





# **TABLE OF CONTENTS**







WASA AT A GLANCE
CHAIRMAN'S MESSAGE
STRATEGIC PLAN6
BOARD OF <b>DIRECTORS</b> 6
A MESSAGE FROM THE GENERAL MANAGER
FINANCIAL PERFORMANCE
STRATEGIC FOCUS AREA  ACCOMPLISHMENTS
Community and Consumer Service 12
Organizational Effectiveness 16
Environmental Quality and Operations 20
RESEARCH PARTNERSHIPS
AWARDS AND INDUSTRY RECOGNITION 27
FINANCE AND RUDGET 28



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 a population of more than 500,000 in the District through a base of 130,000 residential, commercial, and governmental customers. WASA also collects and treats wastewater for a population of 1.6 million in Maryland and Virginia. At the end of FY 05, WASA had net assets of \$880.7 million and operating revenues of \$272.7 million.

WASA was established in 1996 through an agreement among 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, resulted in the creation of an independent, multi-jurisdictional water and wastewater authority.

The Authority is governed by an 11-member Board of Directors comprised of representatives from each service area jurisdiction. The Board independently establishes policy and sets rates. 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



The Blue Plains Advanced Wastewater Treatment Plant covers 150 acres in Southwest Washington, DC.

WASA delivers water that **supports essential services** throughout the District of Columbia.

treatment is provided to areas of Montgomery and Prince George's counties in Maryland, and Fairfax and Loudoun counties and the Town of Vienna in Virginia. The suburban jurisdictions pay the full cost for their use of facilities and services based on a funding formula.

WASA purchases its drinking water from the Washington Aqueduct, a division of the U.S. Army Corps of Engineers. The Aqueduct treats the water, and WASA distributes it throughout the District.

WASA's Board of Directors establishes rates, fees, and other charges for services. These revenues are used to pay WASA's operating costs and capital investments. ❖



Quick WASA Facts

- WASA is a *multi-jurisdictional regional utility* that provides drinking water and wastewater services to a population of more than 500,000 in the District of Columbia. It also collects and treats wastewater for a population of 1.6 million in Montgomery and Prince George's counties in Maryland, and Fairfax and Loudoun counties and the Town of Vienna in Virginia.
- Approximately 1,100 employees work at various facilities throughout the District of Columbia.
- WASA's service area covers approximately **725 square miles**.
- WASA delivers water to more than 130,000 locations in the District of Columbia and provides approximately *135 million gallons each day (MGD) of drinking water* to individuals and businesses.
- WASA operates the *Blue Plains Advanced Wastewater Treatment Plant* which is the largest advanced wastewater treatment plant in the world. Located on the bank of the Potomac River, the plant covers 150 acres with a rated treatment capacity of 370 MGD and a peak capacity of more than 1 billion gallons a day.
- WASA's *Board of Directors* establishes rates, fees, and other charges for all services provided. These revenues pay operating expenses and capital improvement costs.
- **To distribute water,** WASA operates nearly 1,300 miles of pipes, five pumping stations, five reservoirs, four elevated water storage tanks, 36,000 valves, and 8,700 fire hydrants.
- To collect wastewater, WASA operates and maintains, on behalf of the District of Columbia, 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 stormwater sewers serve two-thirds of the city. In the remaining part of the city, primarily in the downtown area, combined sewers are in service.
- WASA's *rates are very competitive* when compared to water and wastewater rates in similar cities in the Mid-Atlantic region.
- WASA has a very *stable customer base*. More than 38 percent of its revenue comes from federal, municipal, and county governments, and 40 percent comes from commercial entities whose businesses are substantially driven by the regional economy. The remaining 17 percent of revenue is derived from residential customers in the District.





# **CHAIRMAN'S MESSAGE**

In fiscal year 2005, the District of Columbia Water and Sewer Authority (WASA) entered its ninth year as an independent agency that has achieved a number of milestones in its mission to serve the public and protect the environment. As chairman, I am honored to be part of a well-managed, financially sound organization with the critical responsibility of providing water services to the District and Capital Region.

The best news about this year is that we were able to redouble our efforts to focus on service quality for our customers through the use of technology and continued investment in water and sewer improvements. In this introduction to our annual report, I want to tell you about the results of these efforts. Perhaps the most visible improvement for most of our customers is the Interactive Voice Response system that greets callers to our main customer service telephone number. This system uses advanced voice recognition technology to allow our customers to access services 24 hours a day and to obtain more accurate information without the need for follow-up calls. WASA has also completed the largest Automatic Meter Reading (AMR) installation in the country. AMR not only eliminates estimated meter readings, it also gives customers the ability the check on billing history and actual consumption.

WASA has expanded its website with new, helpful features, such as up-to-the-minute reports on water main breaks and scheduled construction. We now deliver our customer newsletter, *What's on Tap*, on a monthly basis rather than quarterly. We improved communications to customers, with better publications that are focused on high-profile projects, including Combined Sewer Overflow (CSO) control, lead service line replacement, and numerous water and sewer system improvements throughout the District.

In 2004, WASA devoted a significant amount of attention to addressing drinking water issues that were raised by elevated lead levels that appeared in tap water



**GLENN S. GERSTELL** Chairman of the Board

samples from older homes in the District. A change in water chemistry at the treatment plant has apparently solved the problem, and since January 2005, there has

been a significant, measurable and continuing drop in lead levels. Meanwhile, progress continues on a program, mandated by the Board of Directors, to replace all of the estimated 34,000 public lead water service lines with copper pipe. At the end of FY 05, WASA had replaced 7,500 lead lines since the start of the program.

As the positive trend in drinking water test results continued through the year, WASA was able to pursue and accomplish a number of objectives to protect the reliability and integrity of our infrastructure. We have undertaken an extensive study of the sewer system to address structural issues and flooding. Our 10-year capital investment program includes \$190 million for replacement and rehabilitation of our water distribution system.

Another major milestone was the Board's approval of an agreement with the federal government that would ensure significant and continuing progress in mitigating CSO that pollutes our local waterways. The agreement gives WASA the green light to implement a 20-year, \$2 billion program that will dramatically reduce the overflows from the city's combined sewer system—at an affordable pace for our ratepayers.

The work of this agency goes well beyond pipelines and pump stations. WASA continues to provide national leadership in the field of environmental science. This year, several proposals by WASA staff for national conference presentations and articles for national journals were accepted by professional associations and industry publications. These achievements, combined with numerous research grants and projects, have positioned WASA as a

leader across the nation on issues related to water quality and environmental impact.

This report is only a snapshot of the many WASA accomplishments in FY 05. It provides an overview of the financial performance and the operational achievements and challenges for one of the largest water and sewer utilities on the East Coast. WASA's success is credited to the expertise and prudent policies of its Board, the strong leadership of its General Manager and the hard work of employees striving to bring WASA closer to performing at the very top of this industry. I applaud my colleagues on the Board and the entire WASA staff for their dedication and commitment .

Sincerely,

Glenn S. Gerstell Chairman of the Board

# **WASA'S MISSION**

Mission & Vision

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.

# **WASA'S VISION**

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



# **STRATEGIC** PLAN—*Board of Directors*

The WASA Board of Directors developed a new strategic plan collaboratively with WASA staff and other 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 intent was to create a streamlined plan to guide the organization toward achievement of its vision, yet allow management the maximum freedom for innovation and leadership.

The planning process led to the development of four Strategic Focus Areas. The Board aligned its committee structure to fully support these focus areas and their objectives. 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, and 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.



