2005, with completion of construction currently anticipated in late 2006. The total lifetime budget for Potomac Interceptor projects are $40 million.

In FY 2005, we will continue the comprehensive sewer system assessment, begun in 2003. This assessment will determine the condition of the system, verify that we have adequate capacity, analyze potential new regulations and their impact on our infrastructure needs and CIP, and develop new capital projects as appropriate. This assessment is scheduled to be complete in FY2007. The CIP includes limited funding (approximately $5 million annually) in the out-years to help address any new capital projects identified as a result of this assessment.

WATER

The lifetime budget for the Water Service Area is $744 million, a decrease of $103 million from the July 2004 Board approved plan. As noted earlier, the Board approved the addition of the $300 million lead service line replacement program, resulting in a significant increase in our CIP at that time. This year's CIP reflects the reprioritization of a number of critical water quality projects into the beginning of the CIP, while projects in the later years have been deferred beyond the current ten-year plan to help mitigate the impact of the lead program on projected rate increases. In addition to the lead service line replacement program, critical water quality projects include elimination of dead ends, cleaning and lining and main replacement / rehabilitation, and valve replacement (which is necessary for other water quality construction projects to proceed).

Other major projects include the ongoing rehabilitation of the Bryant Street pumping station, with a lifetime budget of $61 million. The Automated Meter Reading project, which began in FY 2002, is scheduled to be substantially complete in 2005, with the replacement of the largest commercial meters. To date, over 115,000 meters have been installed. The lifetime budget for this project is $46.5 million, which includes ongoing upgrades of $0.3 to $0.5 million annually after initial implementation.

WASHINGTON AQUEDUCT

The lifetime budget for Washington Aqueduct projects totals $155 million, a $50 million decrease from last year's plan due to the completion of a variety of U.S. Treasury-note financed projects that were completed in FY 2003 and dropped from this year's CIP. The ten-year disbursements budget for WASA's share of Washington Aqueduct projects totals $127 million, or $8 million more than last year's plan, and includes funding for WASA's share of the proposed residuals disposal project.

CAPITAL EQUIPMENT

The FY 2006 proposed lifetime budget for Capital Equipment is $91 million, compared to $101 million in last year's plan. With the exception of some systems projects, lifetime budgets for capital equipment begin with FY 2004 actual disbursements and end with projected FY 2013 disbursements. This is due to the annual nature of the purchases that are made in this service area. The lifetime budget decrease in this area is due to the close-out of several projects, particularly, the initial implementation of the Financial system, High Priority Rehabilitation Projects at Blue Plains, and certain I.T. and Facilities department projects.

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. This plan is scheduled to be updated in FY 2005.

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.

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 a 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. In general, projects are closed or dropped from the CIP in the fiscal year following the end of project activity.

CAPITAL AUTHORITY

As part of WASA's enabling legislation, Congressional appropriations authority is required before any capital design or construction contract can be entered into. The FY 2006 request totals $519 million, and reflects the following:

- Remaining authority from prior years' appropriations;
- Projected commitments in FY 2005 and FY 2006;
- Planned FY 2007 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 2007 commitments in addition to FY 2006 commitments allows us adequate flexibility to continue with contract commitments in the event that the U.S Congress delays budget approval and allows us to quickly accelerate or reprioritize projects into earlier years as approved by the Board, as we did with lead this past year. While this gives us flexibility to reprioritize projects, it should be noted that such changes and execution of any contract still require General Manager approval, with major projects and contracts requiring Board approval.

The combined sewer projects' capital authority request is $107 million. This includes projected commitments in FY 2005 – FY 2007 for all previously budgeted combined sewer projects, the majority of which are part of the EarthJustice consent decree. In addition, we have added $100 million in projected commitments for facilities planning, geotechnical work, and other work needed to begin the CSO LTCP so that we have adequate capital authority to rapidly move forward with the plan once settlement is reached. However, we may revise this request prior to Board approval in January based on the status of the litigation with EPA and DOJ, potential new funding, or other related issues.

MAJOR ASSUMPTIONS

Inflation: All project costs are inflated at three percent annually to the mid-point of construction; personnel services are inflated at three percent per year throughout the 10-year plan.

Contingency: WASA capital projects include project contingencies ranging from 5 – 15 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 like 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. The following is a list of definitions of the priorities shown on the individual project sheets:

National Pollutant Discharge Elimination (NPDES) Permit – The Blue Plains Wastewater Treatment Plant operates under the guidelines and restrictions of its NPDES permit issued by the EPA. This permit also includes provisions relating to the operation and improvement of the combined sewer system. It is anticipated that implementation of any approved CSO plan will be addressed in the NPDES permit and other legally enforceable agreements.

Administrative Order and Stipulated Agreement – WASA is under an administrative order that started in 2004 requiring lead service line replacements. In order to replace all of the lead services within the water distribution system, lead service line replacement contracts are scheduled over six years.

Consent Decree – This 1995 Consent Decree required a variety of operational reviews as well as implementation of pilot Biological Nitrogen Removal (BNR) and Return Sludge Chlorination projects at Blue Plains. Both of these projects have been completed. Although WASA is planning additional BNR Improvements that are still budgeted in this CIP, we are currently awaiting action by the federal government to terminate this agreement which related to the already completed projects.

Stipulated Agreement & Order – Wastewater Treatment Plant **–** This 1996 agreement required various operational activities and completion of upgrades to the Secondary Metal Salts facilities. This project was completed in FY 2002, and we are awaiting action by the federal government to terminate this agreement.

Good Engineering Practices – This category includes projects that are needed for rehabilitation and upgrading of facilities and pipelines required in order for WASA to fulfill its mission, as well as projects needed to resolve operational issues and inefficiencies (for example, the Process Computer Control System). Such projects utilize state of the art technology, will improve operations, and in some cases, will reduce operating costs.

Public Health and Safety – these are projects that are required to eliminate or mitigate a threat to human health or safety. These projects are also required to ensure that there is not a failure to comply with WASA's NPDES permit requirements.

District of Columbia Department of Transportation (Highway Projects) – projects managed by the D.C. Department of Transportation.

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 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.

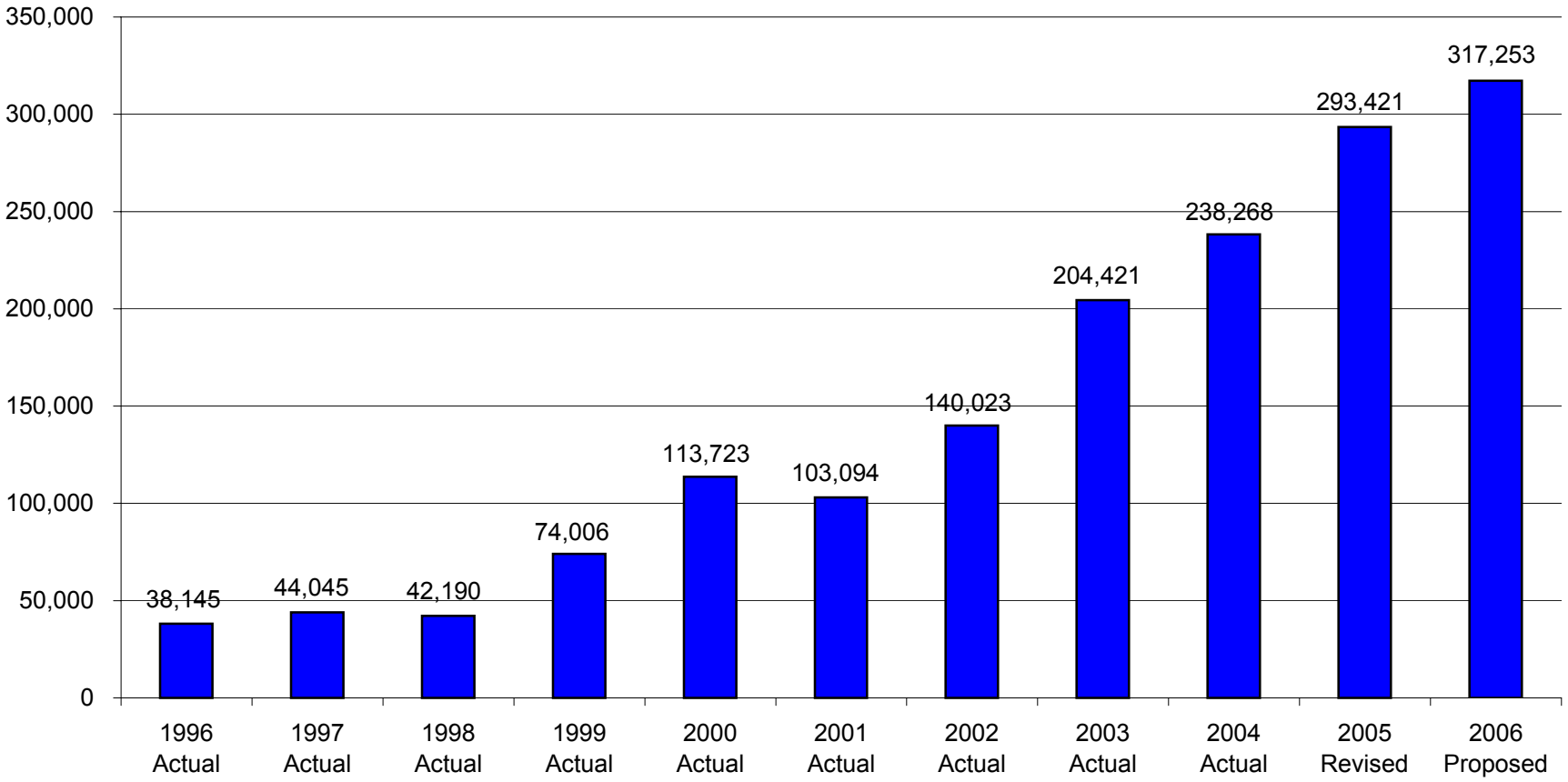
Disbursements / Commitments Budgets – projected project disbursements and commitments are shown by fiscal year in which they are anticipated. Commitments budgets are based on total project budgets, which reflect the fully loaded, anticipated costs of a project, including project contingencies. Contingencies 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):

