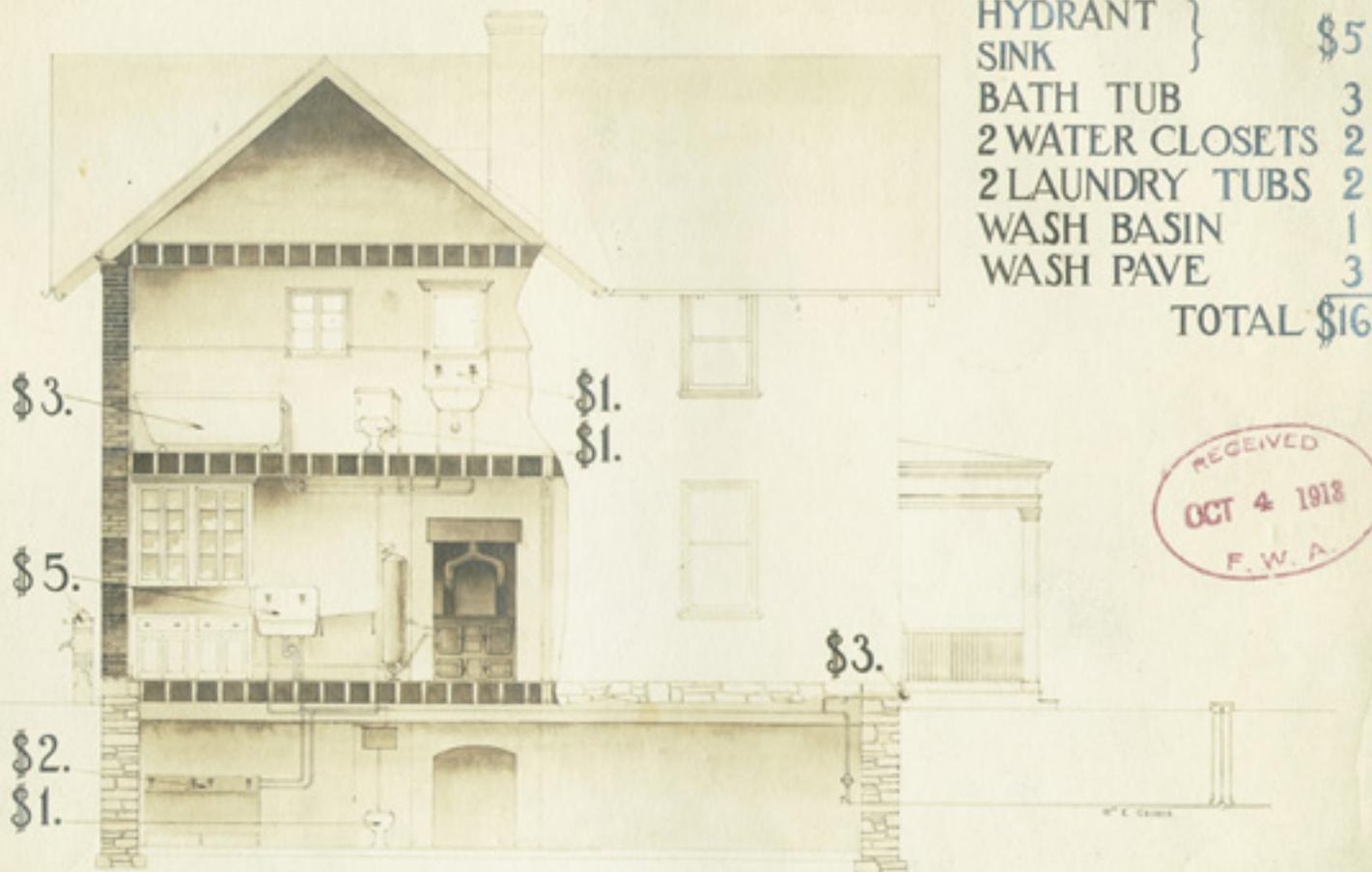




# District of Columbia Water and Sewer Authority

Serving the Public • Protecting the Environment

*(A component unit of the Government of the District of Columbia)*



## WATER RENT ON A PRIVATE RESIDENCE

SHOWING CHARGES ON FIXTURES  
AS ASSESSED BY BUREAU OF WATER.