David J. **Bardin**Principal Member
District of Columbia



James A. **Caldwell**Principal Member
Montgomery Co., MD



Brenda L. **Richardson**Alternate Member
District of Columbia

**Not Pictured:** 



F. Alexis H. **Roberson**Principal Member
District of Columbia



Alexander McPhail
Principal Member
District of Columbia



Alfonso N. **Cornish**Principal Member
Prince George's Co., MD



Donna MP Wilson
Principal Member
Prince George's Co., MD



Bruce F. **Romer**Principal Member
Montgomery Co., MD



Anthony H. **Griffin**Principal Member
Fairfax Co., VA



Howard **Gibbs**Alternate Member
District of Columbia

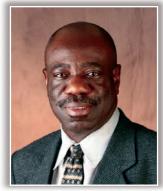


Stephanie M. Nash Alternate Member District of Columbia



Beverly **Warfield**Alternate Member
Prince George's Co., MD





Chris **Akinbobola**Alternate Member
Prince George's Co., MD

Robert **Stalzer**Alternate Member
Fairfax Co., VA



Paul E. **Folkers**Alternate Member *Montgomery Co., MD* 

**Vacant**Principal Member (2)
District of Columbia



David W. Lake Alternate Member Montgomery Co., MD

**Vacant**Alternate Member (2)
District of Columbia



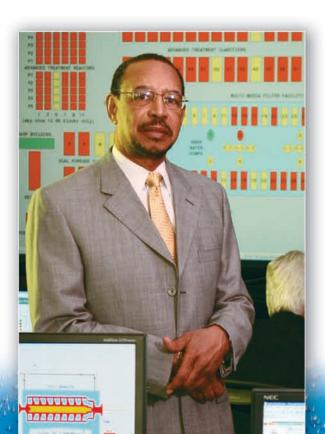
We continue our quest for world-class status. Every activity that WASA undertakes is in some way related to customer service or the environment, whether it's using automatic meter reading technology and making online account information more accessible to consumers, using new technologies to construct and repair our infrastructure, or building miles of underground storage tunnels to eliminate sewer overflows into our local rivers. Our achievements in these and related areas will continually lift WASA to the next level among the best utilities worldwide.

Financial Performance: In fulfilling this commitment to excellence, WASA continues to build a formidable financial position. In fact, WASA ended the year with operating expenditures under budget and with revenues exceeding expenses by \$48 million. These additional revenues were used for capital projects and to continue building the Rate Stabilization Fund to help offset a portion of projected future rate increases. WASA also maintained its "AA" bond ratings, the second highest rating available to state and local entities. These financial accomplishments are largely due to

the leadership of the Board of Directors, particularly their development of and adherence to sound financial policies.

Customer Service: We are communicating more effectively with our customers and strengthening partnerships in our community. As mentioned in the Chairman's Message, our new Interactive Voice Response (IVR) System allows customers to perform many self-service applications for bill payment, water usage information, credit extensions and other services. As a result of our use of Automatic Meter Reading (AMR) technology, customers can get accurate meter reading and water usage history information online. In addition, we are aggressively reaching out to the community through various customer assistance programs and volunteer initiatives to help improve the quality of life for residents.

Capital Improvements: With FY 05 expenditures of approximately \$207 million on capital construction, we are laying the foundation for delivering the highest quality services at reasonable cost. As lead levels continued to drop below the Environmental Protection Agency (EPA) action level, and as our lead pipe replacement program continued to meet its target, we spent FY 05 looking toward greater opportunities for customer service improvement and operational efficiency and productivity.



JERRY N. JOHNSON General Manager

Water Quality: We continue substantial investments to improve water pressure for neighborhoods east of the Anacostia River, and we are nearing completion of the \$61 million rehabilitation of our main water pumping facility in Northwest DC—the heart of the District of Columbia's water distribution system. On-going programs to replace defective valves, eliminate water main dead ends and rehabilitate and extend water mains will help ensure that we maintain water quality while supporting commercial and residential development. In our last annual report, I shared the success we are experiencing in our efforts to dramatically reduce elevated lead levels affecting drinking water in some households. In FY 05, we were able to report a significant and continuing downward trend in lead levels, largely attributed to a change in water chemistry by our supplier. Meanwhile, we continue the multi-year \$400 million program to replace all publicly owned lead service pipes in the District.

Sanitary and Stormwater System Management: We reached an agreement with the federal government on a 20-year, \$2 billion Long-Term Control Plan to reduce combined sewer overflows (CSO) in our local rivers. This plan is the result of a federal mandate imposed on all CSO communities, but this milestone marks a major achievement in WASA's effort to ensure that this massive environmental project is more affordable for District ratepayers. We have also completed inspection of the four large-diameter sewers that convey almost all of the District's sanitary and combined wastewater flow to Blue Plains. Interim improvements to the Potomac Interceptor to address odor complaints have been completed, and the upgrades planned for the Anacostia Main Interceptor will reduce localized flooding.

Security Upgrades: We are a major regional organization providing critical services to many political jurisdictions, and the federal government is one of our largest customers. In an era of heightened security consciousness, we completed significant security upgrades, including surveillance, remote monitoring and intrusion detection devices. We have become a critical partner in emergency preparedness planning for the national capital region.

*Employee Relations:* In FY 05, WASA conducted an Employee Climate Survey to gauge the impact of organizational changes on operations and the workforce

and to facilitate better communication among management and employees. This survey was an important and bold step in WASA's growth and maturity.

Government, Public and Community Relations: WASA is committed to strengthening our critical federal, local and community relationships, creating opportunities for solid, strategic alliances with regulators, elected officials and customers. For example, the success of our efforts to work with local elected officials, customers, and supporters at the federal level, in Congress and the Administration, has been marked by the receipt of \$84.2 million in federal funding for the CSO Long-Term Control Plan.

As we look toward the future, several development and regulatory issues command our attention. We are partners in the Anacostia Waterfront development effort. The potential changes to the Chesapeake Bay Agreement will impact the District and the surrounding jurisdictions and will dramatically affect the cost of operations at the Blue Plains Advanced Wastewater Treatment Plant. The continued implementation of WASA's strategic plan for managing biosolids, including the construction of the state-of-the-art egg-shaped digesters, will have a very positive impact on our operations and will also create a new architectural landmark at one of the southern gateways to the city.

Critical to assuring needed infrastructure improvements is our ability to maintain a strong financial performance record. At the same time, we are equally committed to building a solid organization through skilled staff, flexible and smart enough to anticipate and respond to emerging customer and community needs, as we position ourselves in the march toward world-class status. Our successes have been built by the vision of a strong executive management team, and executed by senior managers and staff who are committed to providing the highest quality water to District residents and the most advanced wastewater collection and treatment services in the world. ❖

Sincerely,

Jerry N. Johnson General Manager

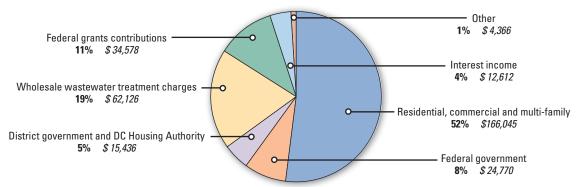
# FINANCIAL PERFORMANCE

WASA has come a long way since its creation in 1996 and has overcome extraordinary obstacles including virtual bankruptcy at its inception.