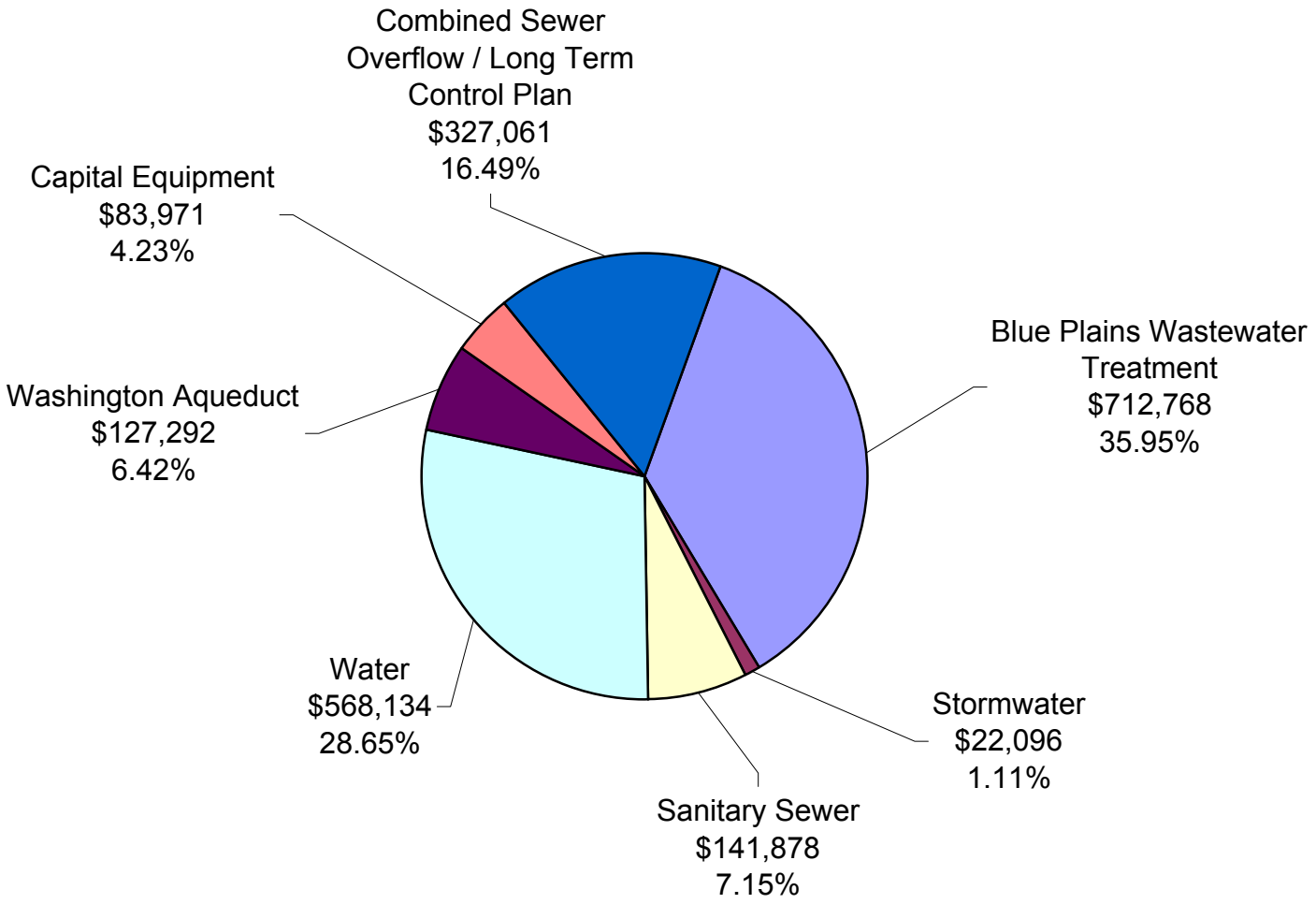
- Maintenance related items – are routine, cost under $5,000, and do not extend the life of the item more than 3 years,
- Capital Equipment – has a life of at least 3 years, a cost exceeding $5,000 and is financed with short-term debt or cash,
- Capital Project – has a long life (average of 30 years),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

Historical and Projected Capital Spending
FY 1996 - FY 2006
($ in 000's)



FY 2004 - FY 2013 Capital Improvement Program

($ in 000's)



FY 2004 - FY 2013 Capital Improvement Plan

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

	FY 2005 Revised	FY 2006 Proposed	Variance
Wastewater Treatment			
Liquid Processing Projects	436,807	521,907	85,100
Plantwide Projects	288,577	276,217	(12,360)
Solids Processing Projects	513,156	515,197	2,041
Sub-total	**1,238,540**	**1,313,321**	**74,781**
Stormwater			
Stormwater Extensions/Local Drainage	6,599	2,270	(4,330)
Stormwater On-Going Program	6,718	6,241	(477)
Stormwater Pumping Facilities	24,550	3,108	(21,442)
DDOT Stormwater Program	28,507	14,647	(13,860)
Stormwater Projects Program Managemer	7,260	5,830	(1,430)
Stormwater Trunk/Force Sewers	21,081	13,580	(7,501)
Sub-total	**94,715**	**45,676**	**(49,039)**
Sanitary Sewer			
Sanitary Collection Sewers	15,231	12,024	(3,207)
Sanitary On-Going Projects	60,569	66,074	5,505
Sanitary Pumping Facilities	20,171	21,978	1,807
Sanitary Sewer Projects Program Manage	14,930	14,930	-
Sanitary Interceptor/Trunk Force Sewers	82,100	79,826	(2,274)
Sub-total	**193,001**	**194,831**	**1,830**
Water			
Water Distribution Systems	262,957	181,613	(81,344)
Water Lead Program	300,750	300,750	-
Water On-Going Projects	52,085	59,740	7,655
Water Pumping Facilities	83,053	85,488	2,435
DDOT Water Projects	40,256	31,772	(8,484)
Water Storage Facilities	36,663	14,140	(22,523)
Water Projects Program Management	25,044	24,480	(564)
Meter Replacement /AMR Installation	46,000	46,500	500
Sub-total	**846,808**	**744,483**	**(102,325)**

FY 2004 - FY 2013 Capital Improvement Plan

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

	FY 2005 Revised	FY 2006 Proposed	Variance
Washington Aqueduct	**204,570**	**154,498**	(50,072)
Capital Equipment	**101,449**	**90,589**	(10,860)
Sub-total	**2,679,083**	**2,543,398**	**(135,685)**
Combined Sewer Overflow			
CSO Program Management	15,254	17,254	2,000
Combined Sewer Projects	150,176	149,034	(1,142)
Long-Term Control Plan (see note 1)	2,457,000	2,457,000	-
Sub-total	**2,622,430**	**2,623,288**	**858**
Total WASA CIP Lifetime (see notes)	**5,301,513**	**5,166,686**	**(134,827)**

Notes:

1 As discussed in Section 1, the CSO LTCP was approved by the Board of Directors and forwarded to the EPA in August 2002. The total cost of this plan is $1.265 billion in 2001 dollars, and increases to to $2.6 billion with inflation, assuming an implementation schedule of 40 years. WASA is currently in litigation with EPA and the Department of Justice over the CSO LTCP, and the focus of the litigation is the length of the implementation schedule.
As in prior years, the CIP includes the early years of the proposed CSO LTCP (totaling $190 million) assuming a 40-year implementation schedule. This amount has been included in the CIP due to receipt of Congressional appropriations for combined sewer projects. WASA's CIP has also historically included approximately $143 million of CSO-related projects for fabridams and pumping stations, which are currently underway. While we have added the LTCP to the CIP to accommodate the potential receipt of future grants, WASA does not intend to undertake any additional LTCP work beyond the $143 million of projects previously included in the CIP and initial facilities planning for the approved LTCP, unless otherwise authorized by the Board. It should also be noted that if the litigation is settled and a shorter implementation schedule is agreed to, the disbursements shown in the ten-year CIP will be significantly greater than currently shown.

2 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 2004 will be dropped from the CIP next year.

3 These budgets do not include inhouse labor costs, which historically have averaged $6 to $8 million annually and are applicable primarily to time charged to capital projects by employees in the Departments of Engineering, Sewer Services, and Water Services.

Fiscal Year 2006 Capital Authority Request
($000's)

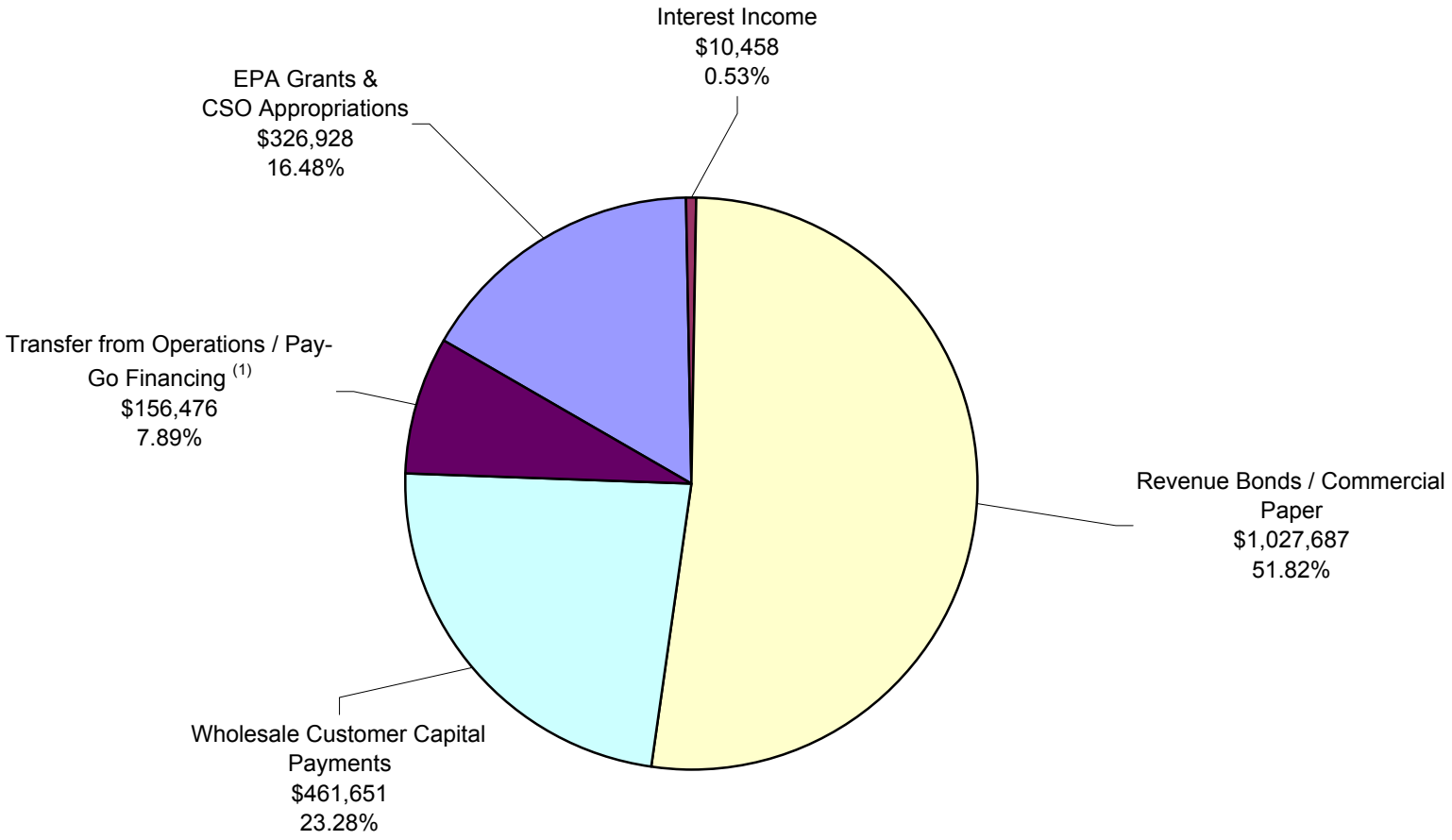
Program Areas	Fiscal Year 2006 Capital Authority Request
Blue Plains Wastewater Treatment	120,130
Sanitary Sewer System	21,485
Combined Sewer Projects	107,146
Stormwater [1]	0
Water System	224,634
Washington Aqueduct (WASA share)	34,463
Capital Equipment	22,136
Total	529,994

