



**District of Columbia
Water and Sewer Authority**



ANNUAL REPORT

2004

MEETING EXCEPTIONAL CHALLENGES ► MAKING EXCEPTIONAL PROGRESS

TABLE OF CONTENTS

TABLE OF CONTENTS

WASA at a Glance	2
Chairman's Message	4
WASA's Mission, WASA's Vision	5
Board of Directors – 2003-2005 Strategic Plan	6
General Manager's Message	8
Financial Performance	10
Accomplishments & Initiatives FY 2004	12
Customer Service Improvements and Community Outreach	15
Capital Improvement Program	16
Water Service Improvements	16
Wastewater Collection and Treatment Upgrades and Improvements	19
Combined Sewer Overflow (CSO) Long-Term Control Plan	19
Blue Plains Plant and Sewer System Upgrades	20
Other FY 2004 Initiatives	22
Information Technology	22
Owner-Controlled Insurance Program	23
Employee Relations	23
Performance Recognition and Awards	25
Evolution and History of the District of Columbia Water and Wastewater Systems	26
Financial Performance and Exhibits	29

WASA AT A GLANCE

The District of Columbia Water and Sewer Authority (WASA) is a regional utility serving the needs of several jurisdictions. WASA provides drinking water and wastewater collection and treatment to more than 500,000 residential, commercial, and governmental users in the District of Columbia. It also collects and treats wastewater for 1.6 million users in Maryland and Virginia. At the end of FY 2004, WASA had net assets of \$832.7 million and operating revenues of \$264.3 million.



Blue Plains Advanced Wastewater Treatment Plant

WASA was established in 1996 as a result of an agreement between the District of Columbia, Montgomery and Prince George's counties in Maryland, Fairfax and Loudoun counties in Virginia and the United States Congress. The agreement, supported by legislation enacted by the Council of the District of Columbia, created an independent, multi-jurisdictional water and wastewater authority.

An 11-member Board of Directors, comprised of representatives from each service area jurisdiction, governs WASA. The Board establishes policy and sets rates independently. WASA's daily operations are administered by a General Manager who reports to the Board.

WASA provides retail water and wastewater services to its residential and commercial customers in the District. Wholesale wastewater treatment is provided to areas of Montgomery and Prince George's counties, Maryland, Fairfax and Loudoun counties, Virginia, and the town of Vienna, Virginia. The suburban jurisdictions pay the full cost for their use of WASA facilities and services based on a funding formula.

F

ACTS ABOUT WASA

WASA's service area covers approximately 725 square miles and has approximately 1,100 employees working at locations throughout the District.



Drinking Water Distribution

- WASA purchases water wholesale from the U.S. Army Corps of Engineers Washington Aqueduct treatment plant and delivers it to more than 130,000 locations in the District.
- Approximately 135 million gallons of drinking water are provided to individuals and businesses for use daily.
- The Authority's water distribution system requires the maintenance and operation of almost 1,300 miles of pipes, five pumping stations, five reservoirs, four elevated water storage tanks, 36,000 valves, and 8,700 fire hydrants.

Wastewater Collection and Treatment

- The Authority's wastewater system encompasses 1,800 miles of sanitary and combined sewers, 22 flow-metering stations, nine off-site wastewater pumping stations, and 16 stormwater pumping stations within the District.
- Separate sanitary and storm sewers serve about two-thirds of the District of Columbia. A combined sanitary and storm water system serves the remainder of the District, primarily in older areas of the city.
- WASA's Blue Plains Advanced Wastewater Treatment Plant, located on the bank of the Potomac River, is the largest advanced wastewater treatment plant in the world.
- The Blue Plains plant covers 150 acres of land. It has a treatment capacity of 370 million gallons per day and a peak capacity of 1.076 billion gallons per day.

WASA purchases its drinking water from the Washington Aqueduct, a division of the U.S. Army Corps of Engineers. The Aqueduct treats the water taken from the Potomac River, and WASA distributes it to more than 130,000 locations throughout the District for use by more than 500,000 individuals and businesses.

Rates, fees, and other charges for services are established by the WASA Board of Directors. The fees collected from services provided for more than two million users in the metropolitan area pay for WASA's operating costs and capital investments. ❖

CHAIRMAN'S MESSAGE

Fiscal Year 2004 was a particularly busy time for the District of Columbia Water and Sewer Authority. That fact, in itself, has contributed to the delay in getting this report in your hands. Yet, despite significant challenges during the year, I am pleased to report to you the impressive progress made by WASA on a number of fronts that year, both operational and financial.

Reports in 2004 of elevated levels of lead in the drinking water in some District homes caused widespread public concern over the safety of their tap water. Obviously, it was of vital concern to us, and all of us at WASA were committed to finding the best solution to this problem.

A big part of the solution was the addition of a corrosion inhibitor by the Washington Aqueduct, which significantly reduced the lead levels found in drinking water samples. But WASA went beyond the requirements of the EPA regulations, and our Board of Directors committed the Authority to replace every lead service line in public space throughout the District—at a rate of almost 4,000 a year. Our Lead Service Line Replacement Program, which will replace more than 29,000 pipes, is the largest project of this type in the nation.

Despite the attention paid to the lead issue, the Authority was able to forge ahead on many projects, and we finished FY 2004 with a record of solid financial performance and operational accomplishment. Let me share just a few of the highlights.

First, I am pleased to report that once again, our revenues exceeded expenses with net assets increasing by \$28.7 million. This means we were able to put our surplus revenues into our rate stabilization fund to help offset future rate increases. Our operating revenues also increased by \$8.5 million, to \$264.3 million. There was equally good news in FY 2004, as WASA continued to maintain its “AA” category bond ratings, the second highest rating category available to state and local governments.

In the past, we've pointed out the importance of implementing our ten-year capital improvement program to achieve operational and customer service goals, and meet regulatory compliance objectives. In FY 2004, the capital improvement program moved forward at unprecedented levels. We continued to invest in major upgrades and key improvements to our water distribution system and to the Blue Plains Advanced Wastewater Treatment Plant. These projects and their direct and positive impact on the community are detailed in the pages of this report.

We've also made substantial progress in cutting back, by 24 percent, the amount of sewage overflows into the Potomac and Anacostia rivers and Rock Creek, and we are on track to reduce these overflows by 40 percent by 2008, at a cost of \$140 million. Under our Long-Term CSO Control Plan, these combined sewer overflows will be reduced by 96 percent over the next 20 years.

Improved customer service has been a consistent goal. This year, we made further progress by completing the change over from quarterly to monthly billing, installing automated meters for retail customers in the District, and initiating a budget billing option.

There is much more I could report, from implementing an owner-controlled insurance program, to technology upgrades, from redesign of our Web site to recognizing the numerous performance awards the Authority received in FY 2004. However, rather than continue to catalog accomplishments, I want to end my message on a personal note.

FY 2004 was an exceptional year, one that called on the Board, WASA management, and every one of our employees to put forth their best efforts to provide our customers and the residents of the District a higher level of service. I thank and commend General Manager Jerry Johnson, the executive staff, our dedicated employees, and the WASA Board of Directors for their efforts and all that they accomplished in 2004. ♦

Sincerely,



Glenn S. Gerstell
Chairman

ASA'S MISSION

The mission of WASA is to serve all its regional customers with superior service by operating reliable and cost-effective water and wastewater services in accordance with best practices.

ASA'S VISION

WASA is the industry leader and environmental steward in providing excellent water service and wastewater collection and treatment for all our customers.

B OARD OF DIRECTORS—2003-2005 Strategic Plan

The WASA Board of Directors developed its strategic plan collaboratively with input from WASA staff and key stakeholders. The plan provides a clear statement of the Authority's vision, mission, and strategic goals and identifies current performance and institutional challenges. The Board's aim was to create a streamlined plan to guide the organization toward achievement of its vision while providing management with maximum freedom to innovate and lead the organization.

The strategic planning process led to the development of four Strategic Focus Areas. To fully support these focus areas, the Board realigned its committee structure. The Board committees support the achievement of objectives in each focus area, and each of the committees has established goals, objectives, and performance measures for the fiscal year.

The four Strategic Focus Areas are:

■ CONSUMER AND COMMUNITY SERVICE

WASA is committed to understanding, serving, and responding to the needs of its diverse customers and stakeholders. WASA will utilize state-of-the-art technology to monitor, measure and manage customer expectations, and reach out to improve relationships with stakeholders and the public.

■ ORGANIZATIONAL EFFECTIVENESS

WASA will ensure the effectiveness of the organization by creating and maintaining a safe, productive, highly competent, diverse workforce. Through partnerships with stakeholders, WASA will maintain a professional, high-functioning, ethical work environment and culture.

■ ENVIRONMENTAL QUALITY AND OPERATIONS

WASA will provide excellent environmental stewardship, meet and surpass regulatory standards, and manage the Authority's infrastructure effectively.