### Comprehensive Annual Financial Report 2002

Fiscal Year: October 1, 2001  
to September 30, 2002

**Paul L. Bender**  
Chief Financial Officer



# 2002

District of Columbia Water and Sewer Authority

## **Comprehensive Annual Financial Report**

(A component unit of the Government of the District of Columbia)

Fiscal Year  
October 1, 2001 to September 30, 2002

Prepared by:  
Department of Finance and Budget

**Paul L. Bender, Chief Financial Officer**



## TABLE OF CONTENTS

<b>INTRODUCTORY SECTION .....</b>	<b>1</b>	<b>Ten-Year Financial Plan.....</b>	<b>23</b>
<b>Certificate of Achievement .....</b>	<b>3</b>	<b>Financial Policies.....</b>	<b>23</b>
<b>Board of Directors.....</b>	<b>5</b>	Financing Policies.....	23
<b>Principal Staff Members.....</b>	<b>6</b>	Rate Setting Policies.....	24
<b>Letter of Transmittal .....</b>	<b>7</b>	Cash Management and Investment Policies.....	24
<b>Report Sections .....</b>	<b>8</b>	<b>Risk Management .....</b>	<b>25</b>
<b>Recent Accomplishments.....</b>	<b>8</b>	<b>Authority Profile.....</b>	<b>25</b>
<b>Highlights and Major Initiatives.....</b>	<b>10</b>	Reporting Entity .....	25
Technology Initiatives .....	10	<b>History of the Authority .....</b>	<b>26</b>
Internal Improvement Plans.....	11	Legislative History & Relationship to the	
Employee Investment/Labor Relations .....	12	District of Columbia .....	26
Combined Sewer Overflow Management.....	12	<b>Governance and Organization Structure .....</b>	<b>27</b>
Stormwater .....	13	<b>Agreements with Other Jurisdictions and</b>	
Water Sold/Pumped Ratio.....	13	<b>Entities .....</b>	<b>28</b>
Capital Improvement Program .....	14	Wholesale Wastewater Treatment	
Impact of September 11, 2001 .....	15	– Intermunicipal Agreements .....	28
<b>Financial Results.....</b>	<b>15</b>	Other Wholesale Wastewater Treatment	
Net Assets/Net Income .....	16	Agreements .....	28
Operating Revenue.....	17	Water Supply Agreements .....	28
Diversity and Stability of Revenues.....	18	<b>Authority Facilities .....</b>	<b>29</b>
Operating Expenses .....	19	<b>The Wastewater System .....</b>	<b>29</b>
Cash Position.....	20	History and Service Area .....	29
Capital Financing and Debt Administration.....	20	Sewage Collection.....	29
<b>Accounting and Budget Processes.....</b>	<b>22</b>	Biosolids Disposal .....	29
Basis of Accounting .....	22	<b>The Water System.....</b>	<b>30</b>
Internal Control .....	22	History and Service Area .....	30
Independent Audit .....	22	Water Treatment and Distribution System.....	30
Budgetary Control .....	22		
Annual Budget Process.....	22		



# TABLE OF CONTENTS

<b>Economic Condition</b> .....	<b>33</b>		
<b>Awards</b> .....	<b>33</b>		
<b>Acknowledgements</b> .....	<b>34</b>		
<b>Conclusion</b> .....	<b>34</b>		
<b>FINANCIAL SECTION</b> .....	<b>35</b>		
<b>Independent Auditors’ Report</b> .....	<b>37</b>		
<b>Management’s Discussion &amp; Analysis</b> .....	<b>39</b>		
<b>Audited Financial Statements for</b>			
<b>FY 2002 and FY 2001</b> .....	<b>47</b>		
Statements of Net Assets .....	47		
Statements of Revenue, Expenses,			
and Changes in Net Assets .....	48		
Statements of Cash Flows .....	49		
Notes to Financial Statements .....	51		
Required Supplementary Information.....	71		
<b>STATISTICAL SECTION</b> .....	<b>73</b>		
<b>Exhibit 1:</b> Operating Revenue by Source			
for FY 1993-2002 .....	75		
<b>Exhibit 2:</b> Operating Expenses by Category			
for FY 1993 – 2002 .....	76		
<b>Exhibit 3:</b> Capital Disbursements			
for FY 1993 – 2002 .....	77		
<b>Exhibit 4:</b> Debt Service Coverage			
for FY 2002 .....	78		
<b>Exhibit 5</b> Number & Type of Customer			
Accounts as of Sept..30, 2002.....	79		
<b>Exhibit 6</b> Largest Commercial Customers			
for FY 2002 .....	80		
		<b>Exhibit 7:</b> Largest Retail Customers	
		for FY 2002 .....	81
		<b>Exhibit 8:</b> History of Retail Water & Sewer	
		Rates for FY 1980 – 2002.....	82
		<b>Exhibit 9:</b> Residential Water & Wastewater	
		Bill Comparisons as of Summer 2002.....	83
		<b>Exhibit 10:</b> Schedule of Insurance	
		as of Sept. 30, 2002.....	84
		<b>Exhibit 11:</b> Water Demand	
		for FY 1997 – 2002 .....	85
		<b>Exhibit 12:</b> Water Delivered (Pumped) and	
		Billed (Sold) in Ccf.....	86
		<b>Exhibit 13:</b> Population of Service Area	
		Jurisdictions for 2000 & 2001 .....	87
		<b>Exhibit 14:</b> Per Capita Personal Income	
		for 2000 and 2001 .....	88
		<b>Exhibit 15:</b> Unemployment Rates	
		for 2001.....	89
		<b>Exhibit 16:</b> Employment by Sector	
		for 2000.....	90
		<b>Exhibit 17:</b> Summary of Major Permits &	
		Administrative Orders for FY 2002 .....	91
		<b>Exhibit 18:</b> Miscellaneous Statistics	
		about Authority Operations.....	92