[1] The Stormwater projects' authority request is zero, as, existing (currently available) capital authority in this service area is in excess of projected commitments in FY 2005, FY 2006, and FY 2007.

FY 2004 - FY 2013 CAPITAL IMPROVEMENT PROGRAM

Sources of Funds

(In 000's)



(1) Pay-go financing is any funds available after funding the 180 day, or approximately $96.3 million in FY 2005, operating and maintenance reserve. These transfers are first used to pay down higher cost debt (such as U.S. Treasury notes for interim financing of Washington Aqueduct improvements), and then used to reduce the amount of revenue bond/commercial paper issuance.

Capital Improvement Program
Dropped or Closed Project Listing

Activity Group	Project Title	Service Area	Budget
Closed Projects:			
O8	504E3 - Master Landscaping Phase I	Wastewater Treatment	$846,618
TB	504 A7 - Primary Sedimentation Tanks	Wastewater Treatment	25,518,388
ZA	901A8 - HVAC & STEAM SYSTEM UPGRADES	Wastewater Treatment	1,042,688
K6	Wet-Weather Water Qual. Monitor. CSO	Combined Sewer Overflow	858,000
AX	Tide Gate Structure Rehab.	Sanitary Sewer	2,110,500
Q1	FY2001 - DSS Sanitary Sewer Project	Sanitary Sewer	4,640,000
E0	FY2000 - DWS Water Projects	Water	1,966,678
M5	WDSC1 - Sm. Valve Replace Contract 3	Water	540,306
NJ	873B3 - Valve Replace II, Various Locs.	Water	1,330,000
Dropped Projects:			
BC	Blue Plains Landscaping	Wastewater Treatment	-
N2	Interactive O&M Manual (Blue Plains)	Wastewater Treatment	$2,088,862
UE	504J3 - Secondary Metal Salts Addit	Wastewater Treatment	3,702,149
YE	700D6 - Plantwide Demolition & Salva	Wastewater Treatment	819,216
YG	700E1 - Centrifuge Repair Service	Wastewater Treatment	2,268,610
YI	700E3 - Roof Replacements	Wastewater Treatment	1,525,046
YJ	700E4 - Plantwide Power Cables	Wastewater Treatment	1,013,743
YK	700E5 - Nit Sodium Hydroxide Facil	Wastewater Treatment	2,937,801
YQ	700F2 - Blue Plains Mechanical Upgrades	Wastewater Treatment	2,211,287
ZB	901B1 - Paved Surfaces Upgrades	Wastewater Treatment	33,000
ZC	901B2 - Doors & Windows Upgrades	Wastewater Treatment	32,532
ZD	901B8 - Chlorine Buildings 1 & 2 REH	Wastewater Treatment	1,891,579
C0	FY2000 - DSS Storm Sewer Project	Stormwater	5,900
C2	FY2002 - DSS Storm Sewer Project	Stormwater	389,563
M2	WDSB4 -Elim. Of Cross Conns #4 Hydts	Water	1,706,810
M3	WDSB5 -Elim. Of Cross Conns #5 Hydts	Water	476,042
MM	873Y7 - Clean & Line Wtrmains 2 C.W.	Water	4,030,011
MS	Anacostia First High South Booster Station	Water	101,917
QV	Valve Repl Program - City Wide	Water	1,290,273
RF	Clean & Line Wtrmains 1, City Wide	Water	2,929,300
RK	Small Vlv Repl Contract 2, City Wide	Water	1,280,472

WASTEWATER TREATMENT

WASA operates the Blue Plains Advanced Wastewater Treatment Plant, the world's largest advanced wastewater treatment facility. At Blue Plains, WASA provides wastewater treatment services to over two 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, 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.

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. 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 $1.3 billion dollars, reflecting a $75 million net increase over the July 2004 Board-approved budget, due primarily to the addition of several new projects in the late years of the plan for primary treatment facilities upgrades, nitrification / denitrification facilities upgrades, and gravity thickener upgrades. The 10-year disbursement budget is $713 million, an increase of $14 million over the July 2004 plan. It is important to note that the budgets in this area reflect the $53 million increase in digester costs due to Class A digestion that was approved by the Board in March 2004. 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.

In the wastewater area, the first few years of WASA's existence were spent on planning and constructing interim improvements necessary to ensure plant process performance. Twenty-eight interim construction projects with a combined value of $59 million are complete and include a major project that rebuilt two primary sedimentation tanks, upgraded the sludge blending tanks to improve dewatering performance, and provided a means of loading contractor-produced sludge cake into the storage facilities.

In FY 2004, two long-term upgrade construction projects were placed in service. These are:

- Area Substation 5 – a new electrical substation replaced an out-of-date facility, and provides electrical service to the gravity thickening facilities, Solids Processing Building, Chemical Building, and Central Maintenance Facility
- Alternate Disinfection – a new facility replaced use of chlorine and sulfur dioxide with sodium hypochlorite and sodium bisulfite in the disinfection process, providing safety for plant workers and neighborhoods surrounding the plant

Long-term upgrade projects now under construction include:

- Additional Chemical Systems - Phases I and 2 – Phase I systems are in operation. Phase II systems are scheduled to be placed in operation in early to mid FY2005.
- Additional Dewatering Facilities – construction of seven new centrifuge dewatering units and two new sludge storage vessels, scheduled to be complete in 2005
- Primary Treatment Facilities – rehabilitation of east and west primary sedimentation tanks, control house upgrades and new pumps and piping systems
- Process Control Computer System – system will provide automated monitoring and control for processes throughout the plant, and will improve treatment, control and optimize chemical and power costs, and increase reliability of the facilities
- Secondary Treatment Facilities, Phases I and 2 – concrete basin structures will replace deteriorated structures, new sludge and scum collection equipment will be provided, and aeration blowers and motors will be rehabilitated
- Gravity Thickener Facilities – replacement of thickener mechanisms, pumps, and piping to improve process efficiency and reliability of the facilities
- Grit and Screen Facilities – upgrade of the West process grit chamber building, East and West Process influent screens, West grit chambers, and conveyance and loading systems to facilitate off-site grit disposal
- East Grit Facilities - upgrade of the East process grit chamber building and grit chambers with conveyance systems to carry the grit to storage facilities
- Filtration and Disinfection Facility, Phase 1 - replacement of filter underdrains, media, and washwater troughs to prepare filters for conversion to air-water wash system

These projects, which have a combined cost of $491.4 million, will rebuild significant portions of the plant and add new sludge dewatering capability.

Liquid Processing Program – $522 million (*project pages begin on page III-8)*

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 $7.5 million* – This project will rehabilitate pumping equipment and appurtenances in one of the two stations that pump incoming wastewater into the plant. Design was started in FY 2002. Final design will start in FY 2005.
- *Influent Screening Facilities Upgrade $36.8 million* – This project will install fine screens to replace existing coarse screens at the head of the plant, as well as screenings conveyance, storage and outloading facilities. Construction began in early FY 2003. Sufficient screens are now in place to screen all dry weather flows, which greatly reduces clogging of sludge pumps in downstream processes.
- *Grit Chamber Facilities Upgrade $65.0 million* **–** This project provides for the construction of an automated, continuous grit removal system in all sixteen chambers. Impacts on operations include the elimination of current manual cleaning of each grit tank and lowered maintenance costs of tanks and pumps. Construction is now underway.
- *Primary Treatment Facilities Upgrade $38.5 million* -- This project involves the replacement of clarifier mechanisms in the East Process and modifications of the clarifiers in the West Process, which will result in improved overall plant efficiency and lowered maintenance costs. Construction began in early FY 2002 and is scheduled to be complete in early FY 2005, ahead of schedule. Construction has been completed on 7 of nine control houses and the associated 28 sedimentation tanks and these facilities are back in service. Construction is now ongoing final two control houses and associated 8 tanks.
- *Secondary Treatment Facilities Upgrade $68.4 million (Phases I and II)* –
  - *Phase I*-Rehabilitation of the East Secondary Treatment facilities, and rehabilitation of support equipment and facilities are included in this project. This project will result in lowered maintenance costs. Construction started in FY 2002 and is scheduled to be complete in early FY 2005. Work in ten of twelve sedimentation basins has been completed and these basins are in service.
  - *Phase II*- This project includes the rehabilitation of the West Secondary Sedimentation Basins (basins number 1-12) and the West Secondary Reactors. This will result in improved process efficiency, lowered chemical usage and lower maintenance costs. Construction started in FY 2003 and is scheduled to be complete in late FY 2007.