■ FINANCE AND BUDGET

WASA will maintain a sound financial position by optimizing operational and capital programs and exploring additional revenue sources, while maintaining fair and equitable rates. ♦



DISTRICT OF COLUMBIA
ALEXANDER MCPHAIL
Principal



DISTRICT OF COLUMBIA
DAVID J. BARDIN
Principal



DISTRICT OF COLUMBIA
MICHAEL DUTTON
Alternate



DISTRICT OF COLUMBIA
STEPHANIE NASH
Alternate



PRINCE GEORGE'S CO.
DONNA MP WILSON
Alternate



MONTGOMERY CO.
DAVID LAKE
Alternate



FAIRFAX COUNTY
JOHN WESLEY WHITE
Principal, 10/03 - 3/04



DISTRICT OF COLUMBIA
LUCY MURRAY
Principal



DISTRICT OF COLUMBIA
MICHAEL HODGE
Principal



DISTRICT OF COLUMBIA
F. ALEXIS H. ROBERSON
Principal



DISTRICT OF COLUMBIA
RODNEY NEWMAN
Alternate



DISTRICT OF COLUMBIA
JAMES WARECK
Alternate



DISTRICT OF COLUMBIA
BRENDA RICHARDSON
Alternate



PRINCE GEORGE'S CO.
ALFONSO CORNISH
Principal



PRINCE GEORGE'S CO.
FARIBA KASSIRI
Principal



MONTGOMERY CO.
BRUCE ROMER
Principal



MONTGOMERY CO.
JAMES CALDWELL
Principal



MONTGOMERY CO.
PAUL E. FOLKERS
Alternate



FAIRFAX COUNTY
ANTHONY H. GRIFFIN
Principal

NOT PICTURED:

PRINCE GEORGE'S CO.
LARRY COFFMAN
Alternate

FAIRFAX COUNTY
ROBERT STALZER
Alternate

DISTRICT OF COLUMBIA
(VACANT)
Alternate

GENERAL MANAGER'S MESSAGE

FY 2004 was one of the most exceptional and demanding faced by WASA, its Board of Directors and its employees. All of us at WASA were impacted by the serious concern over the high levels of lead found in the water in homes of many District residents with lead service lines. WASA responded to that challenge in a variety of ways including the Board of Director's vote to adopt a service line replacement program. Under this program, all lead lines in public space in the District of Columbia will be removed.

As Chairman Gerstell pointed out in his message, we took action on many fronts to address the lead problem. In order to effectively cope with the lead issue, we reordered a number of our priorities. However, through the dedication of our staff, we also achieved other crucial FY 2004 objectives. This proud record of accomplishment is a tribute to our staff. WASA not only met, but often exceeded, its goals in all major areas of operation.

FINANCIAL PERFORMANCE: WASA's solid financial performance continued in FY 2004. Revenues exceeded expenses (change in net assets) by \$28.7 million, despite higher utility costs and unanticipated lead mitigation costs of \$9.7 million. These monies were used to pay for capital projects and to increase the Authority's rate stabilization fund, which will help minimize peaks in rate increases in the future. I am also pleased to report that WASA received a \$29.8 million appropriation from the U.S. Government to help reduce combined sewer overflows (CSO).

CUSTOMER SERVICE: In FY 2004, WASA made further progress on its Automated Meter Reading program. By year's end, more than 115,000 had been installed, representing about 93 percent of all meters. We also converted all retail customers from quarterly to monthly billing, initiated a new budget billing option, and expanded our customer assistance program to aid those in greatest need.






OPERATIONS: WASA announced a **Community Water Pledge** in 2004, promising to go beyond federal requirements in meeting customer expectations, while dramatically lowering the elevated lead levels found in District drinking water. WASA also made significant progress on its multi-year water quality initiatives, including enhanced distribution system flushing, dead-end and cross-connection elimination, water main and large valve replacement, and supplemental monitoring for quality. Infrastructure maintenance and improvements reduced the number of water main breaks in FY 2004 to 388, compared to 521 the year before. Technology improvements such as the installation of the new Process Computer Control System (PCCS) at the Blue Plains Advanced Wastewater Treatment Plant will result in better management of chemical use and electricity consumption (minimizing peak demand use), and other operating efficiencies. Our website, www.dcwasa.com, has been redesigned in FY 2004 with significant changes, including a section to keep customers informed about utility work in their neighborhood and an educational section targeted for school-age children.

CAPITAL IMPROVEMENTS: FY 2004 was an exceptional year of progress made in the area of crucial capital investments. WASA's capital activities exceeded all prior levels, as it spent \$244.5 million on capital construction. WASA's ten-year, \$2.1 billion *Capital Improvement Program*, is the primary funding source for major construction/capital projects, including the first nine years of the combined sewer overflow control project, the lead line replacement program and the large-scale improvements being made to the Blue Plains wastewater treatment plant. We are making substantial progress toward reducing CSO's through plant and sewer system improvements and upgrades. In FY 2004 WASA submitted a projected \$1.9 billion, 20-year, Long-Term CSO Control Plan for federal approval.

HUMAN RESOURCES: WASA's accomplishments would not be possible without the support and dedication of its employees. For its part, WASA provides employees with recognition, training and a comprehensive benefits package. This year, we introduced a new long-term care insurance program and comprehensive wellness program, as part of a labor management partnership. We also continued to expand our training programs. For our efforts in this area, WASA received the Environmental Engineering Grand Award for our first-in-the-nation Maintenance Training and Certification program for the water and wastewater industry. The award was one of several given to the Authority in recognition of its performance and accomplishments in FY 2004.

I began this message by acknowledging the challenge that WASA faced in FY 2004, but it was also a year of opportunity and accomplishment. The progress we made in achieving our goals would not have been possible without the leadership and support from the Board of Directors and our employees. I wish to personally thank each and every one of them for all of their efforts and continued support throughout the year. ♦

Sincerely,


Jerry N. Johnson
General Manager

FINANCIAL PERFORMANCE

Meeting Exceptional Challenges: Making Exceptional Progress

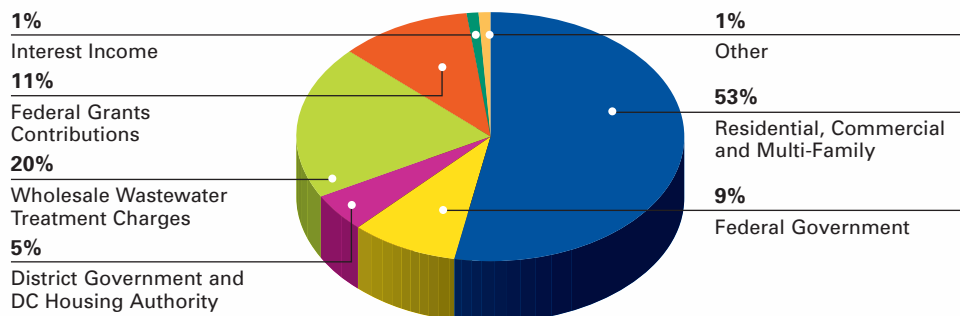
In FY 2004, WASA continued its trend of strong financial performance and the Authority made significant progress in surpassing financial expectations despite the challenges presented by the discovery of elevated lead levels in the drinking water samples from a number of District homes. Although WASA undertook a lead service line replacement program with FY 2004 costs of nearly \$10 million, it was still able to end the year with assets exceeding expenses by \$28.7 million.

Financial Highlights

- WASA's net assets increased by \$28.7 million to \$832.7 million, a 3.6 percent increase that was the result of FY 2004 operations.
- WASA's operating revenues increased by \$8.5 million to \$264.3 million, or 3.3 percent, primarily due to increased revenue from residential, commercial, and multi-family customers that was attributable to the 2.5 percent rate increase put into effect in FY 2004.
- WASA's operating expenses increased by \$12.7 million to \$228.7 million, a 5.9 percent increase that was largely due to one-time lead mitigation expenses of \$9.7 million and higher utility costs.
- WASA issued \$295 million in auction rate subordinate lien revenue bonds in FY 2004 at initial interest rates ranging from 1.0 to 1.4 percent. Proceeds were used to refund \$50 million in outstanding commercial paper. The balance was used to fund various capital projects and fund a debt service reserve fund.
- WASA continued to maintain its "AA" category bond ratings thereby keeping the Authority in the second highest rating category available to state and local governments.
- WASA received a \$29.8 million appropriation from the U.S. Government to be used, with matching funds, for capital projects to reduce Combined Sewer Overflows (CSO). This raised the total federal appropriation for that purpose to \$79.5 million through FY 2004.
- WASA's residential, commercial, and multi-family customer receivables over 90 days decreased to \$16.3 million in FY 2004, from \$21.8 million at the end of FY 2003. The continued decline is attributable to such actions as increased collection efforts, the Customer Service Department's "Dialing for Dollars" program, settlement of several high balance accounts, and conversion to monthly billing.
- WASA contributed \$6 million to the rate stabilization fund at the end of FY 2004, raising the balance to \$27.5 million. The funds will be used to level future rate increases in accordance with the Board's policy of gradual, predictable rate increase. ♦