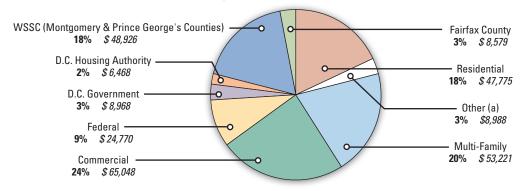
In fiscal year 2005 (FY 05), WASA entered its ninth year as an independent authority with cash reserves of \$106.4 million, the equivalent of six (6) months operating capital. WASA is solely accountable for its fiscal affairs and has earned a significant vote of confidence from the bond rating agencies. As a result of the Board's strong fiscal policies, the following highlights were achieved in FY 05:

- The Authority contributed \$4 million to the rate stabilization fund at the end of FY 05, raising the balance to \$31.5 million. The rate stabilization fund will be used to smooth out peak rate increases at the Authority's discretion and in accordance with the Board's policy of gradual and predictable rate increases.
- The Authority received a \$4.7 million appropriation from the federal government to be used with matching funds for capital projects aimed at reducing combined sewer overflows (CSOs). This raises the total federal appropriation to \$84.2 million through the end of FY 05.
- WASA's bond ratings remain at the "AA" level. This is the second highest rating category available to state and local issuers, and helps reduce the interest rates paid on debt, resulting in lower bills to customers.
- The Authority received its ninth consecutive unqualified audit opinion on its financial statements in FY 05.
- For the second straight year, residential, commercial and multi-family customer receivables over 90 days, including bad debt, continued its downward trend, declining to \$10.9 million at the end of FY 05, from \$16.3 million and \$21.8 million, at the end of fiscal years 2004 and 2003, respectively. This reduction is largely due to the comprehensive Arrears Management Program that was implemented in fiscal year 2004. This program emphasizes improved performance in the daily administration of accounts receivable management through activities like; stepped up collection efforts, more systematic field service collections, and the "Dialing for Dollars" program.
- In FY 05, the Authority successfully renewed all insurance policies at approximately the same cost as FY 2004. ❖

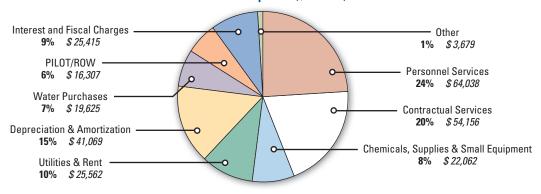




#### FY 2005 Operating Revenue by Source (\$ in 000's)



#### FY 2005 Total Expenses (\$ in 000's)



(a) Other revenues include \$3.2 million from Loudoun County, \$1.3 million from Potomac Interceptors and \$4.4 million from special billing projects.



## Community and Consumer Service

"...utilizing state-of-the-art technology to monitor, measure and manage customer expectations, and reach out to improve relationships with stakeholders and the public."

~ Board of Directors Strategic Plan

### WASA finds new ways to meet customer needs.

- Interactive Voice Response (IVR) technology offers more customer service options. IVR takes advantage of newer voice technologies that allow customers to use many self-service applications through voice communications, including bill payment, water usage information, credit extensions and other services. These new features can be accessed 24 hours a day.
- WASA uses its Customer Information and Billing systems to track lead service lines. A new Electronic Customer Information System (ECIS) has been modified to track lead line replacement in both public and private space.
- Automated Meter Reading (AMR) project is the largest in the country. With approximately 117,000 meters installed throughout the District, AMR has enabled WASA to bill most customers based on actual usage, virtually eliminating estimated billing. With data provided from its radio frequency technology, AMR lets WASA representatives pinpoint major fluctuations in usage, avoiding costly field investigations.
- AMR technology affords automatic notification of high-usage patterns. In FY 05, WASA implementing a first-in-the-nation consumption analysis tool that allows customers to access their daily, monthly and annual meter reading data. This new feature

- capitalizes on automated meter reading (AMR) technology and lets customers access this data online at www.dcwasa.com. In addition, there are graphic illustrations of the data that pinpoint high usage on the exact day it occurred. WASA piloted a new application this year that sends an email alert to customers if their usage spikes beyond a normal level. This helps customers manage their water consumption through conservation measures and leak detection.
- WASA implemented its Bill Roundup Program.

  Bill Roundup creates a voluntary cash reserve that helps families and individuals facing financial difficulties. The program lets customers round up their monthly payment to the nearest dollar mount.

  WASA uses these funds to help offset the bill payments for individuals and families in need through its SPLASH (Serving People by Lending A Supporting Hand) program. Customers participate in SPLASH by adding an additional \$1 or \$2 to their monthly bills. With more than 3,200 customers enrolled, WASA has exceeded the year's goal for SPLASH with contributions totaling \$38,375. ❖



### Community causes give WASA an opportunity to give back.

More than 86 WASA employees joined representatives from other Washington area utilities to host *Joint Utility Discount Day (JUDD)*. The program helped more than 5,000 District residents apply for discounts on their water, electric, gas, and telephone bills. WASA uses this annual event to promote its Utility Discount Program which offers a monthly discount on water bills for the first four hundred cubic feet (Ccf) of consumption to customers who qualify (based on federal income guidelines). Per customer, this discount amounts to approximately \$84 annually.



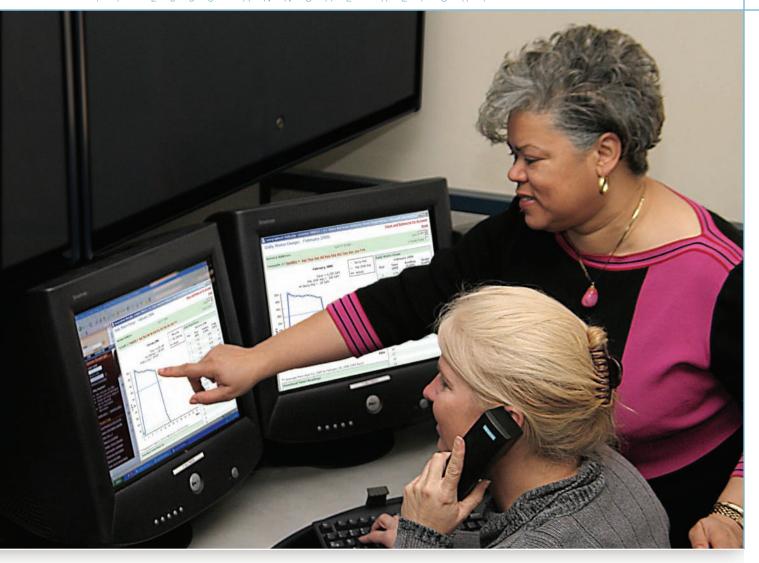
During Joint Utility Discount Day (JUDD), WASA helped thousands of District residents apply for assistance with their utility bills.

- For the second year, WASA employees volunteered to help find a cure for AIDS by participating in *AIDS Walk Washington 2005*. The 5K walkathon benefits the research, prevention and treatment initiatives of the Whitman-Walker Clinic.
- Approximately 124 WASA employees joined a field of 47,000 walkers and runners in the *16th Annual 5K Race for the Cure*, sponsored by the Susan G. Komen Breast Cancer Foundation. The WASA team, including full participation by senior staff, contributed approximately \$5,370 to the foundation's effort to find a cure for breast cancer.
- For the sixth year, WASA participated in the *Christmas in April* program to help District residents maintain their properties when they do not have the resources to do the work on their own.
- WASA employees took part in the *6th Annual Bread for the Soul* campaign by donating more than 350 toys and books, and assembling and distributing food baskets to 62 families and children living with HIV/AIDS in the District. In addition, WASA employees donated over \$2,500 in cash.



For the second year, WASA employees participated in the **5K AIDS Walk Washington** to benefit the Whitman Walker Clinic.





- Automated Meter Reading (AMR) technology enables customer service representatives and customers to **track daily water use**.
- WASA employees assisted in *Anacostia River Clean-Up Day*, a massive cleanup effort, by contributing the use of dumpsters and the skimmer boat to remove debris from the river.
- As part of the District's Hot Spot Initiative to combat crime and rebuild neighborhoods, WASA participated in *Ward 5 Clean-Up Day*, sending crews to check for illegal water hookups and missing meter covers and to clean catch basins and storm drains to prevent flooding.
- WASA is an active member of *Water Use It Wisely*, the national water conservation public education campaign to promote water conservation.