- *Nitrification/Denitrification Facilities Upgrade $88.7 million* – This project is comprised of two liquid processing projects, one for rehabilitation and upgrade of nitrification facilities and one for improvement of denitrification-related process components. This project will result in lowered maintenance and energy costs due to improved efficiency. Final design will be completed and the project will be advertised for construction bids in FY 2005.
- *Filtration and Disinfection Facilities Upgrade $56.2 million* – Replacement of existing filter media and the addition of an air/water backwash system and improvements to pump operation will result in reduced power usage and treatment costs due to reduced backwash water usage. 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 will result in all of the filters being restored to operability with new filter underdrains and media. The second contract will provide a new air-water wash system and improve backwashing controls and instrumentation. Design started in FY 2002, the first construction contract was bid in FY 2004, and construction is now underway. Design for the second contract is done and this contract will be advertised for construction bids early in FY 2005.

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

- *Dual Purpose Sedimentation Basin Rehabilitation $20.0 million* – Replacement of sludge collection equipment, sludge and scum pumps, and support process equipment with design starting in FY2011.
- *Filtration/Disinfection Facility Phase II $14.6 million* – Replaces motors and variable speed drives, recently rebuilt under the Filtration Facility Pumping System Upgrade project, on selected pumping units with design starting in FY 2011
- *Nitrification / Denitrification Facilities Phase II upgrades $54.8 million* - Rehabilitation of lower priority items identified in concept in 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.
- *Primary Treatment Facilities Phase II $14.8 million* – Structural repairs to the primary sedimentation tanks.
- *Grit Chamber Facilities Phase II $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.

Solids Processing Program – $515 million (*project pages begin on page III-44)*

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

WASA has conducted a comprehensive Decision Science planning process to develop a long-term plan for biosolids processing and beneficial reuse. Currently, 1200 to 1350 tons of biosolids are generated daily at Blue Plains. The predominant means of reuse is land application in Virginia, although changes in the regulatory environment and local restrictions on land application may limit the availability of this reuse means in the long run. The Decision Science planning process identified a number of alternatives, all of which included full digestion as a key component. As a result of this process, the Board adopted a Biosolids Management Plan that approved full biosolids digestion as our primary long-term alternative and continuing land application as long as it is financially advantageous.

A detailed facilities plan for this program has been prepared with a total cost of approximately $500 million. These costs are primarily included in the Solids Processing Program, although some costs, such as the second phase of the process control computer system, are included in the Plantwide Facilities Program. The centerpiece of the program is design and construction of 36 million gallon total capacity egg-shaped digesters, sized for the total biosolids production of the plant. The permitting and public acceptance process has begun.

Specific major projects under this program include:

- *Egg-Shaped, Anaerobic Digestion Facilities $311 million* – With the Board's February 2004 approval of the project and budget changes to include Class A digestion and other project changes, construction is tentatively scheduled to begin in 2005 on a contract for the construction of foundations, digester vessels and silos and in 2006 on a contract for the process facilities necessary to complete the digester complex. All of these construction dates are dependent on zoning and Board approval of the design plans and construction contracts.
- *Additional Dewatering Facilities $79.5 million* – This project provides additional centrifuge dewatering equipment and modification of existing centrifuges to reduce dewatered solids generation. Impacts on operational costs include reductions in hauling and contract dewatering costs. It also includes first-in/first-out silos for biosolids cake storage to minimize odors that occur from biosolids being stored for extended periods. Construction commenced in December 2001 and is scheduled for completion in FY 2005.
- *Biological Sludge Thickening Facilities (formerly Centrifuge Thickener Facility) $51.7 million* - This project will upgrade the existing dissolved air flotation thickening units and provide mechanical thickening equipment. Improvements are expected to reduce sludge processing and chemical costs through improved efficiency. A design study commenced in late FY 2003. Final design will begin in FY 2005.
- *Gravity Thickening Facility Upgrade $19.8 million* -- This project includes the rehabilitation of gravity thickeners 1-4 and all sludge and scum pumping systems. Also planned are the rehabilitation of equipment in the degritting and grinding facility and the addition of the ability to add chemicals to the influent flow for odor control. Design is complete, the project has been bid and construction will be completed in FY 2005.

Plantwide Facilities Program – $276.2 million (*project pages begin on page III-28)*

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 and computer system for monitoring and control of all processes and facilities, upgrades to city and plant water systems, chemical systems, electrical power and distribution systems upgrade, telephone service, and data highway infrastructure for process, safety, security and information needs. Facilities comprise chemical receiving, storage, transmission and feed systems for chemicals used throughout the liquid and solids processes, including metal salts, polymers, sodium hypochlorite, and sodium bisulfite. Support facilities projects include the rehabilitation of the Central Operations Facility and the Central Maintenance Facility. Specific projects under this program include:

- *Additional Chemical Systems - $73.8 million (Phases I and 2)* –
  - *Phase I* - This project replaces all of the chemical storage, transmission, and feed facilities at Blue Plains that are used for metal salts. Construction of this project was initiated in April 2001 and is scheduled to be completed early in FY 2005.
  - *Phase II* – This project involves installation of new centralized bulk dry polymer receipt, batching, storage and feed facilities for the entire plant's polymer needs. This new installation will result in improved process efficiencies and reduced maintenance requirements. The construction contract was initiated in August 2002 and is scheduled to be completed in mid FY2005.
- *Process Control and Computer System (Phases 1, 2 and 3) $52.3 million* – This new 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, due to 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, beginning with the grit chambers, primary and secondary treatment facilities, and dewatering processes. Phase II will include nitrification, filtration, disinfection facilities, and Phase III will add the solids processing facilities. WASA has selected an equipment vendor and construction began in August 2002 and will continue through 2009.

COMBINED SEWER

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 60 permitted CSO outfalls in the District.

The lifetime budget for capital projects in the Combined Sewer Service Area is $2.6 billion, consistent with last year's lifetime budget. This includes the proposed CSOverflow Long-Term Control Plan (LTCP), which is discussed in more detail below, as well as $143 million of projects that were included in the settlement of a lawsuit against WASA regarding implementation of the federal CSO Nine Minimum Controls program (the "EarthJustice" consent decree). These projects, which were previously budgeted and planned by WASA prior to the lawsuit, are projected to reduce combined sewer overflows by approximately forty percent when completed. Under the consent decree, WASA has also agreed to fund a supplemental environmental project, which must be approved by U.S. Environmental Protection Agency (EPA).

As of the date of this letter, we remain in litigation with the EPA and the U.S. Department of Justice (DOJ) on our proposed CSO Long-Term Control Plan, originally submitted to the EPA in 2002. The focus of the litigation remains the implementation schedule. However, in the weeks prior to publication of this document, we have reopened settlement negotiations with the federal government as we are anxious to move forward with the proposed CSO LTCP. As part of these negotiations, we are discussing shorter implementation schedules, which will result in accelerated and higher rate increases than under our current proposed plan. Pending conclusion of the negotiations (or if the negotiations are not successful, continuation of litigation against the federal government), we continue to include the early years of the proposed LTCP to our ten-year CIP and ten-year financial plan (totaling approximately $190 million with inflation), assuming a forty year schedule. In addition, we continue to move forward with those projects that were already in the CIP. While we are currently discussing shorter implementation schedules with DOJ, until a final Board-approved settlement is reached, it is recommended that we continue to show a forty-year plan and that no funds beyond the $143 million (disbursements basis) incorporated in the current CIP and initial facilities planning be committed or spent until such time as the following is accomplished:

1. EPA & DOJ approve the final LTCP in a manner that is acceptable to the Board;
2. EPA, DOJ, and WASA agree on the implementation plan and schedule;
3. A Board-approved financing plan is adopted; and
4. A judicially enforceable agreement is executed between EPA, DOJ, and WASA governing the implementation of the LTCP.

The impact on our ratepayers of the proposed LTCP is significant. The projected capital cost of the LTCP is $1.265 billion in 2001 dollars; including inflation, this increases to $2.6 billion (assuming an implementation period of 40 years). As discussed in more detail in Section I of the operating budget document, shorter implementation schedules will result in accelerated and higher rate increases than under our current proposed plan.

Whatever the final implementation schedule is, the benefits of our long-term plan are significant -- when fully implemented, combined sewer overflows are projected to 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. As noted above, WASA's $143 million of previously planned projects will result in an approximately 40 percent reduction in combined sewer overflows, and the completion this past spring of the fabridams alone are projected to result in a 24 percent reduction. The plan includes a variety of improvements planned throughout the District to improve the quality of the Anacostia and Potomac Rivers and Rock Creek:

- Four large storage tunnels, which will allow the storage of flows from storm events until they can be gradually sent to Blue Plains for advanced treatment
- Pumping station improvements
- Targeted separation of combined sewers in several sections of the District to include Anacostia
- Consolidation and elimination of 13 of 59 outfalls, including 4 outfalls on the Anacostia River
- Funds for low impact development (LID) at WASA facilities and to encourage LID across the District

While we continue these negotiations, we are aggressively moving forward with the $143 million of projects that were included in the EarthJustice consent decree. We have also begun the procurement process to select a firm to begin facilities planning, with the selection scheduled to be complete in spring 2005. Some projects included in the $143 million are:

- Potomac Pumping Station rehabilitation, with a lifetime budget of $17.5 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.
- Main & "O" Street Pumping Stations rehabilitation has a project lifetime budget of $71.5 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.
- East Side Pumping Station rehabilitation, with a lifetime budget totaling $18.5 million, provides for a new, above grade pumping station. This project is under construction.
- Poplar Point Pumping Station rehabilitation has a lifetime budget of $4.4 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.

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, pumping stations, and related facilities. Some components of the existing storm sewer system are well 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 $46 million, a decrease of $49 million from last year. This significant decrease is due primarily to the elimination of the stormwater pumping rehabilitation projects from WASA's CIP. Over the last 1-2 years, we have been in discussions with the District's Department of Transportation (DDOT) regarding responsibility for this infrastructure and all work had been deferred pending resolution of this issue.