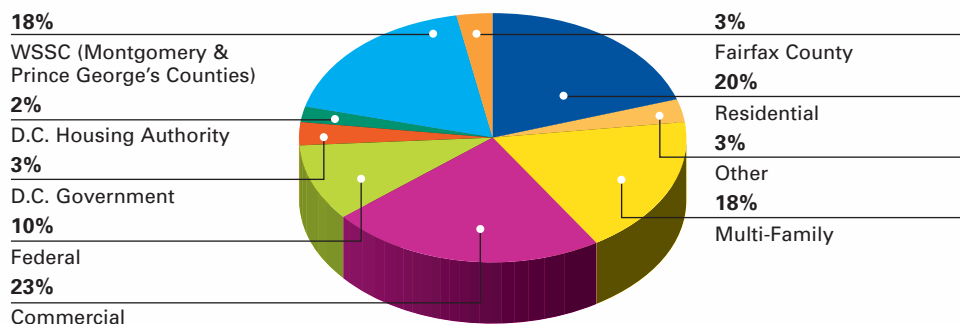
Operating and Non-Operating Revenues

FY 2004 Actual



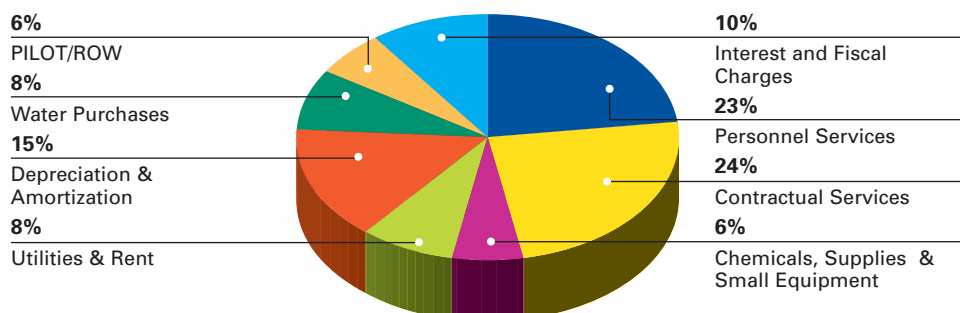
Operating Revenues by Source

FY 2004



Operating and Non-Operating Expenses

FY 2004 Actual





ACCOMPLISHMENTS & INITIATIVES FY 2004

ACCOMPLISHMENTS & INITIATIVES

In fiscal year 2004, the WASA Board of Directors revised its mission statement, vision statement and strategic goals to better define WASA's responsibility and commitment to customers, the community and the environment. This Annual Report highlights the Authority's accomplishments during the year in areas ranging from expanded community outreach and improved customer service, to unprecedented capital investment and impressive financial performance.

Meeting Customer Expectations—An Overarching WASA Priority in FY 2004

WASA purchases water from the U.S. Army Corps of Engineers Washington Aqueduct and distributes it to 130,000 addresses in the District of Columbia. Lead levels began rising in District drinking water when the Aqueduct changed the disinfection agent added to the water in anticipation of new EPA regulations. Considerable media attention to the issue and test results in 2004 drew public interest and heightened public concern over the quality and the safety of their drinking water.

In 2004, WASA announced and began work on its Community Water Pledge—a series of activities that go beyond federal requirements to address the leaching of lead from lead service lines into the drinking water of some District homes. The commitments by WASA in its pledge to the community involved:

- Working with stakeholders to ensure that messages and information related to water quality are clear and reach the appropriate audiences
- Strengthening partnerships with public health officials and health experts to address health-related concerns
- Working closely with the water provider, the Washington Aqueduct, environmental engineers and scientists to find and address the source of elevated lead levels found at some District homes

WASA joined the Aqueduct, EPA, public health experts and other environmental engineers and water quality experts in the formation of a Technical Expert Working Group (TEWG) to solve the problem of elevated lead levels. In August 2004, the TEWG recommended the addition of orthophosphate by the Aqueduct to the drinking water system-wide to reduce the corrosive action of water traveling through pipes and plumbing fixtures that contain lead. The recommendation was based on the results of high-tech test loop studies conducted by WASA to measure corrosion rates under varying chemical conditions.

District drinking water is routinely tested for the presence of more than 100 contaminants. WASA also monitors the water quality at 50 locations monthly throughout the District.

WASA Community Water Pledge

- Significantly accelerate the replacement of all District public space lead service lines compared to EPA's requirements
- Work in partnership with a local financial institution to create a loan program to help customers finance the replacement of lead service line pipes on private property
- Continue to work with District government agencies to identify public grant funds to help District residents with lead service line pipe replacements
- Designate specific staff resources to manage all day-to-day WASA activities regarding lead service line replacements, community outreach, communications and water testing
- Launch a Mobile Community Response Unit to more readily address customers concerns
- Work closely with WASA stakeholders, including elected officials, community and civic organizations, and others to ensure communications are clear and reach audiences appropriately, including those that don't speak English
- Measure communication effectiveness in a quantitative manner
- Strengthen its partnership with the D.C. Department of Health to address any health concerns of D.C. residents regarding lead leaching
- Work closer with the Washington Aqueduct regarding production of water provided to D.C. residents
- Further develop corporate partnerships to benefit resident and rate payers which will specifically address the further distribution of water filters
- Work with the D.C. Department of Health and experts from the George Washington University School of Public Health to more fully understand and communicate to residents information now available from local research and analysis regarding the health effects of water-based lead exposure
- Convene a National Water Authority Peer Group Workshop so experts, scientists and health professionals can discuss and explore the D.C. experience with other utilities in an effort to better frame future policy discussions for the nation and our policymakers



Moreover, the WASA Board adopted a \$300 million initiative to replace all of the 23,000 known publicly owned lead service lines in the District by 2010. During FY 2004, WASA replaced 1,793 public lead lines, in excess of its commitment to EPA, and coordinated access to a variety of financing options to encourage customers to replace the portion of the lead service lines on their private property.

In the months preceding the WASA Board's decision to adopt a comprehensive lead service line replacement program, the Authority took action to address the problem and respond to concerns voiced by the public and the media. A concerted effort was made to communicate accurate and timely information.

- WASA helped residents determine if they were at risk, and provided information to help them eliminate or reduce that risk. It conducted and offered incentives to collect thousands of water samples. It also established and publicized community-based drop-off centers to make participation in the sampling program more convenient.
- The Authority distributed 36,000 free tap water sampling kits to residents who wished to have their water tested and nearly 34,000 filters and replacement cartridges to customers with lead service lines whose test results exceeded the EPA action level. In addition, WASA funded and participated with the D.C. Department of Health (DOH) in an outreach program to encourage blood lead level testing.
- To communicate with customers and all District residents, WASA established a Lead Service Hotline that answered tens of thousands of inquiries from customers. WASA expanded the Hotline's hours of operation to meet demand and furnished bilingual customer service representatives to answer questions from non-English speaking customers.



WASA is investing millions of dollars to replace all publicly owned lead service lines in the District of Columbia.

- During FY 2004, WASA sent multiple mailings to District residents, including joint letters with DOH and the Washington Aqueduct, to convey the latest and best available information about the issue and to address their health concerns. Public service announcements were sent to major broadcast and print media, and the subject was addressed in multiple editions of *What's on Tap*, the monthly WASA customer newsletter.
- WASA leadership and staff made presentations and addressed inquiries in more than 40 community meetings on the subject in FY 2004. WASA also participated in numerous Congressional and District hearings, 15 press conferences, briefings and editorial board meetings, and gave scores of interviews.



WASA felt it was also important for customers to know that, though environmental lead exposure (primarily paint and soil) can be harmful over long periods of time, the large number of blood level tests conducted by DOH in 2004 detected no measurable health effects from the potential exposure to lead in drinking water in the District of Columbia.

Customer Service Improvements and Community Outreach

The Washington Metropolitan Area is one that is highly diverse, and that diversity is reflected in the makeup of WASA's residential and commercial customers. WASA is committed to serve the needs of all of its customers, from underserved families needing assistance to its largest commercial customers depending on service reliability.



Customer interaction is an important part of the job for WASA field service crews

WASA made important strides in improving customer service in FY 2004. Equally important, WASA staff engaged in extensive public outreach and voluntary public service. Their efforts included meetings with a broad cross section of community residents, special interest groups, and elected officials in every area of the District for discussions on proposed rate changes, water quality and planned capital improvements.

Customer Service Accomplishments

- WASA continued implementation of the Automated Meter Reading Program (AMR), installing more than 115,000 automated meters by the end of FY 2004. AMR replaces an aging metering system with new, state-of-the-art equipment using radio technology. This new technology allows WASA to obtain real-time meter readings automatically, assuring virtually 100 percent accuracy. This

milestone represents approximately 93 percent of all meters to be replaced and captures approximately 50 percent of water usage. Project completion is expected during the 2005 calendar year.