  Campaign material has been distributed at various schools and public outreach events, including neighborhood meetings, sporting events, and Green DC Week.
- WASA raised \$29,221 for *One Fund*, the District's only official charitable fundraiser that supports a range of nonprofit organizations in the Washington area. WASA also collected \$4,079 for *Water for People*. The program's mission is to provide a sustainable water supply in developing countries. ❖

## Organizational Effectiveness

"...ensuring organizational effectiveness by creating and maintaining a safe, productive, highly competent, diverse workforce." ~ Board of Directors Strategic Plan

### Training programs enhance performance and improve quality.

- began a training program to dramatically improve the customer service skills of frontline staff and improve the communication between Call Center dispatchers and the field team that responds to customer needs. The result has been significant progress toward seamless customer service from request to response and follow-up.
- WASA is building leaders from within. In 2005, WASA developed a multi-year leadership development program that: (1) identifies and then develops the baseline competencies of all senior and mid-level managers; (2) develops a plan to move the competencies down the line to supervisory level staff in 2006; and (3) integrates those competencies into a recruitment screening process that helps determine if a candidate is potentially a "good fit" for WASA.
- WASA's Internship Program is an effective education and recruitment tool. WASA has a nationally acclaimed summer internship program, offering students many opportunities to strengthen their skills, obtain valuable experience, and make a contribution to the organization as environmental professionals after graduation. The 2005 class was the largest and most diverse in the history of the program, with 31 students from part near and far—



Getting feedback on the **Employment Climate Survey** results was important to the process.

Thailand, Kenya, Northern Virginia, Serbia, China, New York City, Ghana, and the District of Columbia. To date, WASA has hired 11 former interns in several of its technical operation divisions.

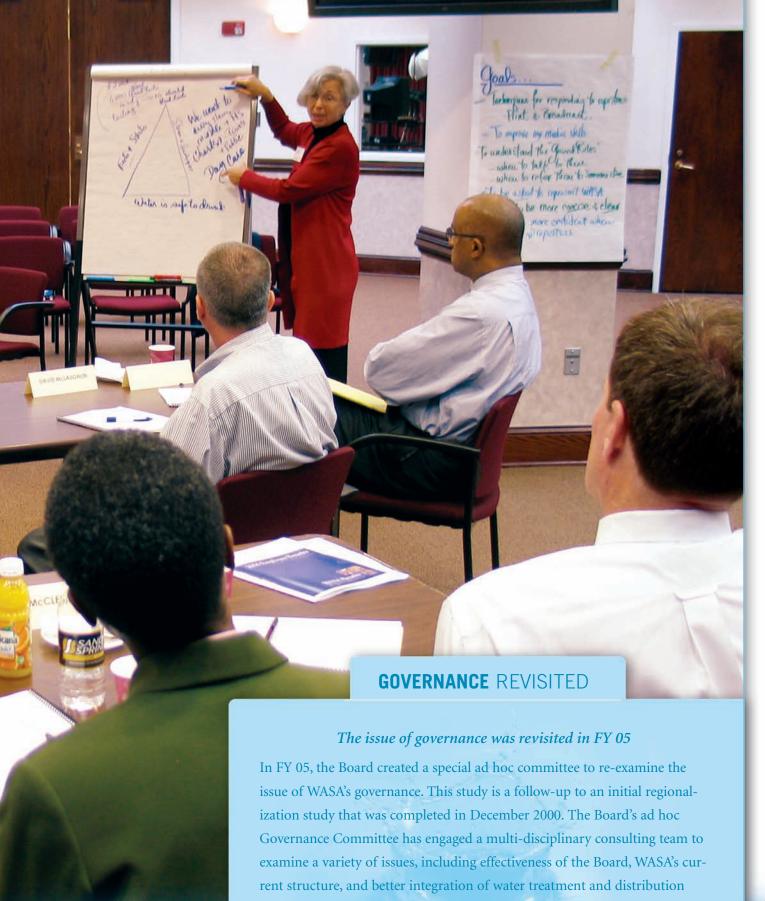
■ WASA's adult literacy program, WASA Reads, helps employees, confidentially, strengthen their reading and basic arithmetic skills, and improve their ability to keep pace with increasing job literacy demands. ❖



WASA's 2005 internship class was the **most diverse** in the program's history.

**Training and development** is key to empowering employees to become more productive and innovative in their work.





functions in the District of Columbia. The consulting team will interview a wide variety of stakeholders in the District and across the region and then

present governance options and recommendations to the Board.

# Wellness, retirement and investment programs offer employees quality of life options and flexibility.

WASA completed the second year of its agency-wide wellness program, which includes seminars and workshops on a variety of health topics, workplace health screenings and fitness tests, as well as opportunities to participate in exercise activities and nutrition programs.

WASA Fit is a 12-week fitness program to encourage staff to get more physically active in their daily lives. WASA Fit helps employees improve their overall health and quality of life, as well as develop a strong sense of teamwork.

Retirement planning is offered for employees who are participants in the Civil Service Retirement System (CSRS) and for non-Civil Service employees with a 401(a) Plan.

*Investment counseling* provides guidance on investing retirement funds for employees in the WASA 457(b) Deferred Compensation Plan.

As investment opportunities continue to change, WASA counsels employees on **retirement plan options**.



### WASA customer outreach is a broad-reaching and ongoing activity.

The WASA website,
www.dcwasa.com, and monthly
customer newsletter, What's on
Tap, have markedly improved
communication with customers. In
FY 05, WASA published its annual
Drinking Water Quality Report
(Consumer Confidence Report),
an Update on Lead in District
Drinking Water, and an expanded
information guide on Combined
Sewer Overflow control.

WASA has provided extensive specialized communications for a number of high-profile projects, including Combined Sewer Overflow Control, the lead service line replacement program, and various water and sewer system improvements throughout the District. Individual customer mailings were provided for these programs, and

numerous public meet-

ings were held for the

CSO project, lead service line replacement program, the Northeast Boundary Sewer upgrade project, and water system infrastructure improvements in Anacostia.

■ The Authority has also received *national and international recognition* for its capital projects through articles in industry publications, broadcast documentaries, and newscasts.



In FY 05, WASA hosted a record number of meetings (approximately 35) directly with customers on a variety of issues, including lead service line replacement and proposed rate and fee increases. The use of existing community forums

to educate customers on a range of water and sewer issues, allowed WASA to reach a far greater number of customers than in previous years.

■ WASA has engaged the Gallup Organization to conduct its first *comprehensive customer survey* to provide benchmark data for operational and customer service improvements. This survey of residential and commercial customers will measure satisfaction and awareness levels of WASA operations and programs. ❖

## **Environmental Quality and Operations**

"...providing excellent environmental stewardship, meeting and surpassing regulatory standards and managing the Authority's infrastructure effectively."

~ Board of Directors Strategic Plan

### Water Services—Distribution and Quality

Each day, WASA distributes 135 million gallons of drinking water through a 1,300-mile network of transmission pipes and water mains, ranging from 4 to 78 inches in diameter, beneath the city streets. Like many older East Coast cities, the District's distribution system was installed before World War II. Some pipes are more than 100 years old in a system that also includes more than 36,000 valves and 8,700 hydrants. The Authority also operates and maintains five water pumping stations—Bryant Street, Old Fort Reno, New Fort Reno, 16th and Alaska, and Anacostia.

WASA is replacing and rehabilitating mains throughout the District. These projects include joint repairs on large (16-inch or larger) mains with a high frequency of joint leaks. The rehabilitation of a huge 48-inch water transmission main near the Bryant Street pumping station and a 42-inch concrete pipe main in Northeast DC was completed in FY 05. Also in FY 05, WASA replaced 5,000 linear feet of a 20-inch water main in the Anacostia First High service area (pressure zone).

The design phase for the replacement of mains in the Capitol Hill area was completed in FY 05 and construction began on replacement of the main that crosses Rock Creek Park via the Duke Ellington Bridge (Calvert Street Bridge).

WASA is replacing defective valves on large water transmission mains. Many of these have been in the ground since the early 1900s. Properly operating valves are required to flush the distribution system annually and isolate parts of the system for routine and emergency repairs. As part of the \$12.5 million program, WASA replaced the valves on large underground water transmission mains at two intersections this year. A 24-inch valve was replaced at 16th and Military at Georgia and Missouri, 30 and 48-inch valves were replaced, and new 48-inch valve was added.