District of Columbia Stormwater Permit and Enterprise Fund

In April 2000, the District of Columbia received its first stormwater management and discharge permit from the U.S. Environmental Protection Agency. In June 2001, D.C. City Council enacted the Stormwater Compliance Act of 2000 (DC Law 13-311, or the "Act"). The Act designated WASA as the stormwater administrator, and identified the District's Departments of Health and Public Works, along with WASA, as responsible for complying with the provisions of the permit. A task force was created with the participating agencies to coordinate required activities. In addition the Act created a stormwater advisory panel consisting of the Mayor, Chairman of the City Council, WASA's General Manager, and heads of the participating agencies. In 2002, DDOT, and the District's Chief Financial Officer were added to the task force and the advisory panel. The Act also established a stormwater rate and a separate stormwater fund to finance the activities required to comply with the permit. This rate is collected by WASA as part of its water and sewer billing process. Since 2001, the District, due to the efforts of all participating agencies, has complied with all permit requirements.

In August 2004, EPA issued the second permit to the District. The permit requires continuation and enhancement of the original compliance activities. The main thrust of the new permit is for the District to comply with the total maximum daily load (TMDL) of pollutant reduction requirement allocated to stormwater by the District's Department of Health. The reduction requirement for various pollutants (e.g., nutrients, toxics, oil & grease, sediment) is as high as 90 percent in some cases. This is a difficult task because of the limited technology available for such pollution control from diffuse sources, limitation of space in a densely urban area, and associated costs. The participating agencies are in the process of developing cost estimates for compliance with the new permit; the task force's preliminary estimate of annual costs is approximately $7 million per year, although this estimate will be refined over the next few months. WASA will use the results of this analysis to develop a stormwater rate increase for the District's consideration, as needed. The review of the District's stormwater rate will also include analysis on impervious surface-based rate ideas and be coordinated with WASA's CSO rate review.

Stormwater Program Management -- $5.8 million *(project pages begin on page V-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 – $13.6 million *(project pages begin on page V-39)*

This program includes large diameter storm sewers and pumping station force sewers that serve new development, replace undersized sewers, or replace or rehabilitate storm sewers that have reached their useful life or have experienced structural deterioration. In 2004, we completed construction on improvements to the Northeast Boundary sewer in Northeast Washington which helped relieve localized flooding in this area. We will be starting two significant projects to address drainage problems in 2005, one near Broad Branch Road and one 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 being performed by the engineering project management consultant over the next several years.

Pumping Facilities - $3.1 million *(project pages begin on page V-23)*

This program includes programs for the rehabilitation or replacement of 15 existing stormwater pumping stations. Detailed design of these improvements is dependent on the outcome of negotiations with DDOT regarding ownership of the stations.

Extension/Local Drainage Projects -- $2.3 million *(project pages begin on page V-5)*

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. One project to highlight in this year's CIP is the sewer lining at 22nd & P Streets, NW, which will correct a drainage and flooding problem. The engineering study to define the design parameters was completed in FY2003 after receipt of a National Park Service (NPS) permit. Design will be completed during FY2005, and construction is scheduled to begin later in the year.

On-Going Stormwater Projects – $6.2 million *(project pages begin on page V-11)*

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

DDOT Storm Projects – $14.6 million *(project pages begin on page V-24)*

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

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 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 and concrete, reinforced concrete, ductile iron, plastic, steel, brick, cast iron, cast in place concrete, and even fiberglass.

During FY2005, WASA will continue the evaluation of the sewer system to determine its condition, verify adequate capacity, and to develop new capital projects, as appropriate. A five-year contract is underway with an engineering program management consultant (EPMC-IIIA) to provide services for the comprehensive assessment, and this work is scheduled to be completed in FY 2005. Funding is included in this 10-year CIP for the new capital projects that may come out of the assessment. Projects that have been identified in FY 2004 and have been addressed, or will be addressed include:

- *Additional Tide Gate Improvements*- Retrofit of tide gates on CSO structures that are subject to inflow during high river flows.
- *Dredging of DuPont Circle Siphon* - This was completed on an emergency basis and eliminated basement flooding in the DuPont Circle area.
- *Upper Anacostia Sewer Basin*- Investigation with follow-up design and construction if sewer capacity limitations are verified.
- *Improvements to the East Side Pumping Station and Swirl Facility*- Investigation of these facilities identified the need for improvements to sampling, instrumentation and metering to ensure compliance with NPDES permit conditions.

In general, projects in the existing sanitary sewer service area program provide for replacement or rehabilitation of the system as well as extensions to this system for development and growth as needed.

The current CIP includes the following projects:

Sanitary Sewer Service Area- Management – $15 million (*project pages begin on page VI-25*)
During FY2005, 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) - This planning 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 required to comply with the current National Pollutant Discharge Elimination System (NPDES) permit,

the EarthJustice consent decree, and pending federal regulations addressing sanitary sewer overflows is also included in this initiative.

- Design Management for Sanitary Sewer Pumping Stations - This ongoing project began in 2001, and provides for the management of the design of three small sanitary sewage pumping stations requiring major rehabilitation or replacement. A project design engineer has been selected and the design will be finalized in FY2005.

Collection Sewer Projects – $12 million (*project pages begin on page VI-6*)

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 – The portion of the sewer that traverses the National Arboretum has significant structural distress. Design is underway for the rehabilitation of the sewer. Construction is scheduled to start in the summer of 2005.

- Infiltration/Inflow City Wide (excluding National Park Service areas) – This project corrects infiltration/inflow problems throughout the City that have been identified as cost effective. Construction of this project is underway and is expected to be completed early in FY 2005.

Interceptor/Trunk Sewer/Force Sewers – $80 million (*project pages begin on page VI-26*)

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 $7 million in FY 2005 for capital projects 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 – 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 our 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 construction locations, including:

- Potomac Interceptor Rehabilitation in Fairfax and Loudoun Counties – The capital improvement program includes funding to design and reconstruct portions of the interceptor in Fairfax and Loudoun Counties that are deteriorated due to hydrogen sulfide corrosion. Design is complete and construction bidding will take place early in FY 2005; construction is expected to begin in the summer of 2005.

- General Potomac Interceptor Rehabilitation Projects – Funding is included to repair appurtances of the Potomac Interceptor as determined by a study that was completed to assess the condition of the pipeline. This includes manhole replacement and rehabilitation of miscellaneous structures along the length of the line. Construction is underway, and is expected to be completed in FY2005.

- 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:

  - 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 2005.

  - 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 $12 million. The conceptual design was completed in FY2003. 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 FY2005 and to be completed in FY2006.

- Additional Tide Gate Structure Replacements – This new project recommends the study, design, and replacement of five additional tide gates at various locations that are impacted by high tides. Similar to the previous tide gate improvements project, this project involves replacement of existing gates with elastomeric-type gates that more positively ensure closure. The design of this project is underway, and construction is scheduled to be completed in 2008.

- Upper Potomac Interceptor Rehabilitation – This project involves the repair of a major portion of the trunk sewer. This project was initially delayed due to adequate capacity in the Upper Potomac Interceptor Relief Sewer, which is now not available. The design will be completed in FY2005, and construction is anticipated to start in the fall of 2005.

Pumping Facilities – $22 million (*project pages begin on page VI-21*)

This program includes projects required for the rehabilitation or replacement of existing wastewater pumping stations as well as projects for the engineering and construction of new wastewater pumping facilities, as required. The current program includes projects to rehabilitate three existing wastewater pumping stations (Upper Anacostia, Earl Place, and Rock Creek pumping stations). The conceptual design of these pumping stations is completed, and the detailed design is underway and expected to be completed in FY2005. Construction is expected to begin in FY2005 and to be completed in FY2008.

Ongoing Sanitary Sewer Projects – $66 million *(project pages begin on page VI-9)*

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.

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 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 and concrete, reinforced concrete, ductile iron, plastic, steel, brick, cast iron, cast in place concrete, and even fiberglass.

During FY2005, WASA will continue the evaluation of the sewer system to determine its condition, verify adequate capacity, and to develop new capital projects, as appropriate. A five-year contract is underway with an engineering program management consultant (EPMC-IIIA) to provide services for the comprehensive assessment, and this work is scheduled to be completed in FY 2005. Funding is included in this 10-year CIP for the new capital projects that may come out of the assessment. Projects that have been identified in FY 2004 and have been addressed, or will be addressed include:

- *Additional Tide Gate Improvements*- Retrofit of tide gates on CSO structures that are subject to inflow during high river flows.
- *Dredging of DuPont Circle Siphon* - This was completed on an emergency basis and eliminated basement flooding in the DuPont Circle area.
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In general, projects in the existing sanitary sewer service area program provide for replacement or rehabilitation of the system as well as extensions to this system for development and growth as needed.

The current CIP includes the following projects:

Sanitary Sewer Service Area- Management – $15 million (*project pages begin on page VI-25*)
During FY2005, 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) - This planning 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 required to comply with the current National Pollutant Discharge Elimination System (NPDES) permit,

the EarthJustice consent decree, and pending federal regulations addressing sanitary sewer overflows is also included in this initiative.

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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 $7 million in FY 2005 for capital projects 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 – 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 our 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 construction locations, including:

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- Odor Control Projects:

  - 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 2005.

  - 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 $12 million. The conceptual design was completed in FY2003. 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 FY2005 and to be completed in FY2006.

- Additional Tide Gate Structure Replacements – This new project recommends the study, design, and replacement of five additional tide gates at various locations that are impacted by high tides. Similar to the previous tide gate improvements project, this project involves replacement of existing gates with elastomeric-type gates that more positively ensure closure. The design of this project is underway, and construction is scheduled to be completed in 2008.

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Pumping Facilities – $22 million (*project pages begin on page VI-21*)

This program includes projects required for the rehabilitation or replacement of existing wastewater pumping stations as well as projects for the engineering and construction of new wastewater pumping facilities, as required. The current program includes projects to rehabilitate three existing wastewater pumping stations (Upper Anacostia, Earl Place, and Rock Creek pumping stations). The conceptual design of these pumping stations is completed, and the detailed design is underway and expected to be completed in FY2005. Construction is expected to begin in FY2005 and to be completed in FY2008.

Ongoing Sanitary Sewer Projects – $66 million *(project pages begin on page VI-9)*

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.

WATER

Projects in the Water Service Area are required to rehabilitate, replace or extend water mains, storage facilities, and pumping stations in order to provide service to new developments, maintain an adequate water supply for customer service, fire protection, protect the quality of the potable water, and replace water service lines and water meters. As in last year's program, the current 10-year plan reflects the substantial costs of street repaving due to street repair and restoration regulations required of WASA and other area utilities by the District.