- WASA is fully implementing the AMR's state-of-the-art technology and Customer Information and Billing System (CIS)—to give customers the ability to access their daily water use directly from WASA's website or from its Interactive Voice Response phone system.
- In 2004, WASA converted all accounts from quarterly to monthly billing. The Authority redesigned the monthly customer bill, making it easier to read and conveying more information, such as monthly usage. WASA also introduced a budget billing option, allowing customers with widely fluctuating monthly bills to normalize their monthly payment.
- Nearly 5,000 WASA customers signed up for discounts on their water/sewer bills at Joint Utility Discount Day (JUDD). WASA participates in this annual event with other area companies to help eligible District residents pay their utility bills.
- WASA continued extending a helping hand to the community it serves. During FY 2004, WASA employees worked together on such projects as Christmas in April to help seniors with minor home repairs, Project Harvest to collect food for needy families, Bread for the Soul to distribute money, food and toys to families and children in need, and the Anacostia River Clean-Up Day to help revitalize this historic District waterway. ♦



WASA's new consolidated Command Center is a 24-hour emergency response operation.



CHALLENGES FACING WASA

In the nine years since its creation, WASA has grown to become a nationally recognized regional authority, one that serves two million users and customers in one of the nation's largest metro areas. However, like many water utilities in major cities, especially older ones, WASA faces exceptional challenges.

Many of these challenges are directly related to the need to:

- Make the improvements necessary to transform an aging water distribution system into one fully capable of safely meeting the growing demands of the community
- Invest in the upgrades and improvements required to optimize the functioning of the Blue Plains Advanced Wastewater Treatment Plant
- Protect the area's waterways, the Anacostia River, Potomac River and Rock Creek, by dramatically reducing combined sewer overflows

The primary vehicle for addressing these challenges is WASA's capital improvement program.

Capital Improvement Program

WASA's success in attaining its operational and customer service goals, as well as its continued success in regulatory compliance, depends in large measure on implementing its \$2.1 billion, 10-year Capital Improvement Program (CIP). It is only through such investment in systems and infrastructure that WASA can balance current and future service needs, environmental considerations, government regulations and costs in the best interest of the ratepayers and the community at large.

CIP spending has markedly increased over the past three years, as many large projects entered the construction phase. Investment in capital construction reached a high point in FY 2004. This year, capital construction activities exceeded all prior year levels, as WASA spent \$244.5 million on capital construction projects.

Water Service Improvements

During FY 2004, WASA continued to invest in the improvement of water services through the major rehabilitation of the Bryant Street Pumping Station. The \$61 million rehabilitation of the city's main



WASA's 10-year Capital Improvement Program includes \$182 million for water system improvements.

water pumping station is among WASA's most significant undertakings. Nearly 100 years old, Bryant Street is one of the oldest stations in the District, pumping approximately one million gallons of water throughout the city each day. This major rehabilitation project includes replacing pumps, control systems and electrical equipment.

Aside from the attention to the lead issue in FY 2004, there was a continuing focus on water distribution system improvements to address what had been, until WASA's creation in 1996, disinvestment and a lack of attention to the District's water utility infrastructure. Over the years, WASA has made, and continues to make, considerable progress in the following activities:

- Valve replacements—replacing defective valves throughout the system
- Cross-connection elimination—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
- Water main dead end elimination—eliminating the potential for stagnant water to accumulate at the ends of water mains
- Water main extension and replacement—providing service to new developments or replacing undersized or defective mains in the system
- Large-diameter water main rehabilitation—performing internal joint repairs on large-diameter water mains exhibiting a high frequency of joint leaks
- Small-diameter water main rehabilitation—improving system reliability and water pressure, maintaining water quality and ensuring adequate flows in the system
- Flushing—annual unidirectional flushing of the water distribution system at high velocities to clear sediment and debris



Major renovations at the Bryant Street Pumping Station include new high lift pumps, HVAC upgrades, and architectural improvements to the 100-year-old building.



As discussed earlier in this report, WASA's Board of Directors adopted a lead service line replacement program in July 2004. During FY 2004, the Authority replaced 1,793 lead service lines (publicly owned portion only). This exceeds the requirements of the Lead and Copper Rule and WASA's commitment in the EPA Administrative Order by 1,615 lines.

The replacement and rehabilitation of water mains and valves is a major priority in WASA's water quality improvement program.

Wastewater Collection and Treatment Upgrades and Improvements

Combined Sewer Overflow (CSO) Long-Term Control Plan

Many older cities in the United States are served by a combined wastewater collection sewer system, one in which both sanitary waste and storm water flow through the same pipes. Approximately one-third of the District of Columbia is served by a combined sewer system. The remainder of the city has separate systems for sanitary waste and storm water. When the collection system and/or the Blue Plains Advanced Wastewater Treatment Plant reach capacity, usually during

heavy rainfall, the system is designed to overflow the excess combined flow into area waterways—the Potomac and Anacostia rivers and Rock Creek. These events are referred to as *combined sewer overflows (CSO)*.

■ During FY 2004, WASA, the District government, EPA and the Department of Justice reopened negotiations on the 15- to 40-year timeline for implementing a Long-Term CSO Control Plan. This plan is projected to reduce CSO by 96 percent overall and 98 percent in the Anacostia River alone, the waterway most impacted by CSO. The program includes the following components:

- Three large storage tunnels that will store wastewater flows from storm events until they can be sent to the Blue Plains Advanced Wastewater Treatment Plant for treatment
- Targeted separation of combined sewers in several sections of the District
- Consolidation and elimination of 13 of 59 outfalls and
- Rehabilitation and construction of pump station facilities

Bass tournament competitors fish near the Blue Plains plant effluent pipe. The biosolids treatment facility is in the background.



- Implementation of the \$2 billion Long-Term Control Plan is projected to increase retail water service rates by an average of three percent over planned increases. Projected annual spending under the Plan ranges from \$5 million to \$19 million through 2010, minimizing the near-term impact on rates. The current rate projections assume no additional funding from outside sources beyond those already received through U.S. Congressional appropriations.

Meanwhile, WASA has already begun work on a \$140 million CSO project that will eliminate 40 percent of the overflows by 2008. To date, rehabilitated fabri-dams and new tide gates have already reduced overflows by 24 percent.

Upgrades at Blue Plains include work on the sedimentation basins.

Blue Plains Plant and Sewer System Upgrades

WASA serves the wastewater collection and treatment needs not only in the District of Columbia but in several other jurisdictions in Maryland and Virginia as well. This service requires a huge infrastructure, one that includes 1,800 miles of sanitary and combined sewers and the 47-mile Potomac Interceptor which brings wastewater from areas in Virginia and Maryland to Blue Plains. The Blue Plains Advanced Wastewater Treatment Plant is the lynchpin in the system. In FY 2004, WASA continued to upgrade and improve the system, with particular emphasis on the needs of the Blue Plains plant.



Major capital improvement projects that continued in FY 2004 at the Blue Plains Treatment Plant were:

- Primary and secondary treatment facility upgrades with budgets totaling \$107 million
- Grit and screen facility upgrades totaling \$102 million
- Additional dewatering facilities with a total project budget of \$79.5 million
- Additional chemical systems with a total budget of \$73.8 million
- Final design is underway on the Egg-Shaped Digester Project. Construction is scheduled to begin on the digester project in early 2006, pending final approvals by the District of Columbia Zoning Commission. The projected budget for the digester project is \$311 million. The digesters will dramatically improve operations and reduce the production of biosolids by 50 percent. Biosolid hauling costs are currently \$16 - \$17 million annually. Additional environmental benefits of the project will be a dramatic reduction in the amount of biosolids created, the reduction in odors, and a projected sharp decrease in local traffic as a result of fewer trucks hauling biosolids from the plant.

During FY 2004, WASA continued its focus on day-to-day preventative maintenance on the wastewater collection system which included cleaning approximately 26,000 catch basins and 95 miles of sewer lines; repairing or replacing nearly 300 sewer laterals; collecting 600 tons of floatable debris from the Anacostia and Potomac rivers, and; removing debris from six critical stormwater pumping stations to help prevent road flooding.



Operators in area control centers (ACCs) can monitor operations at Blue Plains.

There were numerous other accomplishments related to the District's wastewater collection operation, including:

- Completing improvements to the sewer system to help relieve local area flooding in Northeast Washington along the Northeast Boundary sewer. The \$3.5 million project cost was funded in part by the District Emergency Management Agency and the Department of Transportation
- Undertaking an 11-month project to address localized flooding in the Dupont Circle area that involved repairing pipe deficiencies and a blocked sewer siphon
- Breaking ground for the construction of a new 45 MGD East Side Sewer Pumping Station
- Completing interim improvements to the Potomac Interceptor to address odor complaints and finishing the final design for permanent odor control facilities along the interceptor, with construction set for spring 2006. In addition to odor control, significant structural improvements are planned for two large segments of the interceptor in Fairfax and Loudon counties. ♦



OTHER FY 2004 INITIATIVES

WASA'S FY 2004 progress was not only measured in moving forward with major capital projects. The Authority also forged ahead in less visible, but very important, areas such as technology, human resources, and insurance.

Information Technology

Information technology is vital to the successful operation of modern, complex organizations such as WASA. It plays a crucial role in functions ranging from web site management to customer billing, from asset management to managing chemical usage.