- WASA is ridding the system of dead-ends.

  Eliminating the potential for stagnant water buildup at the ends of water mains helps maintain water quality in the distribution system. In keeping with WASA's aggressive focus on water quality, three of these projects were accelerated for construction in 2005.
- One of WASA's most significant water system improvements has been the rehabilitation of the Bryant Street Water Pumping Station, one of the oldest stations in the District. The \$61 million project included replacing 11 high-lift pumps; making architectural improvements to the building; replacing heating, cooling and ventilating systems; making site improvements, replacing water mains; and upgrading the electronic monitoring systems for water distribution and security.
- WASA announces service improvements east of the Anacostia. WASA has earmarked more than \$70 million in projects east of the Anacostia River to enhance water system pressure and reliability. The work includes a new water pumping station and water tower, and new transmission and distribution mains.

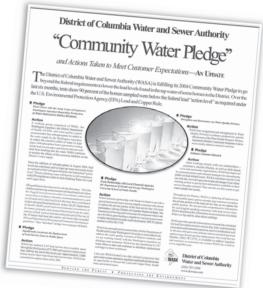




Lead levels in District drinking water continue to decline. In FY 05, WASA continued to meet the obligations of its 2004 Community Water Pledge to lower the lead levels found in some District tap water samples. Tests in the first six months of 2005 showed that 90 percent of sampled homes had fallen below the federal lead "action level" as required under the Environmental Protection Agency Lead and Copper Rule. The lower lead levels are attributed to the addition of orthophosphate to District drinking water in June 2004. This change in water chemistry reduced the corrosiveness of the water traveling through lead pipes—preventing lead from leaching into the water.

Moreover, in the analysis of potential health effects, the District Department Health concluded, after thousands of blood screenings, that residents with elevated lead levels in their tap water *did not* have elevated blood lead levels. WASA, however contin-

The **Bryant Street Water Pumping Station** pumps approximately 90 million gallons of water to customers throughout the city each day.





The Community
Water Pledge reflects
WASA's commitment
to go beyond federal
regulations to ensure
water quality for its
customers.



WASA's **large valve replacement program** is essential to the performance and maintenance of the water distribution system.

Operators in WASA's **central control facility** can monitor and control virtually all plant operations at Blue Plains.



ued to respond to citizens' concerns through a fully staffed Lead Hotline, water filter distribution program, and frequent community meetings and mailings.

In FY 05, WASA replaced more than 3,900 public lead service lines, bringing the total replacements by the end of the year to more than 6,000. To encourage the replacement of service lines on private property, WASA offers a range of payment options—grants, loans and installments—for eligible property owners. •



### Wastewater Services—Treatment and Recycling

The Blue Plains Advanced Wastewater Treatment Plant provides services to more than two million people in the area and is the world's largest advanced wastewater treatment facility. Treatment includes liquid process facilities that handle both sanitary and peak stormwater flows, and solids processing facilities that treat the residual solids removed during treatment. Blue Plains treats wastewater at a level that meets one of the most stringent federal discharge permits in the country.

WASA continued its 10-year, \$1.4 billion Blue Plains rehabilitation initiative, making progress on several major projects. The primary treatment facilities upgrade was completed. Work is well underway with secondary treatment upgrades and implementation of the process computer control system.

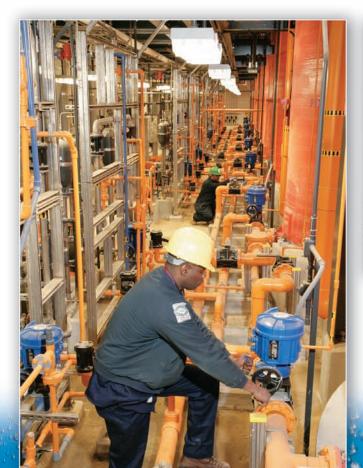
■ WASA's efficient operations processes are lauded.

Since 1996, Blue Plains has been recognized by the Association of Municipal Sewerage Agencies (AMSA) for its excellent record of compliance with federal regulations—a result of optimized operations and maintenance practices. A new electronic system allows WASA to track the status of equip-

ment and process trains, and a new computerized maintenance management system is now online.

- The high-priority pumping station rehabilitation program improves operations. In FY 05, important improvements were made to operations, sanitation, and employee safety. A new lube oil system, dewatering pumps and washer/compactors were installed at Potomac Pumping Station. Ventilation improvements were made at the Upper Anacostia, O Street and the existing Eastside pumping stations.
- Blue Plains surpasses nitrogen reduction goals. The Blue Plains wastewater treatment plant has been the single, largest point source of nitrogen traveling to the Chesapeake Bay, discharging approximately 14 million pounds of nutrients into the Bay each year. To meet the Chesapeake Bay nitrogen reduction goal, a full-scale denitrification process was incorporated in 2000. By FY 05, the nitrogen load was reduced by 56 percent, exceeding the 1987 Chesapeake Bay Agreement reduction goal of 40 percent.

- WASA plans for international WEFTECH spotlight. WASA initiated agency-wide planning activities to prepare for the 78th Annual Water Environment Federation's Technical Exhibition and Conference (WEFTEC) coming to the District of Columbia in November 2005. WASA serves as host for technical tours and presents various research findings.
- WASA Pretreatment Program expands its services. WASA operates an Industrial Pretreatment Program that issues wastewater discharge permits to regulate non-domestic wastewater discharged into the District's sewer system. In March 2005, WASA began receiving an average of 176,000 gallons per month of domestic septage and other authorized hauled waste at its new Septage Receiving Station at Blue Plains. Before the new facility, WASA was receiving less than 12,000 gallons per month of hauled waste at temporary receiving stations.
- Design of Egg-Shaped Digester Facilities has been completed. When constructed, these digester facilities will be one of the largest in the world and will treat approximately 350 dry tons each day of wastewater treatment residuals. Currently, the handling and disposal of residual solids from treatment is a huge undertaking that uses approximately 70 trucks a day to haul to agricultural sites in Virginia for reuse. These digesters will offer significant operational and environmental benefits: material volume will be reduced by nearly 50 percent; operational and maintenance costs will be reduced by \$16 million annually; and truck traffic and pollution will be reduced by nearly 50 percent. The digesters will produce a stable, dependable and sought-after agricultural product (fertilizer/soil conditioner), and a renewable bio-gas will be produced that can power 10,000 District homes or produce approximately one-third of Blue Plains' electrical needs. Construction of the \$400 million project is scheduled to begin in FY 06 with the first digesters in service by FY 10. ❖





The \$400 million digester project will line the District skyline with eight egg-shaped towers, 108 feet tall, along the Potomac River.

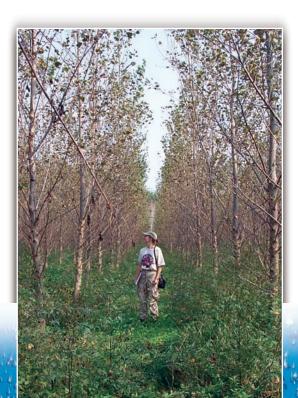


The mix and quantity of chemicals added in the **wastewater treatment process** is carefully monitored.

### **Sewer Services—Collection and Environmental Protection**

WASA's responsibility for wastewater collection in the District of Columbia involves the operation and maintenance of the sanitary and combined sewer systems. The 1,800 miles of sewer lines 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. The existing sanitary sewer system in the District dates back to 1810, and includes a variety of materials such as brick, concrete, clay, reinforced concrete, ductile iron, plastic, steel, and even fiberglass. In addition, WASA also operates and maintains the 50-mile-long Potomac Interceptor System, which carries wastewater from areas in Virginia and Maryland to Blue Plains.