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 more than 8,800 hydrants and approximately 124,000 meters.

The lifetime budget for the Water Service Area is $744 million, a decrease of $103 million from the July 2004 Board approved plan. In July 2004 the Board approved the addition of the $300 million lead service line replacement programme, resulting in a significant increase in our CIP at that time. This year's CIP reflects the reprioritization of a number of critical water quality projects in the beginning of the CIP, while projects in the later years have been deferred beyond the current ten-year plan to help mitigate the impact of the lead program on projected rate increases. In addition to the lead service line replacement program, critical water quality projects include elimination of dead ends, cleaning and lining and main replacement / rehabilitation, and valve replacement (which is necessary for other water quality construction projects to proceed).

Highlights of this year's CIP are:

Lead Service Replacement Program – $300 million

Pursuant to the Board of Directors approval of a comprehensive lead service replacement program in July 2004, all activities related to implementing this initiative have been organized into a single program area in the Water Service Area. In addition to the physical replacement of the service lines, a comprehensive approach to environmental compliance, public information and relations, interim remediation efforts, and call center operations is included in this program.

In 2004 approximately 1750 lead service lines were replaced; an additional 2,800 replacements are scheduled in FY 2005. Additional details on this program are discussed in Section 1 of the operating budget document. The amounts shown below are Lifetime Budgets for the Projects under a given Program, for a Service Area.

Water Service Area - Management – $24 million *(project page on page VII-72)*

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.

Water Pumping Facilities – $85 million *(project pages begin on page VII-47)*

This program includes several projects to rehabilitate or replace water pumping stations in the system. The status of these projects is, as follows:

- The Bryant Street Pumping Station is undergoing a major rehabilitation to meet current code requirements and maintain the reliability of the water distribution system. Work includes 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, upgrading SCADA for the water distribution system, and an electronic security system. Construction is underway and will be completed in winter 2006 at a total cost of $61 million.
- The Fort Reno Pumping Station will be upgraded to improve pressure in the fourth high service area in the northwest quadrant of the District. Design completion was extended to summer 2005 to coordinate this project with construction of a water tank in the fourth high service area. Construction is currently scheduled for fall 2005 through spring 2007 at a total project cost of $2.5 million.
- The Anacostia Pumping Station will be replaced on the same site it presently occupies, and will include multiple sets of booster pumps and a 30-inch transmission main to increase pressure in the southern portion of the Anacostia first high service area. Design will take place in 2004 and 2005 with construction beginning in spring 2006 at a total project cost of $19.4 million.

Water Storage Facilities – $14 million *(project pages begin on page VII-65)*

Studies have identified the need for several new storage facilities to support population growth and development, 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 in the southern portion of the Anacostia first high service area. Agreements have been reached to site the facility at St. Elizabeth's Hospital, and necessary approvals and permits are being pursued, with design expected to start in summer 2005.

Water Distribution System – $182 million *(project pages begin on page VII-7)*

This program provides for rehabilitation, replacement or extension of the water distribution system through several categories of projects. With the exception of the complete replacement of the 12-inch water main in Wisconsin Avenue, the water distribution work performed under the Georgetown Joint Utility Project has been completed. The Georgetown Joint Utility Project is scheduled for completion in FY 2005.

Highlights of the work under this program by project category includes:

- *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. Three contracts replacing 40 large valves (16-inch and larger) are either completed or under construction, and four more contracts to replace approximately 100 large valves are under design. Additionally, construction is underway for replacing small diameter (12-inch and smaller) single- and multi-stem valves at 177 sites throughout the District, with construction completion expected fall 2005.

- *Cross Connection Elimination* - This project entails eliminating potential cross connections between the water distribution system and the sewer system by removing the connections of fire hydrant drains and blow-offs to the sewer system. Six construction contracts for eliminating cross connections have been completed, and the remaining paving work for the last construction contract will be completed in FY 2005. All the work required by the EPA's Administrative Order and Consent Decree III-96-001-DS was completed on schedule.

- *Water Main Dead End Elimination* - This will eliminate the potential for stagnant water to accumulate at the ends 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. There are three projects in the capital program to perform this work: one is underway and the other two projects will be accelerated as part of our overall focus on water quality projects.

- *Water Main Extension and Replacement* - Extension and replacement of water mains is required to provide service to new developments, or to replace undersized or defective mains in the system. Two contracts, one to replace 14,600 linear feet of 12-inch diameter and smaller water main at different locations, and other to replace 3,500 linear feet of 12-inch water main at Livingston Road, S.E. are under construction. Design for replacing 5,000 linear feet of undersized mains is underway, with construction procurement scheduled for FY 2005.

- *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. Design to rehabilitate a 48-inch water main in the third high service area near the Bryant Street pumping station and a 42-inch concrete pipe water main in the second high service area in the northeast quadrant of the District is under construction. Internal Joint Repair Contract 2, involving approximately 48,000 linear feet of water main, has been separated into two smaller projects. Design is underway with construction procurement scheduled for FY 2005.

- *Water Distribution/Transmission Mains* - These projects include replacing and constructing distribution and transmission mains in the system. The contract to replace 5,000 linear feet of a 20-inch Anacostia First High Service Area water main is under construction. Design is underway for replacing 6,100 linear feet of 20-inch water main in Minnesota Avenue S.E. with a 30-inch water main, for installing approximately 5,300 linear feet of 24-inch water main to reinforce the supply to the Fort Stanton Reservoirs, and for installing approximately 4,600 linear feet of 16-inch water main in Michigan Avenue NE to reinforce the supply to the McMillan Water Treatment Plant. These three construction contracts will be advertised in FY 2005.

- *Small Diameter Water Main Rehabilitation* - Work includes rehabilitating small diameter (12-inch diameter and smaller) water mains to improve system reliability as well as to improve water pressure, maintain water quality and ensure adequate flows in the system. Also, included is elimination of dead ends in the system and replacement of associated valves, fire hydrants and house services. Three contracts are scheduled for construction in FY 2005. In addition design will be accomplished for four contracts to replace small diameter mains in the new pressure zone east of the Anacostia River. Higher pressures combined with older mains in this area makes replacement necessary. In addition, planning will begin during FY ’05 for a holistic approach combining the lead service replacement program and the water main condition assessment program, along with coordinating work for all utilities on a given block. 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 and if the main is adequate, it will be cleaned and lined. 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.

- *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 – $60 million *(project pages begin on page VII-33)*

WASA's Department of Water Services manages projects in this program area. 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. As in prior year's program, project budget reflects the substantial costs of street repaving due to the street repair and restoration regulations required of WASA and other area utilities.

DDOT Water Program – $32 million *(project pages begin on page VII-51)*

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.

Metering – $46.5 million *(project page on page VII-74)*

The residential phase of the Automated Meter Reading (AMR) project was essentially completed by the end of FY 2003, and by the end of FY 2004, the large commercial meter installation phase was well underway. At the end of the year, approximately 95 percent of the 123,000 planned installations of residential, small commercial, and large commercial were complete. The large commercial installations will extend into 2005, with the most significant impact on WASA's revenues, approximately 50 percent of retail revenues, attributable to the largest 2,800 commercial accounts.

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 FY 2004 – 2013 proposed disbursements budget for WASA's share of Washington Aqueduct projects totals $127.3 million, or $8.1 million more than last year's 10-year plant of $119.1 million.

Major projects underway in this year's plan include:

- *McMillan Water Treatment Plant Improvements* – This includes a variety of projects at the McMillan plant, which is adjacent to WASA's Bryant St. pumping station, including silt curtain replacement, pumping improvements, filter media upgrades, valve replacements, security improvements, including transitioning to sodium hypochlorite, and building renovations. Over ten years, projects at this facility will total approximately $13.9 million (WASA share.)
- *Transmission & Storage Facility Improvements* – This includes a variety of projects including renovation of the booster pumping station, improvements to the Georgetown Reservoir, transmission main rehabilitation, and improvements to the Little Falls pumping station. WASA's share of costs over ten years totals approximately $16.9 million.
- *Dalecarlia Water Treatment Plant Improvements*– This includes a variety of projects at the Dalecarlia plan, including filter improvements, building, roadway and security improvements (including transition to sodium hypochlorite) and clearwell cleaning and disinfection. Over ten years, projects at this facility will total approximately $14.8 million (WASA share.)

Near-term projects include Georgetown Reservoir improvements, including rehabilitation of the dividing wall and sluice gates, and renovation of the laboratory and chemical buildings which will renovate the four existing, forty-year old labs.

In addition to these projects, the Aqueduct has identified a project that could occur depending on the outcome of permit negotiations and other regulatory changes that are being considered by the EPA. Currently, solids that settle out from water in the Dalecarlia and Georgetown Reservoirs are periodically discharged into the Potomac River during high river flow conditions. The draft NPDES permit received by the Aqueduct requires development of a plan to remove 85 percent of incoming sediments and not return them to the Potomac River. The Aqueduct, WASA and the other wholesale customers are working with the EPA to better understand this

requirement and to identify the technological alternatives available to meet this requirement. The Aqueduct has identified projects to address this requirement, with costs totaling approximately $50 million (WASA share only).