WASA continued to make technological improvements called for in its 2002-2005 Information and Technology Strategic Plan, including:

- **IMPLEMENTED AN ASSET MANAGEMENT SYSTEM** designed to integrate existing customer information, maintenance management functions, the process computer control system, and mapping systems. The new system will help WASA better manage its water and sewer infrastructure.
- **REDESIGNED WASA'S WEB SITE** at www.dcwasa.com. Changes included creating a section of the site that will keep customers informed about infrastructure work in their neighborhood. An education section for school-aged children has also been added.
- **PROCEEDED WITH THE DEVELOPMENT OF A PROCESS COMPUTER CONTROL SYSTEM** designed to aid in the management of chemical usage, electrical consumption, and provide other operating efficiencies. The project is critical to achieving the goals of the Blue Plains treatment plant internal control plan.



www.dcwasa.com provides customer service assistance, information on water and wastewater operations, and a fun, educational site for youngsters.

Owner-Controlled Insurance Program

During FY 2004, WASA implemented its planned owner-controlled insurance program. That program not only offers the Authority several important benefits, but does so at a cost-savings.

The program enables WASA to procure insurance for construction projects rather than having contractors purchase insurance on their own. The new program gives the Authority several benefits including the ability to provide higher coverage levels; assure an enhanced and consistently implemented safety program; facilitate minority participation in capital projects; and achieve cost savings. It is estimated that WASA will save \$400,000 in 2005 through its implementation of the new program.



Employee Relations

WASA's success is directly linked to the performance and dedication of its employees. For its part, the Authority participates in well-received labor-management programs and provides employees with recognition awards, a highly competitive compensation and benefits program, and effective training and career development opportunities.

In FY 2004, the Authority:

- Introduced a new long-term care insurance program and a comprehensive wellness program
- Continued implementation of an extensive training program highlighted by completion of the wastewater treatment operator certification program
- Expanded its successful labor-management partnerships to other departments

WASA offers its employees a competitive and comprehensive benefits package.





Performance Recognition and Awards

The respect with which WASA is held in the water and wastewater utility fields is underscored by the fact that it receives multiple awards recognizing its performance from a variety of prominent professional organizations in the industry.

In FY 2004 WASA was recognized for its achievements with numerous awards including those listed below.

- WASA was presented with a Certificate of Achievement for Excellence in Financial Reporting by the Government Finance Officers Association of the United States for its annual financial report (CAFR).
- The Authority received the George J. Schroeper Medal for Innovative Wastewater Facilities Design presented by the Water Environment Federation (WEF) at its 76th annual conference. In addition, four WASA team members were nominated for individual awards.
- WASA's Operations Challenge Team participated in the national WEF Operations Challenge Competition and finished third nationally in the overall competition, second in the process controls skills test, and third in the safety event.
- WASA received a National Gold Award from the Association of Metropolitan Water Agencies. The new National Gold Award for Competitive Achievement adds to the four gold and two silver awards WASA has received in the past six years.
- WASA was awarded the American Academy of Environmental Engineering Grand Award for its first-in-the-nation maintenance training and certification program for the water and wastewater industry.

- WASA received the Association of Metropolitan Sewerage Agencies' (AMSA) Gold Award for the fourth consecutive year for complete and consistent compliance with the EPA permit for operations at Blue Plains.
- WASA was selected for AMSA's 2003 Excellence in Management Recognition Award. The award is based on demonstrating management excellence in seven different categories. ♦



EVOLUTION AND HISTORY OF THE DISTRICT OF

The Water Treatment and Distribution System

The District of Columbia's early settlers had no public water system. Residents depended on springs and wells for their water needs. The earliest documented instance of water being piped throughout District streets for public use was in 1808. Funds were first appropriated for a project to pipe water for residential use in 1809. Thereafter, the spring water piping systems were replaced and extended from year to year. In 1858, the Washington Aqueduct Division of the Army Corps of Engineers was founded, and on January 3, 1859, it provided the first water to reach the District through the Water Aqueduct system. Subsequently, the Potomac River became the source of the District's drinking water. As the population of the area grew, more capacity was needed, and by 1905 the Washington City Tunnel, McMillan Reservoir and Filtration Plant, and the Bryant Street Pumping Station were completed. It was about this time that springs and hydrants lost favor and were replaced by new pipe extensions.

While all major components of the District's present water supply and distribution system were in place by 1928, the area continued to experience population growth, especially during World War II. This made it necessary to expand the water supply system. In 1946, the District Engineer, the United States Engineering Office, and the Engineer Commissioner of the District of Columbia submitted a joint report to Congress which contained comprehensive plans for constructing, improving, and expanding the water system. Over the next 30 years, the plan underwent periodic modifications to reflect the changing needs of the District brought about by continued growth.

Today, WASA purchases treated water from the Washington Aqueduct and transmits and distributes it through five pumping stations, five distribution reservoirs and four elevated tanks. WASA's Department of Water Services oversees the extensive water distribution system serving the District, one that includes 1,300 miles of pipes, and mains ranging from four to 78 inches in diameter. All of its pumping stations have adequate pumping capacity to meet peak demands.



COLUMBIA WATER AND WASTEWATER SYSTEMS

The Wastewater Collection and Treatment System

The District's wastewater system is one of the oldest in the United States. It dates to about 1810, when sewers and culverts were constructed to safely drain storm and ground water from streets. The drains were not all built at the same time nor were they linked together to form a "system" as we know it today. By 1850, many District streets

had spring or well water piped in, thereby creating a need for the earliest sanitary sewerage disposal system. At that time, sewerage was discharged into the nearest body of water.

In the early 1870's a general sewer construction program was undertaken by the Board of Public Works. The system put in place was a combined system, one that discharged

both sanitary sewage and storm water into local waterways. By the 1890's, there was considerable difference of opinion among engineers about the desirability of retaining a combined system. A Board of Engineers, appointed by President Benjamin Harrison, recommended that the combined system be retained, but extensions built to serve new areas employ a separate system, using separate lines for storm water and sanitary sewage. It was also recommended that the discharge point be far enough down the Potomac River to prevent discharge from returning to the environs of the city. That discharge point is still located at Blue Plains. In addition, the Board of Engineers recommended that a system of large interceptor sewers be constructed to collect and carry sanitary sewage and some storm water to a pumping station on the bank of the Anacostia River and to the discharge point at Blue Plains. The implementation of those recommendations accounts for a major portion of the current wastewater system.



The present day sewage collection system consists of approximately 1,800 miles of sanitary and combined sewers, 22 flow-meter stations, nine off-site wastewater pumping stations and 16-storm water pumping stations. Sewers range in size from eight inches in diameter to 27-foot arch sewers. Biosolids are also produced at the Blue Plains facility. In 1984, officials from all jurisdictions served by Blue Plains established procedures for soliciting and entering into contracts for hauling and disposing of biosolids from the facility. Most of the 1,300 tons per day of biosolids produced at Blue Plains is directly land applied at various sites in Maryland and Virginia. Montgomery and Prince George's counties, Maryland, retain contractual responsibility for disposal of their share of biosolids produced at Blue Plains.

The Biosolids Management Program developed by WASA through a stakeholders group that included neighboring jurisdictions, and adopted by the Board in 1999, calls for full biosolids digestion as the primary long-term solution and for continuing land application for as long as it is financially advantageous. WASA has completed preliminary design for the installation of new egg-shaped digesters. This facility will reduce odors in the product that leaves Blue Plains and significantly reduce the volume of biosolids produced and greatly reduce truck traffic transporting biosolids. ❖

FINANCIAL PERFORMANCE AND EXHIBITS

Total Revenues

Total operating and non-operating revenues were \$299.3 million in fiscal year 2004, an increase of \$0.8 million, or 0.3 percent over fiscal year 2003.

This is primarily due to increases of \$8.5 million in water and wastewater user charges and \$0.3 million in interest income. These increases were offset by a decrease of \$8.2 million in Federal grants contribution.