Sewer evaluation examines conditions and needed upgrades. WASA has undertaken an extensive assessment of the District sewer system to determine its condition, verify adequate capacity, and begin needed capital improvement projects. The rehabilitation of the Georgetown sanitary sewer system is an identified project that will involve the replacement of existing sewers found to have numerous structural defects. Deteriorated 30 and 36-inch diameter sewers are also scheduled for rehabilitation on 10th and 12th streets NW. The portion of the East Side Interceptor that traverses the National Arboretum has significant structural distress, and rehabilitation will be completed in FY 06.



- Potomac Interceptor rehabilitation project will address odor and structure. WASA has been working with its wholesale wastewater treatment 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. Interim odor improvements have been completed. Further work requires National Park Service approvals and various required jurisdictional permits for construction locations.
- Sewer pumping station rehabilitation is ongoing. Three sanitary pumping stations, Upper Anacostia, Earl Place, and Rock Creek, have been selected for major rehabilitation and should be completed in FY 08. Construction is underway on a new Eastside Pumping Station in Anacostia Park next to the existing Swirl Facility near DC General Hospital. The new station will be completed in FY 06 and consists of four 15 MGD pumps for increased capacity.
- WASA plays a large role in protecting District rivers. In FY 05 WASA reached an agreement in a federal lawsuit to implement a very extensive program that will dramatically reduce the overflows from the District's combined sewer system that pollute local waterways, especially the Anacostia River. The agreement calls for WASA to implement a plan over a 20-year period for a variety of capital investments throughout the District including:
  - Miles of huge subway-size underground tunnels to store the combined sewage and stormwater until it can be treated at Blue Plains to protect the Anacostia, Potomac, and Rock Creek/Piney Branch waterways

University of Maryland researcher checks a tree farm growing in soil supplemented with WASA biosolids.



Men at work on the junction chamber of the **new Eastside Pumping Station**. The pipe shown connects to the sewer bringing wastewater into the chamber before it is pumped to Blue Plains.

 Sewer separation and outfall consolidation to eliminate 14 CSO outfalls along the rivers near public areas including the Georgetown waterfront and the Anacostia marinas



The **20-year program to control combined sewer overflow (CSO)** includes three deep underground storage tunnels, side tunnels to reduce flooding, pump station rehabilitation and the elimination of 14 CSO outfalls along the Potomac and Anacostia rivers and Rock Creek.

- Pump station rehabilitation and new construction
- Blue Plains wastewater plant improvements to increase excess flow capacity

Realizing the significant impact the \$2.2 billion cost of the long-term control plan will have on District ratepayers, WASA continues its efforts to secure federal funding assistance. To date, Congress has appropriated \$84.2 million for the costly project.

Meanwhile, WASA is currently completing construction on approximately \$140 million in projects that are projected to reduce overflows by 40 percent by 2008. To date, overflows are down by 24 percent since the replacement of tide gates to keep river water from entering the sewer system and the replacement of inflatable dams that hold back overflows until they can be treated. Engineering designs are underway to separate the combined sewers in selected areas of the Anacostia and Rock Creek watersheds. Additionally, design and construction work is underway on the rehabilitation of major sewage pumping stations to increase their capacity. ❖

# **RESEARCH PARTNERSHIPS**

WASA is collaborating with a number of national research foundations and Mid-Atlantic universities on wastewater and biosolids management research projects designed to answer operational questions and improve or develop new processes. These collaborative projects allow WASA to expand its research capabilities, foster peer review research, and contribute to the development of the next generation of wastewater treatment engineers and environmental scientists.

- In cooperation with other utilities in Maryland and Virginia, WASA is funding the third and final year of a major project involving the mobility of phosphorus from biosolids to the aquatic environment. This research is being conducted by the *University of Delaware, Virginia Tech*, the *University of Maryland* and *Penn State University*.
- WASA is supporting joint research by the *University of Maryland* and the *U.S. Department of Agriculture* to assess odors associated with the land application of biosolids.
- WASA has partnered with *Howard University's*College of Engineering, Architecture and Computer

  Sciences to develop a wastewater technologies center, initially focusing on the application of membrane filtration processes to improve wastewater treatment efficiency.
- WASA provides support to the American Water Works Association Research Foundation, a national collaborative research effort involving over 1,000 utilities and other supporters around the world. Research projects address drinking water quality, operation and maintenance methods, health effects and management issues.
- Through its sponsorship of the *Water Environment Research Foundation* (WERF), WASA is working with utilities around the world to develop new technology to improve wastewater system operations. WASA staff serve on project advisory committees addressing health, safety and management issues.

- WASA was awarded an additional WERF project to study and test online nitrate analyzers that are currently on the market for use in the wastewater treatment process. This new project is added to 12 ongoing WERF projects at WASA. Of particular interest is the work being done on the project "Protocols for the timely investigation of potential health incidents associated with Biosolids Land Application."
- In another research endeavor, WASA serves as a principal investigator on a project entitled "Understanding Mechanisms and Methods to Mitigate Survival, Reactivation and Regrowth of Fecal Coliforms in Anaerobically Digested Biosolids." The project involves field testing for possible mitigation options for reactivation. ❖

WASA analyzes **nitrate levels in effluent** discharged into the Potomac River.



## AWARDS AND INDUSTRY RECOGNITION

Over the past several years, the District of Columbia Water and Sewer Authority (WASA) has won national recognition from industry peer groups in several areas, including regulatory compliance and financial reporting.

National certification of WASA's biosolids management program is the first on the East Coast and fifth in nation. In FY 05, WASA's Environmental Management System (EMS) for biosolids was nationally certified by the National Biosolids Partnership (NBP), a nonprofit alliance that promotes environmentally sound and accepted biosolids management practices. (The non-liquid



WASA General Manager Jerry N. Johnson (I.) and Biosolids Manager Chris Peot receive **EPA** award for biosolids program during international conference in Washington, DC.

residue generated during the treatment of domestic sewage at a treatment facility is called biosolids.) The prestigious certification placed WASA among other leading utilities in the nation that are continually improving environmental performance, meeting regulatory compliance obligations, utilizing good management practices, creating meaningful opportunities for public participation, and conforming with NBP requirements. NBP is comprised of the EPA, the Water Environment Federation (WEF), and the Association of Municipal Sewerage Agencies (AMSA).

- WASA was presented with the Environmental Protection Agency (EPA) coveted 2005 National First Place Clean Water Act Recognition Award. The award acknowledged dramatic improvements in WASA's Biosolids Management Program through leading-edge research, outstanding operational projects, technological advances and extensive outreach and public involvement to promote the beneficial uses of municipal wastewater biosolids.
- WASA again received the *Gold Award* from the National Association of Clean Water Agencies (formerly AMSA) in FY 05 for complete and consistent compliance with EPA permit requirements at Blue Plains
- WASA was awarded "Top Contributor of the 2005 National Institute of Government Purchasing Region II" during the Metropolitan Washington Chapter's First Annual Conference in FY 05.
- In FY 05, the Government Finance Officers Association (GFOA) awarded WASA the Certificate of Achievement for Excellence in Financial Reporting for

2004. This is the highest form of recognition in governmental accounting and financial reporting.





## FINANCE AND BUDGET\*

"... maintaining a sound financial position by optimizing operational and capital programs and exploring additional revenue sources, while maintaining fair and equitable rates." ~ Board of Directors Strategic Plan

#### **Total Revenues**

Total revenues (including federal grants and contributions) were \$319.9 million in fiscal year 2005, an increase of \$20.7 million or 6.9 percent over fiscal year 2004. This is primarily due to increases of \$8.4 million in water and wastewater user charges, \$9.1 million in interest income, and \$3.1 million in Federal grants contribution.

### **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.

### **Expenses**

Operating expenses increased by \$1.5 million or 0.7 percent in fiscal year 2005, primarily due to \$4.7 million increase in chemical purchases, \$3.3 million increase in utilities expense, \$1.6 million increase in personnel services, and \$0.6 million increase in depreciation expense. These increases were offset by a \$7.3 million decrease in contractual services and \$1.1 million in water purchases expense. Non-operating expenses increased by \$0.1 million.