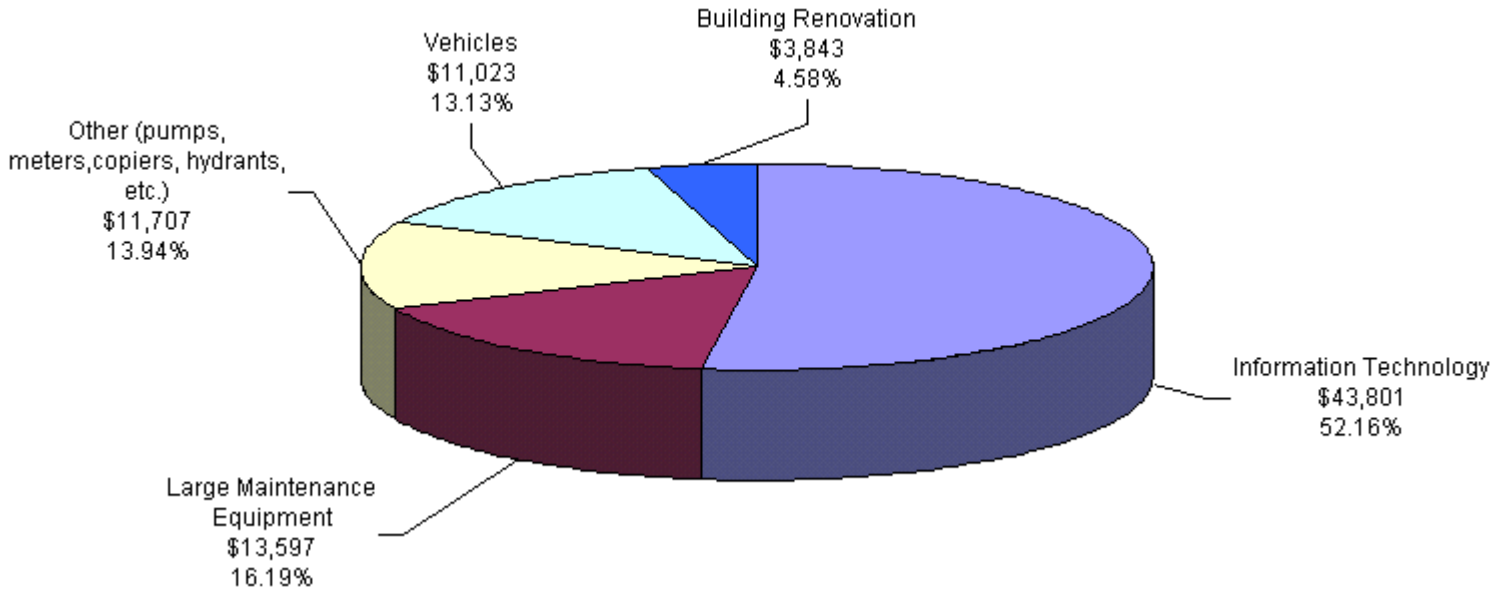
Currently, WASA finances its Washington Aqueduct projects in two ways: 1) taxable U.S. Treasury notes; and 2) pay-as-you-go financing. Most of the projects financed with U.S. Treasury notes are nearing completion, leaving virtually all of the out-year projects to be financed with WASA pay-as-you-go financing. For the pay-as-you-go projects, the U.S. Corps of Engineers currently requires 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 at zero return to WASA. In the past, this has not been a significant issue to WASA as the level of projects to be undertaken was relatively small. However, these projects are beginning to increase in size and scope, becoming an unreasonable cost for WASA's customers to bear. We have made good progress over the last six months on this issue, including discussions with senior management at the Corps, the Aqueduct, Congressional staff, and the U.S. Office of Management and Budget. In addition, we are pursuing options to transfer dollars on a phased basis or to provide the Corps with a bank line of credit, both of which would allow us to keep our cash and related interest earnings until the funds are actually needed by the Corps. Resolution of this issue is critical as the residuals disposal project is scheduled to start in 2007; if the current practice is continued, WASA would be required to send close to $38 million in cash for the construction portion of this project in 2007.

CAPITAL EQUIPMENT

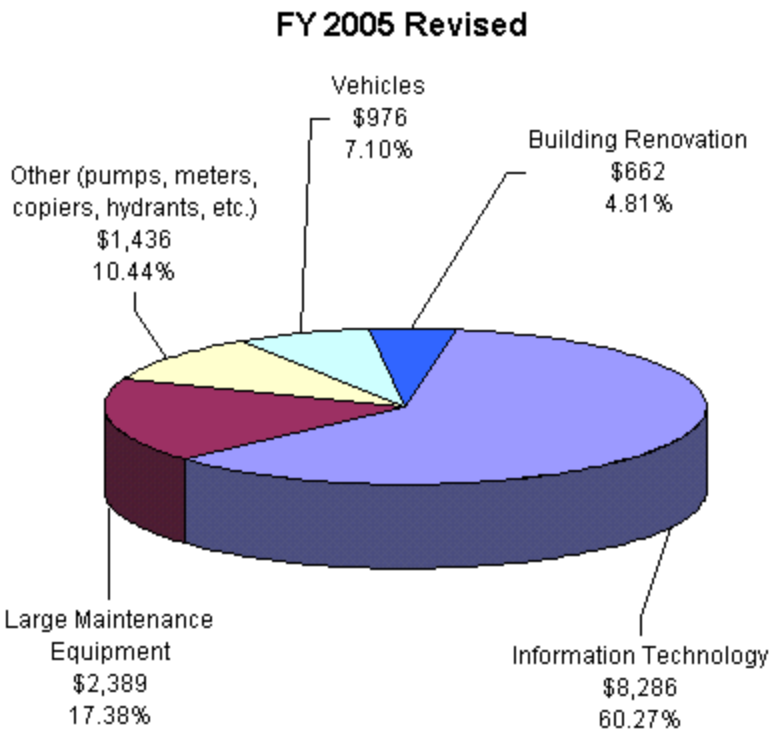
WASA's lifetime capital equipment budget totals $91 million, compared to a lifetime budget of $101 million in the FY 2003 – FY 2012 plan. This decrease is due to the close-out of several projects, particularly, the initial implementation of the Financial system, High Priority Rehabilitation Projects at Blue Plains, and certain I.T. and Facilities department projects. This decrease is offset, in part, by the inclusion of a new document management system with a lifetime budget of $4 million. The 10-year disbursements budget for capital equipment is $84 million, compared to the FY 2003 – FY 2012 capital equipment budget of $83 million.

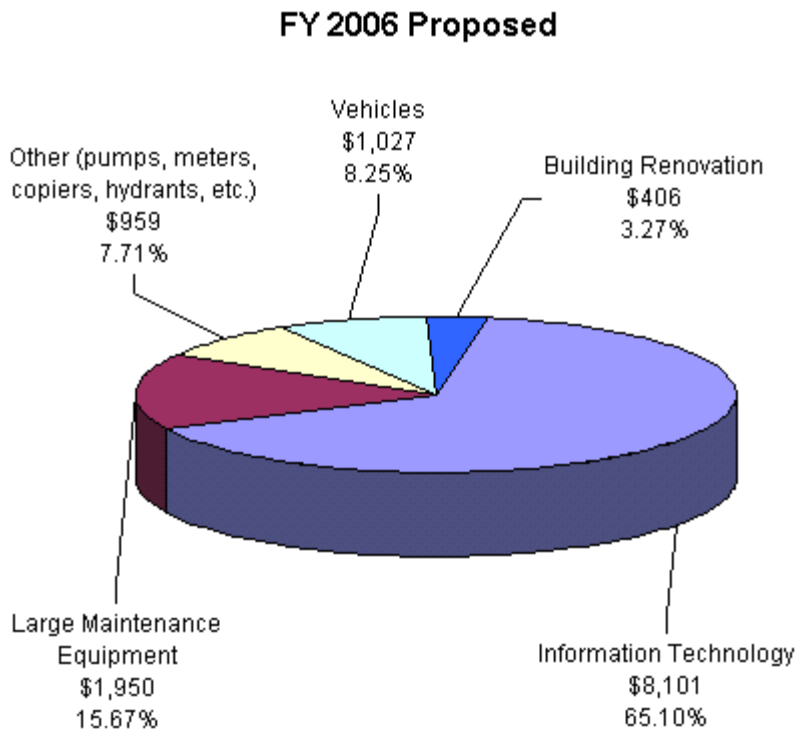
The FY 2005 revised disbursement budget has decreased by $0.7 million compared to the FY 2005 proposed budget. This is attributable to a combination of, moving disbursements for the asset management system into later years, and adding $500,000 for the first year of spending for the document management system.

CAPITAL EQUIPMENT DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES
FY 2004 – FY 2013
($ in 000's)



CAPITAL DISBURSEMENTS BY MAJOR EXPENDITURE CATEGORIES
FY 2005 Revised vs. FY 2006 Proposed
($ in 000's)





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.

Equipment Purchases

Equipment purchases are made by the Departments of Wastewater Treatment, Water Services, Sewer Services, Customer Service, Fleet Management, Facilities and Security, Information Technology, and Maintenance Services. Amounts shown below are 10-year disbursement totals.

Department of Wastewater Treatment - $0.6 million

Capital equipment expenditures for this department are for laboratory equipment purchases to maintain a certified laboratory. Metering and recording device purchases are planned beginning in FY 2005. Revising the virtual tour of the Blue Plains Advanced Wastewater Treatment Plant was not completed in FY 2004, and the project has been moved forward to FY 2005. The revision is needed to show sodium hypochlorite disinfection, which replaced chlorine disinfection in late 2001.

Department of Water Services - $6 million

The Department of Water Services is responsible for replacing deteriorated or damaged fire hydrants, water system valves, and system appurtenances. These purchases are separate from Capital Improvement Program activities for the systematic replacement of valves; rather they are for interim replacement of these items as individual needs are encountered by field crews. Activities in the FY 2005 revised and FY 2006 proposed budgets largely remain the same as those carried out by the department in previous years.

Department of Sewer Services - $3 million

This department is responsible for replacing catch basins, manhole covers and frames, and rehabilitating regulators and outfall gates. Design for the South Capitol Street outfall gate was started in FY 2002, and construction completion is scheduled for early FY 2005.

Department of Fleet Management - $11 million

A major emphasis will be placed on coordinating equipment purchases with the realigned needs of the Authority as Internal Improvement Plans continue to be carried out in FY 2005. In addition to the replacements planned by the Fleet Department, a supplemental replacement program for Customer Service reflects the changing needs of the department due to the automated meter installation program.

Department of Facilities and Security - $6 million

Capital equipment activities for this department in FY 2005 include HVAC system upgrades at various locations, fencing and rollup door replacements. This capital program also includes funding for major projects at the COF and other key facilities.

Department of Information Technology - $ 44 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 a new project for a wireless technology survey, a document management system, a redundant data center, an automated dispatching system, upgrades of several critical computer systems, and a comprehensive asset management system which supports GIS throughout the organization's operational infrastructure.

Department of Maintenance Service - $14 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.

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. Projects

completed in FY 2004 included online access to employee payroll and benefit information in the Payroll/HR system. Continuing into FY 2005 are enhancements to the customer information and billing system, which will allow the capture of data essential to the lead water services replacement program. A notable new project is a system for electric analysis and modeling software, which will allow WASA's electrical engineers to simulate plant activities, particularly at Blue Plains, and more efficiently manage the Authority's electrical consumption. This software has a proposed cost of $30,000. Another proposal for FY 2005 is an upgraded audio visual system for the Board of Directors' meeting room, at a cost of $100,000.