A detailed analysis of operating and non-operating revenue variances follows:

- Water and wastewater user charges from residential, commercial and multi-family customers increased by \$11.3 million to \$159.2 million, or 7.6 percent. This is due in part to a rate increase of 2.5 percent in fiscal year 2004 and one-time impact of the conversion to monthly billing on commercial accounts and increased consumption associated with meter replacement.
- Water and wastewater user charges from Federal government customers were \$26.4 million in fiscal year 2004, a decrease of \$0.4 million, or 1.6 percent over fiscal year 2003, primarily due to lower consumption.
- Water and wastewater user charges from the District government and District of Columbia Housing Authority were \$15.5 million in fiscal year 2004, a decrease of \$0.6 million, or 3.8 percent over fiscal year 2003, primarily due to lower consumption.
- Wholesale wastewater treatment charges were \$60.8 million in fiscal year 2004, a decrease of \$0.8 million, or 1.4 percent over fiscal year 2003, primarily due to lower sharable costs at the wastewater treatment plant. Per the IMA (see Note 1), wholesale partners pay a share of both the operating and capital costs of the plant. The payments for capital costs are amortized and recognized as income over the depreciable life of assets purchased (i.e., 60 years).
- Other revenues were \$2.4 million in fiscal year 2004, a decrease of \$0.9 million, or 26.1 percent over fiscal year 2003, primarily due to lower revenues from fees and charges not directly related to metered water and wastewater sales, metering, or stormwater services. These fees include such services as water and sewer tap connections.
- Interest income, a non-operating revenue item was \$3.5 million in fiscal year 2004, an increase of \$0.4 million, or 12.4 percent over fiscal year 2003, primarily due to higher cash and investment balances.
- Federal grant contributions were \$31.5 million in fiscal year 2004, a decrease of \$8.2 million, or 20.6 percent over fiscal year 2003, in line with the completion of grant-funded capital projects. ♦

Diversity and Stability of Operating Revenues

The Authority's operating revenue base is very diverse, including established customers such as the Federal government, the District government, surrounding jurisdictions in Maryland and Virginia and commercial and residential customers within the District. No one category accounts for more than 23 percent of total revenue.

A description of each revenue source as well as a discussion of recent trends in each category follows:

- Revenues from commercial and multi-family customers in the District comprise approximately 41 percent of the Authority's total operating revenues. Commercial revenues are especially strong due to the presence of many national associations, government-consulting firms, and colleges and universities in the District. The commercial customer category also includes multi-family dwellings.
- The Authority provides wastewater conveyance and treatment services to Montgomery and Prince George's counties in Maryland through the Washington Suburban Sanitary Commission (WSSC) and Fairfax and Loudoun counties in Northern Virginia. Operating revenues from WSSC and Fairfax County account for 21 percent of the Authority's revenues and are based on their share of operating costs at Blue Plains. Loudoun County and Potomac Interceptor account for additional 2.1 percent of the Authority's revenues and

are included in other revenue. Operating costs are allocated to each user based on their sewer flows and purchased capacity at Blue Plains.

- Residential customers in the District account for 20 percent of total revenues.
- Payments from the Federal government comprise 10 percent of the Authority's total operating revenues and include customers such as the U.S. Congress, the Smithsonian Institution, and other federal agencies.
- Revenue from the District of Columbia government and the District of Columbia Housing Authority makes up 5 percent of total operating revenue. ♦

Expenses

Operating expenses increased by \$12.7 million, or 5.9 percent in fiscal year 2004, primarily due to \$7.0 million increase in water purchases, \$2.6 million increase in supplies expense, \$2.4 million increase in contractual services, and \$1.4 million increase in utilities expense. These increases were offset by a \$1.6 million decrease in personnel services. Non-operating expenses increased by \$8.5 million.

A detailed analysis of the operating expenses follows:

- Personnel services were \$62.4 million in fiscal year 2004, a decrease of \$1.6 million, or 2.6 percent over fiscal year 2003, primarily due to higher capitalized

labor costs. Total capitalized labor costs increased in fiscal year 2004 by \$0.9 million to \$7.8 million compared to \$6.9 million in fiscal year 2003. The Authority charges to capital all personnel costs of staff involved in the capital improvement program and depreciates these costs over useful life (60 years) of capital assets.

- Contractual services were \$65.4 million in fiscal year 2004, an increase of \$2.4 million, or 3.8 percent over fiscal year 2003, primarily due to sampling and contractual expenses incurred for lead mitigation activities.
- Chemicals, supplies, and small equipment expenses were \$17.4 million in fiscal year 2004, an increase of \$2.6 million, or 17.7 percent over fiscal year 2003, primarily due to \$1.5 million increase in chemical expense and \$1.4 million increase in supplies expense. Chemical expense increased due to the completion of certain capital projects, while supplies expenses increased due to the purchase and distribution of water filters to households with lead service lines as part of the lead mitigation program.
- Utilities and rent expenses were \$22.2 million in fiscal year 2004, an increase of \$1.4 million, or 6.8 percent over fiscal year 2003, primarily due to higher electricity expense driven by higher than expected maximum peak demands in the summer.
- Depreciation and amortization expenses were \$40.5 million in fiscal year 2004, an increase of \$1.0 million, or 2.5 percent over fiscal year 2003, in line with the increase in capital assets due to the capital improvement program.

- Water purchases were \$20.7 million in fiscal year 2004, an increase of \$7.0 million, or 50.8 percent over fiscal year 2003, due to two one-time charges. These include \$2.4 million for system-wide flushing of the water system as part of the lead mitigation program, and a \$2.6 million retroactive charge for prior year's costs.
- Interest and fiscal charges were \$26.1 million in fiscal year 2004, an increase of \$8.3 million, or 46.3 percent over fiscal year 2003, primarily due to two large accounts receivable write offs. \$3.8 million to write off fiscal years 2003 and 2002 accounts receivable accruals for the Washington Aqueduct's usage of Authority water services and \$2.4 million to record an 'allowance for bad debt expense' for an old accounts receivable from the Washington Suburban Sanitary Commission. ❖

Utility Plant and Debt Administration—Capital Assets

At the end of fiscal year 2004, the Authority had \$1.7 billion invested in a broad range of capital assets, including its wastewater collection, wastewater treatment and water distribution systems. This amount represents a net increase of nearly \$195.6 million, or 12.9 percent over last year due to continued capital spending in accordance with CIP. ❖

Statements of Net Assets—September 30, 2004 and 2003 (In thousands)

Assets	2004	2003
Current assets:		
Cash and cash equivalents (note 3)	\$48,405	\$131,078
Investments (note 3)	99,747	14,978
Customer receivables, net of allowance for doubtful accounts of \$6,876 in 2004 and \$6,961 in 2003 (note 7)	41,497	41,406
Due from Federal government (note 6)	24,888	41,454
Due from District government (note 13)	6,863	17,740
Due from other jurisdictions (note 8)	20,907	33,706
Inventory	6,984	6,913
Prepaid	296	150
Total current assets	249,587	287,425
Noncurrent assets:		
Restricted cash equivalents and investments (notes 3 and 10):		
Combined Sewer Overflow (CSO) federal appropriation	71,640	46,825
Revenue bond debt service reserve fund	38,550	23,565
Revenue bond fund - interest account	12,226	8,656
Revenue bond construction fund	203,594	4,842
Commercial paper proceeds	21	20
Total restricted cash equivalents and investments	326,031	83,908
Utility plant (note 4):		
In-service	1,796,037	1,749,644
Less accumulated depreciation	(638,111)	(602,855)
Net utility plant in service	1,157,926	1,146,789
Construction in progress	552,898	368,440
Net utility plant	1,710,824	1,515,229
Other noncurrent assets:		
Due from other jurisdictions, net of allowance for doubtful accounts of \$2,410 in 2004 (note 8)	30,169	32,887
Purchased capacity (less accumulated amortization of \$34,671 in 2004 and \$31,760 in 2003) (note 5)	139,789	135,712
Total other noncurrent assets	169,958	168,599
Total noncurrent assets	2,206,813	1,767,736
Total Assets	2,456,400	2,055,161

(Continues)

Statements of Net Assets—September 30, 2004 and 2003 (Continued)

Liabilities	2004	2003
Current liabilities:		
Accounts payable and accrued expenses	77,225	78,069
Compensation payable (note 9)	9,042	7,941
Accrued interest	12,764	9,885
Due to stormwater fund (note 13)	293	154
Due to jurisdictions	6,731	10,176
Deferred revenue	28,052	20,015
Current maturities of long-term debt (note 10)	16,134	15,892
Total current liabilities	150,241	142,132
Noncurrent liabilities:		
Deferred revenue	601,710	536,746
Deferred revenue-CSO	70,828	46,629
Other liabilities (note 12)	15,802	15,671
Long-term debt excluding current maturities (note 10)	785,111	510,010
Total noncurrent liabilities	1,473,451	1,109,056
Total liabilities	1,623,692	1,251,188
Net Assets		
Invested in capital assets, net of related debt	651,250	588,294
Restricted for:		
Debt service	38,302	22,356
Capital projects	815	5,038
Unrestricted	142,341	188,285
Total net assets	\$832,708	\$803,973

The notes to the basic financial statements are an integral part of this statement.

Statements of Revenues, Expenses and Changes in Net Assets
Years Ended September 30, 2004 and 2003 (In thousands)

	2004	2003
Operating revenues:		
Water and wastewater user charges:		
Residential, commercial and multi-family customers	159,165	147,870
Federal government	26,444	26,884
District government and DC Housing Authority (note 13)	15,464	16,072
Charges for wholesale wastewater treatment	60,834	61,682
Other	2,427	3,287
Total operating revenues	264,334	255,795
Operating expenses:		
Personnel services	62,449	64,091
Contractual services	65,446	63,065
Chemicals, supplies and small equipment	17,384	14,768
Utilities and rent	22,217	20,804
Depreciation and amortization	40,500	39,524
Water purchases	20,692	13,723
Total operating expenses	228,688	215,975
Operating income	35,646	39,820
Nonoperating revenues (expenses):		
Interest income	3,472	3,090
Payment in lieu of taxes and right of way fee (note 13)	(15,778)	(15,513)
Interest and fiscal charges	(26,060)	(17,816)
Total nonoperating revenues (expenses)	(38,366)	(30,239)
Income before contributions and transfers (note 15)	(2,720)	9,581
Federal grants and contributions	31,455	39,626
Change in net assets	28,735	49,207
Total net assets, beginning of year	803,973	754,766
Total net assets, ending of year	\$ 832,708	\$803,973

The notes to the basic financial statements are an integral part of this statement.