#### Capital Assets

At the end of fiscal year 2005, the Authority had \$1.9 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 \$174.8 million, or 10.2 percent over last year due to continued capital spending in accordance with the capital improvement program.

<sup>\*</sup> Source: District of Columbia Water and Sewer Authority Comprehensive Annual Financial Report 2005

#### THOMPSON, COBB, BAZILIO & ASSOCIATES, P.C.

Certified Public Accountants and Management, Systems and Financial Consultants

1101 15th Street, N.W. Suite 400 Washington, D.C. 20005 (202) 737-3300 Fax: (202) 737-2684

Regional: 100 Pearl Street 14th Floor Hartford, CT 06103 (203) 249-7246 Fax: (203) 275-6504

21250 Hawthorne Boulevard Suite 500 Torrance, California 90503 (310) 792-7001 Fax: (310) 792-7004

#### Independent Auditor's Report

Board of Directors

District of Columbia Water and Sewer Authority:

We have audited the accompanying statements of net assets of the District of Columbia Water and Sewer Authority (WASA) (a component unit of the District of Columbia) as of September 30, 2005 and 2004, and the related statements of revenues, expenses and changes in net assets and cash flows for the years then ended. These financial statements are the responsibility of WASA's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The Management's Discussion and Analysis on pages 35 through 45 is not a required part of the basic financial statements but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the District of Columbia Water and Sewer Authority as of September 30, 2005 and 2004, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

December 23, 2005

Washington, DC Thompson, Coff, Bazilio & Associates, P.C.

#### Statements of Net Assets September 30, 2005 and 2004 (In thousands)

Assets	2005	2004
Current assets:		
Cash and cash equivalents (note 3)	\$ 89,331	\$ 48,405
Investments (note 3)	64,762	99,747
Customer receivables, net of allowance for doubtful accounts of \$7,756 in 2005 and \$6,876 in 2004 (note 7)	34,721	41,497
Due from Federal government (note 6)	19,301	24,888
Due from District government (note 0)	14,162	6,863
Due from other jurisdictions (note 8)	12,653	20,907
Due from stormwater fund (note 13)	211	· —
Inventory	7,097	6,984
Prepaid assets	460	296
otal current assets	242,698	249,587
loncurrent assets:		
Restricted assets (note 3):	017.500	001.010
Cash and cash equivalents	217,538	281,213
Investments	20,000	44,818
otal restricted cash equivalents and investments	237,538	326,031
Utility plant (note 4):	1 000 000	1 700 027
In-service Less accumulated depreciation	1,823,606 (672,559)	1,796,037 (638,111)
Net utility plant in service	1,151,047	1,157,926
Construction in progress	734,600	552,898
Net utility plant	1,885,647	1,710,824
Other noncurrent assets:		
Due from other jurisdictions, net of allowance for doubtful accounts of \$4,396 in 2005 and \$2,410 in 2004 (note 8)	26,377	30,169
Purchased capacity, net of accumulated amortization of \$37,729	20,377	30,103
in 2005 and \$34,671 in 2004 (note 5)	147,405	139,789
Total other noncurrent assets	173,782	169,958
otal noncurrent assets	2,296,967	2,206,813
Total Assets	2,539,665	2,456,400
Liabilities		
Current liabilities:		
Accounts payable and accrued expenses	72,219	77,225
Compensation payable (note 9)	13,123	9,042
Accrued interest	12,563	12,764
Due to stormwater fund (note 13)	_	293
Due to jurisdictions	8,560	6,731
Deferred revenue	29,875	28,052
Current maturities of long-term debt (note 10)	13,390	16,134
otal current liabilities	149,730	150,241
loncurrent liabilities:	040 400	001.710
Deferred revenue Deferred revenue-CSO	646,490	601,710
Other liabilities (note 12)	70,406 20,674	70,828 15,802
Long-term debt excluding current maturities (note 10)	771,637	785,111
otal noncurrent liabilities	1,509,207	1,473,451
otal liabilities	1,658,937	1,623,692
	1,000,007	1,020,002
let Assets Invested in capital assets, net of related debt	713,470	651,250
Restricted for:	/13,4/0	001,200
Debt service	39,765	38,302
Capital projects	2,146	815
Unrestricted	125,347	142,341
otal net assets	\$ 880,728	\$ 832,708

### Statements of Revenues, Expenses and Changes in Net Assets Years Ended September 30, 2005 and 2004 (In thousands)

	2005	2004
Operating revenues:		
Water and wastewater user charges:		
Residential, commercial and multi-family customers	\$ 166,045	\$ 159,165
Federal government	24,770	26,444
District government and DC Housing Authority (note 13)	15,436	15,464
Charges for wholesale wastewater treatment	62,126	60,834
Other	4,366	2,427
otal operating revenues	272,743	264,334
Operating expenses:		
Personnel services	64,038	62,449
Contractual services	54,156	61,491
Chemicals, supplies and small equipment	22,062	17,384
Utilities and rent	25,562	22,217
Depreciation and amortization	41,069	40,500
Water purchases	19,625	20,692
Other	3,679	3,955
otal operating expenses	230,191	228,688
Operating income	42,552	35,646
lonoperating revenues (expenses):	10.010	2.470
Interest income	12,612	3,472
Payment in lieu of taxes and right of way fee (note 13) Interest and fiscal charges	(16,307)	(15,778)
5	(25,415)	(26,060)
otal nonoperating revenues (expenses)	(29,110)	(38,366)
ncome before contributions and transfers (note 15)	13,442	(2,720)
Federal grants and contributions	34,578	31,455
Change in net assets	48,020	28,735
otal net assets, beginning of year	832,708	\$803,973
otal net assets, ending of year	\$ \$880,728	\$ 832,708

### Statements of Cash Flows Years Ended September 30, 2005 and 2004 (In thousands)

	2005	2004
Cash flows from operating activities:		
Cash received from customers	\$ 273,605	\$ 263,388
Cash paid to suppliers for goods and services	(122,459)	(124,234)
Cash paid to employees for services	(59,957)	(61,348)
Net cash provided by operating activities	91,189	77,806
Cash flows from capital and related financing activities:		
Proceeds from issuance of commercial paper	_	50,000
Repayments of commercial paper	_	(50,000)
Proceeds from revenue bonds	_	291,451
Proceeds from other jurisdictions	67,284	85,961
Repayments of bond principal and notes payable to federal and district government	(15,297)	(17,248)
Acquisition of utility plant and purchased capacity	(206,721)	(244,442)
Payments of interest and fiscal charges	(32,422)	(25,951)
Contributions of capital from Federal government	30,592	80,992
Net cash provided by (used in) capital and related financing activities	(156,564)	170,763
Cash flows from non-capital financing activities -		
Loan from DC government	_	10,900
Repayment of loan to DC government	(10,900)	_
Transfers-Out (payment in lieu of taxes and Right of way fee)	(16,307)	(18,221)
Net cash used by non-capital financing activities	(27,207)	(7,321)
Cash flows from investing activities:		
Cash received for interest	10,031	2,971
Investment purchases	(182,810)	(164,572)
Investment maturities	242,612	34,985
Net cash used in investing activities	69,833	(126,616)
Net increase in cash and cash equivalents	(22,749)	114,632
Cash and cash equivalents (including restricted) at beginning of year	329,618	214,986
Cash and cash equivalents (including restricted) at end of year	\$ 306,869	\$ 329,618
Operating income	\$ 42,552	\$ 35,646
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	41,069	40,500
Change in operating assets and liabilities:		
Decrease in customer and other receivables	6,756	4,374
Increase in inventory	(276)	(216)
Increase (decrease) in payables and accrued liabilities	9,038	(1,639)
Decrease in deferred revenue	(7,950)	(859)
Net cash provided by operating activities	\$ 91,189	\$ 77,806