The major initiative for FY 2005 will be the beginning phase of a Document Management System implementation, described in more detail below.

Asset Management System - $10 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.

EMAP Phases I and II - $0.4 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.

e-Contract Management - $0.1 million

This automated procurement system will manage and track activity, data, and statistics on annual and multi-year contracts such as contract values, contract terms, contract changes orders, and contractor performance history.

Maintenance Management System - $0.5 million

This system, needed to replace an obsolete materiel management system, went online in FY 2003 and is an integral component of the asset management system. There will be ongoing enhancements throughout the 10-year plan, and in FY 2005, the Department

of Facilities and Security has $50,000 budgeted in order to integrate their system needs within the maintenance management system.

Radios - $0.4 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. Improvements to enhance transmitting capabilities from underground work sites are planned in FY 2005 and FY 2006.

Document Management System - $4 million

In 2004 WASA completed an assessment of its document management needs, and has developed a comprehensive plan for a new system that will be implemented over the next 2-3 years.

Financial Management System - $1 million

This project is managed by the Office of the Chief Financial Officer, with the support of the Information Technology Department. A system upgrade is planned for FY 2005, in order to maintain full support of all system components by the vendor. The initial implementation has been closed out.

Payroll/Human Resources System - $0.7 million

This project is also managed by the Office of the Chief Financial Officer, with the support of the Information Technology Department. FY 2004 improvements to the system included kiosks throughout WASA facilities that will allow employees remote access to leave and benefit information, and swipe cards to assist in automating timekeeping activities. 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 - $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 many new options were added during the past year, including recurring credit card payments and budget billing. A system upgrade was completed in FY 2004. Enhancements planned for FY 2005 will accommodate data storage in support of the lead water service line replacement program.

Web Development - $1million

In keeping with the Information Technology Strategic Plan, WASA's website will be completely updated every 18 months. The first update since the site's 2003 unveiling will be completed early in FY 2005.

Note:

On the project pages that follow, lifetime budgets prior to FY 2005 reflect only FY 2004 actual disbursements, with the exceptions of the maintenance management, customer information and billing systems, water system electronic security, desktop replacements and the web development project. Additionally, out year budgets show only FY 2012 expected spending. This is due to the generally annual nature of purchases and projects occurring in the Capital Equipment service area of WASA's capital program.

FY 2004 - FY 2013 Capital Equipment Disbursements

($ in 000's)

Department	Equipment Type	FY 2004 Actual	FY 2005 Revised	FY 2006 Proposed	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY '04 - FY '13 Total
Wastewater Treatment												
	Laboratory Equipment	$43	$34	$33	$27	$27	$25	$25	$32	$32	$32	$310
	Safety Equipment	0	0	11	14	13	19	19	16	20	20	132
	Metering and Recording Devices	0	18	14	15	13	12	10	10	10	10	112
	Plant Model	0	50	0	0	0	0	0	0	0	0	50
Total		**$43**	**$102**	**$58**	**$56**	**$53**	**$56**	**$54**	**$58**	**$62**	**$62**	**$604**
Water Services												
	Lab Equipment and Flow Monitors	$0	$50	$50	$0	$0	$0	$0	$0	$0	$0	$100
	Fire Hydrant Replacements	107	267	250	250	250	250	250	250	250	250	2,374
	System Valve Replacements	0	150	73	81	89	98	100	100	100	100	891
	Water Service Replacement	13	250	300	300	300	300	300	300	300	300	2,663
Total		**$120**	**$717**	**$673**	**$631**	**$639**	**$648**	**$650**	**$650**	**$650**	**$650**	**$6,028**
Sewer Services												
	Emergency Generator & Load Center	$0	$120	$0	$0	$0	$100	$0	$0	$0	$100	$320
	Sewer Pipes/Fittings	190	30	30	30	30	30	30	30	30	$30	460
	Regulator and Gate Rehabilitation	0	10	10	10	10	10	10	10	10	10	90
	Sewer Cleaning and Repair Equipment	0	55	55	55	55	55	55	55	55	55	495
	Portable Pumps	0	15	15	15	15	15	15	15	15	15	135
	Flow Meters/Sensor Replacements	0	25	25	25	25	25	25	25	25	25	225
	Manhole Covers/Frames	0	33	33	33	33	33	33	33	33	33	297
	Catch Basin Tops/Frames/Covers	0	60	60	60	60	60	60	60	60	60	540
	Outfall Gates	7	269	0	0	0	0	0	0	0	0	276
	Visitors' Center	2	0	0	0	0	0	0	0	0	0	2
Total		**$199**	**$617**	**$228**	**$228**	**$228**	**$328**	**$228**	**$228**	**$228**	**$328**	**$2,840**
Fleet Management												
	Vehicles	1,340	976	1,027	1,000	1,000	1,000	1,000	1,000	1,680	1,000	11,023
Total		**$1,340**	**$976**	**$1,027**	**$1,000**	**$1,000**	**$1,000**	**$1,000**	**$1,000**	**$1,680**	**$1,000**	**$11,023**

FY 2004 - FY 2013 Capital Equipment Disbursements

($ in 000's)

Department	Equipment Type	FY 2004 Actual	FY 2005 Revised	FY 2006 Proposed	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY '04 - FY '13 Total
Facilities and Security												
	Water System Electronic Security	$98	$0	$0	$0	$0	$0	$0	$0	$0	$0	$98
	HVAC at Various Locations	57	531	0	0	0	0	0	0	0	0	588
	Facilities Small Capital Improvements	55	25	25	25	25	25	25	25	25	25	280
	Signage	0	25	0	0	0	0	0	0	0	0	25
	Rollup Doors	0	81	81	81	81	0	0	0	0	0	324
	Fleet Building Rehab	51	0	0	0	0	0	0	0	0	0	51
	Photocopier Purchase	837	0	0	0	0	1,300	0	0	0	0	2,137
	Facilities Improvements	0	0	300	325	325	325	325	325	325	325	2,575
Total		**$1,098**	**$662**	**$406**	**$431**	**$431**	**$1,650**	**$350**	**$350**	**$350**	**$350**	**$6,078**
Information Technology												
	Electric Analysis and Modeling Softwar	$0	$30	$0	$0	$0	$0	$0	$0	$0	$0	$30
	Facilities Tech Program	0	25	0	0	20	0	0	25	0	0	70
	Audio Visual Equipment - IT	0	100	0	0	100	0	0	100	0	0	300
	Asset Management System	502	3,000	3,089	2,762	100	100	100	100	100	$100	9,953
	EMAP Phases I and II	76	125	197	0	0	0	0	0	0	0	398
	Command Center	$327	$0	$0	$0	$0	$0	$0	$0	$0	$0	$327
	Engineering Plotters/Scanners	11	25	45	0	0	0	15	25	45	0	166
	Field Laptops for Engineering	48	0	0	0	0	116	0	0	0	116	280
	e-Contract Management System	0	100	0	0	0	0	0	0	0	0	100
	TV Camera Equipment	106	0	0	0	0	130	0	0	260	0	496
	Maintenance Management System	17	50	50	50	50	50	50	50	50	50	467
	Radios	46	50	80	30	30	30	30	30	30	30	386
	Document Management System	39	500	1,500	1,700	100	50	50	50	50	50	4,089
	Financial Management System	225	100	100	100	100	100	100	100	100	100	1,125
	Payroll/HR System	386	30	30	30	30	30	30	30	30	30	656
	Customer Information & Billing System	797	774	100	100	100	100	100	100	100	100	2,371
	Automated Dispatch System	0	50	0	1,900	50	50	50	50	50	50	2,250
	Interactive Voice Response	5	205	20	20	20	20	20	20	20	20	370
	Facilities Management System	0	50	0	0	0	0	0	0	0	0	50
	Wireless Technology Survey	0	100	0	0	0	0	0	0	0	0	100
	Network Systems Security	112	100	30	100	30	100	30	100	30	100	732
	Intranet	37	0	50	0	50	0	50	0	50	0	237
	Handheld Inventory	0	70	300	50	50	50	50	50	50	50	720
	Software Applications/Licenses	150	250	150	150	150	150	150	150	150	150	1,600
	Redundant Data Center	321	450	400	150	60	60	60	60	60	60	1,681

FY 2004 - FY 2013 Capital Equipment Disbursements
($ in 000's)

Department	Equipment Type	FY 2004 Actual	FY 2005 Revised	FY 2006 Proposed	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY '04 - FY '13 Total
Information Technology - continued												
	Web Development	72	**121**	75	75	75	75	75	200	75	75	918
	Network System Renewal	108	650	250	250	650	250	250	650	250	250	3,558
	Desktop Replacements	504	511	500	500	640	500	500	500	640	500	5,295
	Cable Renewal	253	200	200	200	200	200	200	200	200	200	2,053
	Telephone System Renewal/Replacem	140	450	740	265	100	100	100	100	100	100	2,195
	Messaging Services	(3)	30	165	70	10	10	70	10	10	70	442
	Windows 2003 Migration	6	140	30	30	30	30	30	30	30	30	386
Total		**$4,285**	**$8,286**	**$8,101**	**$8,532**	**$2,745**	**$2,301**	**$2,110**	**$2,730**	**$2,480**	**$2,231**	**$43,801**
Maintenance Services												
	Shop Equipment and Plant Lighting	$0	$175	$50	$0	$0	$0	$0	$0	$0	$0	$225
	Centrifuge Repair/Replace	152	200	200	300	300	300	300	300	300	300	2,652
	VFD Replacement-Nitrification Pumpin	77	0	0	0	0	0	0	0	0	0	77
	Pump Repair/Replacement	505	500	500	400	400	300	200	200	200	200	3,405
	Large Electric Motors	921	700	700	500	400	200	200	200	200	200	4,221
	High Priority Rehab Program	603	**814**	500	300	300	200	100	100	100	0	3,017
Total		**$2,258**	**$2,389**	**$1,950**	**$1,500**	**$1,400**	**$1,000**	**$800**	**$800**	**$800**	**$700**	**$13,597**
Total Capital Equipment		**$9,343**	**$13,749**	**$12,443**	**$12,378**	**$6,496**	**$6,983**	**$5,192**	**$5,816**	**$6,250**	**$5,321**	**$83,971**