Statements of Cash Flows
Years Ended September 30, 2004 and 2003 (In thousands)

	2004	2003
Cash flows from operating activities:		
Cash received from customers	\$263,388	\$253,855
Cash paid to suppliers for goods and services	(124,234)	(105,964)
Cash paid to employees for services	(61,348)	(63,994)
Net cash provided by operating activities	77,806	83,897
Cash flows from capital and related financing activities:		
Proceeds from notes payable to Federal government	—	1,165
Proceeds from issuance of commercial paper	50,000	10,000
Repayments of commercial paper	(50,000)	(100,000)
Proceeds from revenue bonds	291,451	170,000
Proceeds from other jurisdictions	85,961	73,736
Repayments of bond principal and notes payable to federal and district government	(17,248)	(22,856)
Acquisition of utility plant and purchased capacity	(244,442)	(205,469)
Payments of interest and fiscal charges	(25,951)	(21,211)
Contributions of capital from Federal government	80,992	76,930
Net cash provided by (used in) capital and related financing activities	170,763	(17,705)
Cash flows from non-capital financing activities -		
cash repayments of loan to District		
Loan from DC Government	10,900	—
Transfers-Out (payment in lieu of taxes and Right of way fee)	(18,221)	(25,971)
Net cash used by non-capital financing activities	(7,321)	(25,971)
Cash flows from investing activities:		
Cash received for interest	2,971	3,157
Investment purchases	(164,572)	(29,947)
Investment maturities	34,985	19,869
Net cash used in investing activities	(126,616)	(6,921)
Net increase in cash and cash equivalents	114,632	33,300
Cash and cash equivalents (including restricted) at beginning of year	214,986	181,686
Cash and cash equivalents (including restricted) at end of year	\$ 329,618	\$ 214,986
Operating income	\$ 35,646	\$ 39,820
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	40,500	39,524
Change in operating assets and liabilities:		
Decrease in customer and other receivables	4,374	12,712
Decrease in inventory	(216)	700
Decrease in payables and accrued liabilities	(1,639)	10,000
Decrease in deferred revenue	(859)	(18,859)
Net cash provided by operating activities	\$ 77,806	\$ 83,897

The notes to the basic financial statements are an integral part of this statement.

Operating Revenue by Source FY1995–2004 (\$000)

Revenue Source	1995	1996	1997	1996	1999	2000	2001	2002	2003	2004
Residential/Commercial	\$101,696	\$101,078	\$115,294	\$138,697	\$138,328	\$131,399	\$139,429	\$148,134	\$147,870	\$159,165
Governmental										
Federal	22,966	21,946	24,024	25,068	26,859	24,092	26,199	28,501	26,884	26,444
DCGovernment ⁽¹⁾	-	-	12,268	21,883	11,168	10,883	9,543	10,293	9,943	9,129
DCHousing Authority	6,338	6,623	7,035	7,770	5,720	5,194	6,284	6,203	6,129	6,335
Subtotal Governmental	29,304	28,569	43,327	54,721	43,747	40,169	42,026	44,997	42,956	41,908
Total Retail Revenues	\$31,000	\$129,647	\$158,621	\$193,418	\$182,075	\$171,568	\$181,455	\$193,131	\$190,826	\$201,073
Charges for Wholesale										
Sewer Treatment	40,080	35,989	52,333	50,566	56,107	50,284	52,542	53,211	61,682	60,834
Other Revenues	3,977	5,854	6,230	14,459	4,450	6,078	3,483	2,387	3,287	2,427
Wholesale Water										
Revenues ⁽²⁾	2,522	9,546	4,310	-	-	-	-	-	-	-
Refunds to Customers	(259)	-	-	-	-	-	-	-	-	-
Total Revenues	\$177,320	\$181,036	\$221,494	\$258,443	\$242,632	\$227,930	\$237,480	\$248,729	\$255,795	\$264,334

⁽¹⁾ As part of the Authority's enabling legislation, the District of Columbia Government pays the Authority for water and sewer services.

⁽²⁾ In FY 1997, the Authority entered into an operating agreement with the U.S. Army Corps of Engineers, which operates the Washington Aqueduct. Prior to the execution of the agreement, amounts paid to the Aqueduct by its other customers (the City of Falls Church and Arlington County, Virginia) were recorded as revenue of the Authority.

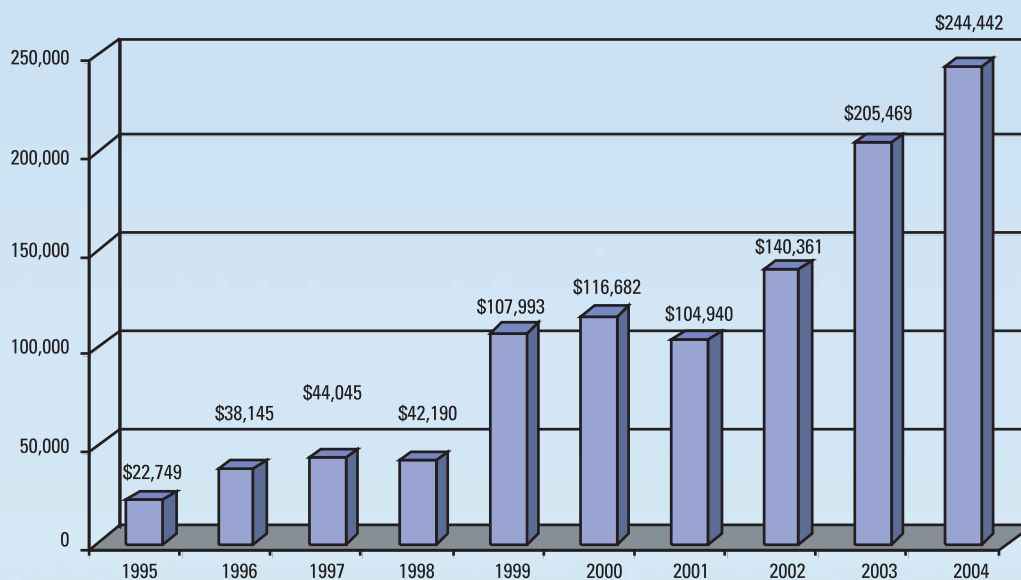
Source: FY 1995 - 2004 Audited Statements of Revenue, Expenses and Changes in Net Assets

Operating Expenses by Category FY 1995–2004 (\$000)

Expense Category	1995	1996	1997	1996	1999	2000	2001	2002	2003	2004
Personnel	\$49,669	\$50,758	\$51,197	\$53,956	\$60,674	\$63,078	\$62,055	\$62,162	\$64,091	\$62,449
Contractual	43,808	40,539	55,904	66,340	56,017	54,552	58,976	59,166	63,065	65,446
Supplies	15,855	14,686	14,057	17,722	11,431	13,129	15,488	13,683	14,768	17,384
Occupancy	15,337	15,392	16,668	21,173	21,225	20,091	21,219	20,071	20,804	22,217
Depreciation & Amortization	18,830	18,660	25,695	26,278	28,227	30,329	32,971	37,099	39,524	40,500
Water Purchases	18,077	16,760	21,620	23,313	18,922	16,358	17,085	16,904	13,723	20,692
PILOT/Right of Way Fee ⁽¹⁾	-	-	-	-	-	9,177	15,026	15,247	15,513	15,778
Miscellaneous	244	387	1,407	-	-	-	-	-	-	-
Total Operating Expenses	\$161,820	\$157,182	\$186,548	\$208,782	\$196,496	\$206,714	\$222,820	\$224,332	\$231,488	\$244,466

⁽¹⁾ PILOT/Right of way fee not considered operating expense for financial reporting purposes and in the Authority's Master Indenture of Trust.

Source: FY 1995 - 2004 Audited Statements of Revenue, Expenses and Changes in Net Assets

Capital Disbursements FY 1995–2005

Note: These disbursements include the Authority's share of Washington Aqueduct's capital disbursements, which in FY 1997 – 2002 have been financed by U.S. Treasury notes.