#### Operating Revenue by Source FY 1996–2005 (\$000)

Revenue Source	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Residential/Commercial	\$ 101,078	\$ 115,294	\$ 138,697	\$ 138,328	\$ 131,399	\$ 139,429	\$ 148,134	\$ 147,870	\$ 159,165	\$ 166,045
Governmental										
Federal	21,946	24,024	25,068	26,859	24,092	26,199	28,501	26,884	26,444	24,770
DC Government (1)	_	12,268	21,883	11,168	10,883	9,543	10,293	9,943	9,129	8,968
DC Housing Authority	6,623	7,035	7,770	5,720	5,194	6,284	6,203	6,129	6,335	6,468
Subtotal Governmental	28,569	43,327	54,721	43,747	40,169	42,026	44,997	42,956	41,908	40,206
Total Retail Revenues	\$ 129,647	\$ 158,621	\$ 193,418	\$ 182,075	\$ 171,568	\$ 181,455	\$ 193,131	\$ 190,826	\$ 201,073	\$ 206,251
Charges for Wholesale Sewer Treatment	35,989	52,333	50,566	56,107	50,284	52,542	53,211	61,682	60,834	62,126
Other Revenues	5,854	6,230	14,459	4,450	6,078	3,483	2,387	3,287	2,427	4,366
Wholesale Water Revenues (2)	9,546	4,310	_	_	_	_	_	_	_	_
Total Revenues	\$ 181,036	\$ 221,494	\$ 258,443	\$ 242,632	\$ 227,930	\$ 237,480	\$ 248,729	\$ 255,795	\$ 264,334	\$ 272,743

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

Source: FY 1996 – 2005 Audited Statements of Revenue, Expenses and Changes in Net Assets

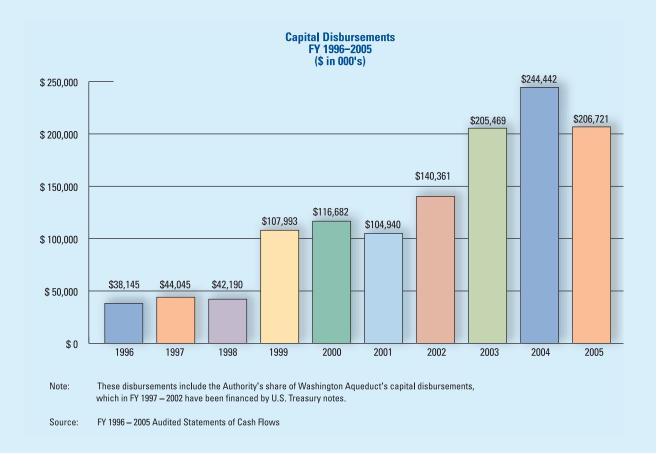
# Operating Expenses by Category FY 1996–2005 (\$000)

Expense Category	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Personnel	\$ 50,758	\$ 51,197	\$ 53,956	\$ 60,674	\$ 63,078	\$ 62,055	\$ 62,162	\$ 64,091	\$ 62,449	\$ 64,038
Contractual	40,539	55,904	66,340	56,017	54,552	58,976	59,166	63,065	61,491	54,156
Supplies	14,686	14,057	17,722	11,431	13,129	15,488	13,683	14,768	17,384	22,062
Occupancy	15,392	16,668	21,173	21,225	20,091	21,219	20,071	20,804	22,217	25,562
Depreciation & Amortization	18,660	25,695	26,278	28,227	30,329	32,971	37,099	39,524	40,500	41,069
Water Purchases	16,760	21,620	23,313	18,922	16,358	17,085	16,904	13,723	20,692	19,625
PILOT/ Right of Way Fee (1)	_	_	_	_	9,177	15,026	15,247	15,513	15,778	16,307
Other	387	1,407	_	_	_	_	_	_	3,955	3,679
Total Operating Expenses	\$ 157,182	\$ 186,548	\$ 208,782	\$ 196,496	\$ 206,714	\$ 222,820	\$ 224,332	\$ 231,488	\$ 244,466	\$ 246,498

(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 1996 – 2005 Audited Statements of Revenue, Expenses and Changes in Net Assets

<sup>(2)</sup> 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.

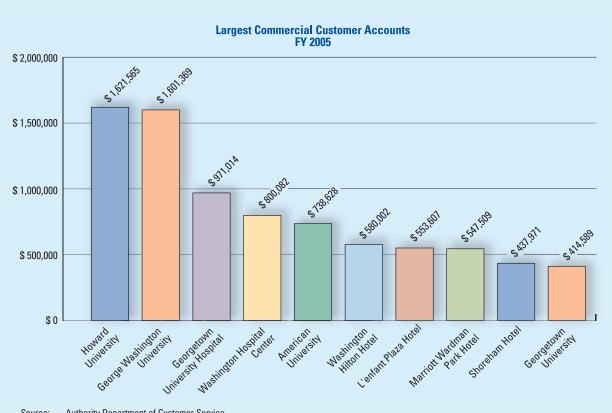


# Number and Type of Customer Accounts as of September 30, 2005

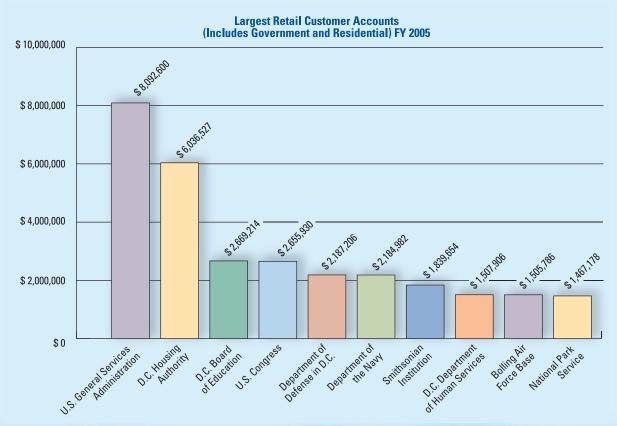
TYPE OF ACCOUNT		NUMBER OF ACCOUNTS
Residential		102,418
Commercial (1)		18,337
Governmental		
Federal	526	
District of Columbia	565	
DC Housing Authority	1,179	
<b>Total Governmental</b>		2,270
WASA		29
Washington Aqueduct		1
Wholesale		7
TOTAL NUMBER OF ACCOUNTS		123,062

(1) Included in commercial accounts are 46 exempt accounts (38 for Howard University and 7 for Soldiers' Home)

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



Source: **Authority Department of Customer Service** 



**Authority Department of Customer Service** 

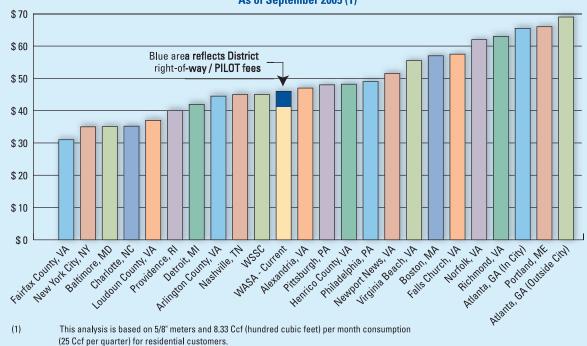
#### History of Retail Water & Sewer Rates per Ccf FY 1980 – 2005

Fiscal Years	Metering Fee	District Public Space Occupancy Fee-PILOT	Water Consumption Rate	Sewer Consumption Rate	Combined Consumption Rate	Average Monthly Bill (2)
1980–1983	\$ —	s —	\$ 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
2005 (1)	2.010	0.360	1.830	2.760	4.590	\$ 43.240

(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: Authority Department of Finance & Budget

#### Residential Water & Wastewater Bill Comparisons Monthly Basis As of September 2005 (1)



Source: Authority Department of Finance & Budget





# District of Columbia Water and Sewer Authority

5000 Overlook Avenue, SW Washington, DC 20032 www.dcwasa.com