Source: FY 1995 – 2004 Audited Statements of Cash Flows

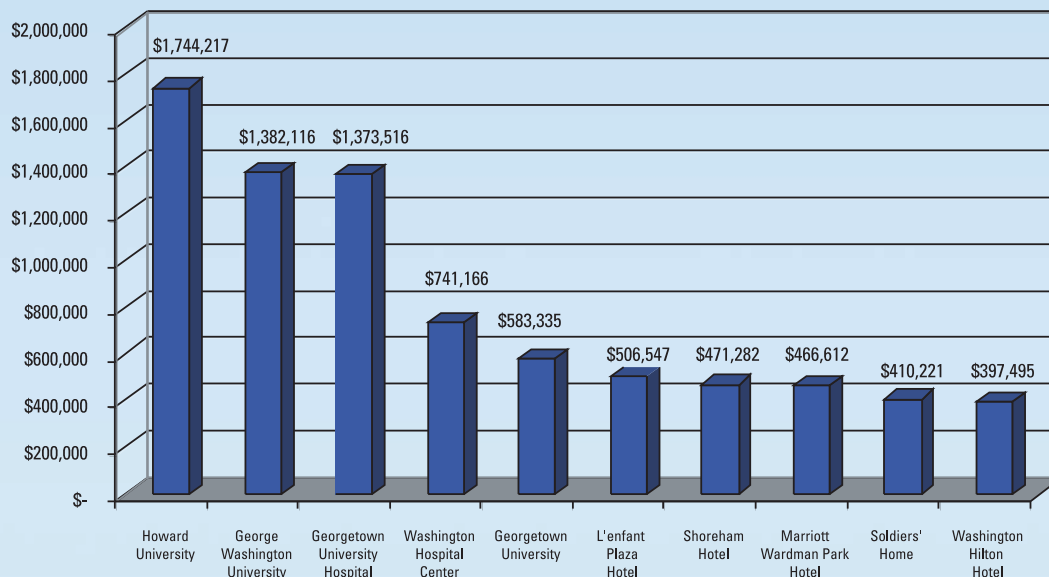
Number and Type of Customer Accounts (As of September 30, 2004)

Type of Account	Numbers of Accounts
Residential	102,188
Commercial ^(A)	18,283
Governmental	
Federal	529
District of Columbia	569
DC Housing Authority	1,196
Total Governmental	2,294
WASA	29
Washington Aqueduct	1
Wholesale	7
Total Number of Accounts	122,802

^(A) Included in Commercial accounts are 46 exempt accounts (39 for Howard University and 7 for Soldiers' Home)

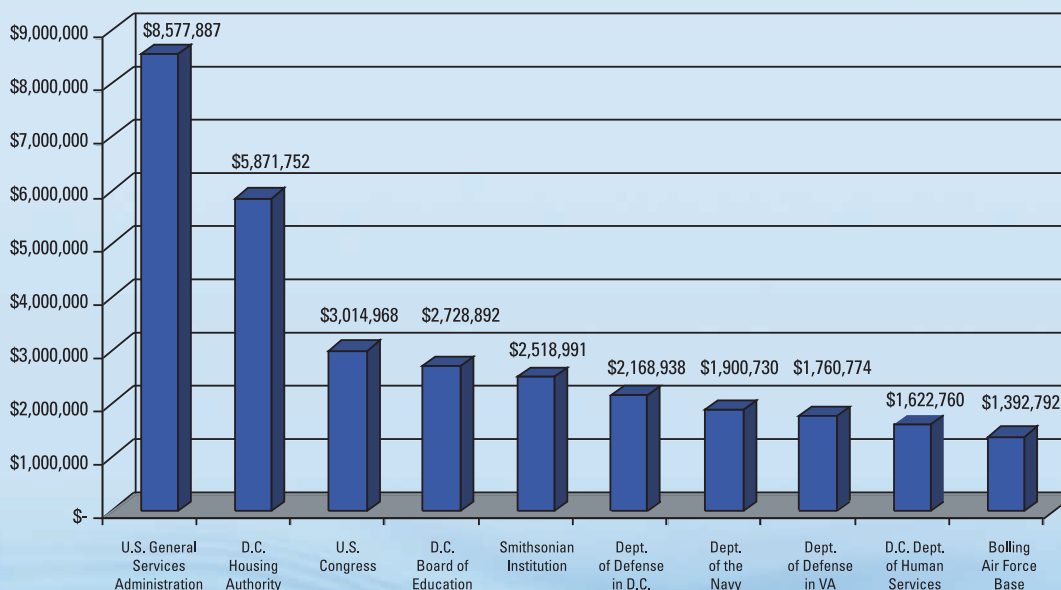
Source: D.C. Water and Sewer Authority Department of Customer Service

Largest Commercial Customer Accounts FY 2004



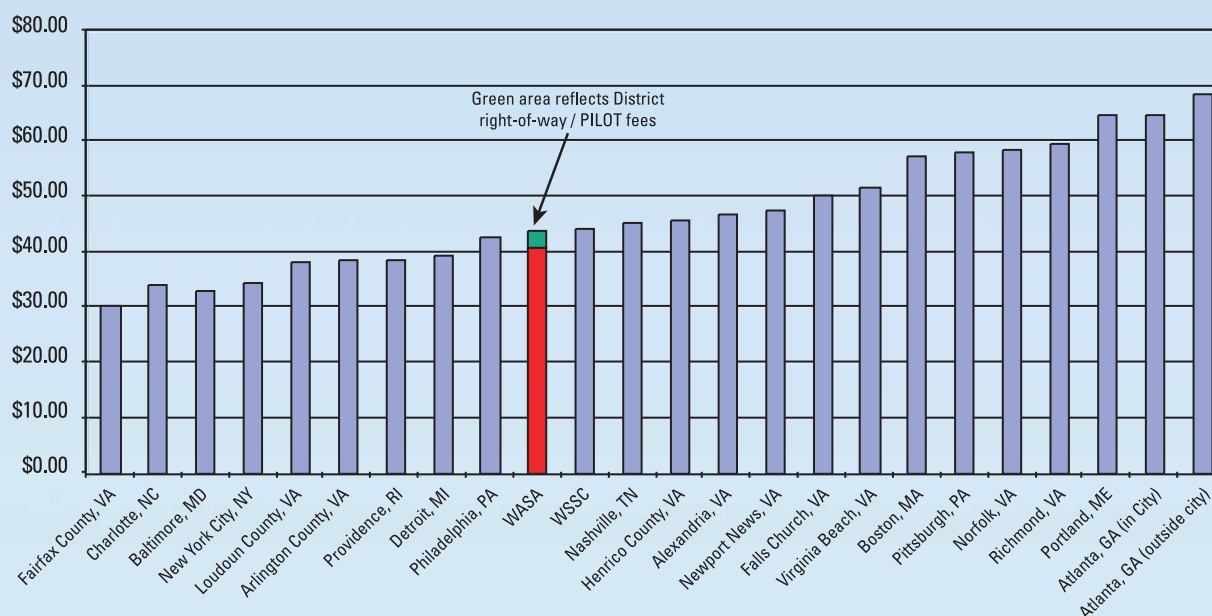
Source: Authority Department of Customer Service

Largest Retail Customer Accounts (Includes Government and Residential) FY 2004



Source: Authority Department of Customer Service

*Residential Water & Wastewater Bill Comparisons—
Monthly Basis (as of Summer 2004)⁽¹⁾*



⁽¹⁾ This analysis is based on 5/8" meters and 8.33 Ccf (hundred cubic feet) per month consumption (25 Ccf per quarter) for residential customers.

Source: Authority Department of Finance & Budget

History of Retail Water & Sewer Rates Per CcF—FY 1980–2004

Fiscal Year	Metering Fee	District Public Space Occupancy Fee - Pilot	Water Consumption Rate	Sewer Consumption Rate	Combined Consumption Rate	Average Monthly Bill ²
1980-1983	\$ -	\$ -	\$ 0.460	\$ 0.677	\$ 1.137	\$ 9.471
1984	-	-	0.537	0.998	1.535	\$ 12.787
1985	-	-	0.698	1.297	1.995	\$ 16.618
1986	-	-	0.873	1.621	2.494	\$ 20.775
1987-1996	-	-	1.004	1.864	2.868	\$ 23.890
1997	-	-	1.380	2.710	4.090	\$ 34.070
1998	-	-	1.380	2.710	4.090	\$ 34.070
1999	-	-	1.380	2.710	4.090	\$ 34.070
2000	-	-	1.576	2.710	4.286	\$ 35.702
2001-2002	-	-	1.786	2.710	4.496	\$ 37.452
2003 ⁽¹⁾	2.010	0.360	1.690	2.570	4.260	\$ 40.490
2004 ⁽¹⁾	2.010	0.360	1.740	2.630	4.370	\$ 41.410

⁽¹⁾ All rates are for one hundred cubic feet (1 Ccf) consumption with the exception of the flat metering fee, which became effective on October 1, 2002.

⁽²⁾ Average consumption is 8.33 Ccf per month.

Source: D.C. Water and Sewer Authority Department of Finance & Budget

The Blue Plains Wastewater Treatment Plant is the largest advanced wastewater treatment plant in the world, with a capacity of 370 million gallons per day (mgd), a peak capacity of more than one billion gallons per day and covering 150 acres.





**District of Columbia
Water and Sewer Authority**

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SERVING THE PUBLIC ► PROTECTING THE ENVIRONMENT