## **Introductory Section**

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# Certificate of Achievement for Excellence in Financial Reporting

Presented to

District of Columbia Water  
and Sewer Authority

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
September 30, 2001

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



*William Patrick Pate*  
President

*Jeffrey L. Esser*  
Executive Director

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**BOARD OF DIRECTORS**  
AS OF SEPTEMBER 30, 2002

**PRINCIPAL MEMBERS**

**JURISDICTION**

Glenn S. Gerstell .....	District of Columbia
David J. Bardin.....	District of Columbia
Michael J. Hodge.....	District of Columbia
Charles C. Johnson, Jr.....	District of Columbia
Lucy B. Murray.....	District of Columbia
Vacant.....	District of Columbia
Barbara Holtz.....	Prince George's County, MD
Howard W. Stone, Jr. ....	Prince George's County, MD
James A. Caldwell.....	Montgomery County, MD
Bruce F. Romer.....	Montgomery County, MD
Anthony H. Griffin.....	Fairfax County, VA

**ALTERNATE MEMBERS**

**JURISDICTION**

Wesley A. Brown .....	District of Columbia
Alexander A. McPhail.....	District of Columbia
Stephanie M. Nash.....	District of Columbia
Rodney L. Newman.....	District of Columbia
Brenda L. Richardson.....	District of Columbia
James Wareck.....	District of Columbia
Sherry Conway Appel.....	Prince George's County, MD
Samuel E. Wynkoop, Jr. ....	Prince George's County, MD
George F. Griffin.....	Montgomery County, MD
David Lake.....	Montgomery County, MD
John Wesley White.....	Fairfax County, VA



## PRINCIPAL STAFF MEMBERS

AS OF SEPTEMBER 30, 2002

### GENERAL MANAGER'S STAFF

**Jerry N. Johnson** ..... **General Manager**  
Henderson Brown.....General Counsel  
Michael Hunter..... Internal Auditor  
Libby Lawson .....Public Affairs  
Linda R. Manley .....Secretary to the Board

### OFFICE OF THE CHIEF FINANCIAL OFFICER

Paul L. Bender..... Deputy General Manager/Chief Financial Officer  
Michelle G. Cowan ..... Budget and Finance  
Olu Adebo ..... Controller  
Charles W. Kiely ..... Customer Service  
Mujib Lodhi.....Chief Information Officer  
Vacant..... Risk Management

### OPERATIONS

Michael S. Marcotte..... Deputy General Manager/Chief Engineer  
Walter M. Bailey ..... Wastewater Treatment  
Kofi Boateng ..... Water Services  
Cuthbert Braveboy ..... Sewer Services  
Leonard Benson ..... Engineering and Technical Services  
R. Wayne Raither ..... Maintenance Services

### SUPPORT SERVICES

Michael A. Carter ..... Interim Assistant General Manager  
Barbara Grier..... Human Resources  
O.Z. Fuller ..... Fleet Management  
Roger L. Ball ..... Procurement  
J. Jeffrey Robertson ..... Facilities  
Everett Lallis ..... Health and Safety



## **DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

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

January 31, 2003

Chairman and Members, Board of Directors  
Mr. Jerry N. Johnson, General Manager  
5000 Overlook Avenue, S.W.  
Washington, D.C. 20032

Dear Chairman, Members of the Board, and Mr. Johnson:

I am pleased to present the District of Columbia Water and Sewer Authority's (the "Authority" or "WASA") Comprehensive Annual Financial Report (CAFR) for the fiscal year ended September 30, 2002.

The Authority has made remarkable progress in the six years since its creation as an independent agency. I am especially proud of the Authority's strong financial position. The authority received its sixth consecutive unqualified audit opinion. The year ended with revenues exceeding expenses (change in net assets) by \$33.7 million, unrestricted cash and investments increasing by \$12 million to \$137 million, net utility plant increasing by \$105.5 million to \$1.3 billion, and long and short-term debt increasing by \$69 million. As required by Board policy, the Authority maintained cash reserves in excess of 180 days' operating and maintenance costs (\$91.8 million in FY 2002). Additionally, the Authority was in compliance with all bond covenants (see Statistical Section, Exhibit 4), while bond ratings remained strong with ratings of A1, A and A+ from Moody's Investors' Service, Standard and Poor's Corporation, and Fitch Ratings, respectively. The Authority ended FY 2002 with operating expenditures under budget and revenues in excess of budget (described in more detail in the table on page 71).

These financial accomplishments are due in large part to the leadership of the Board of Directors, particularly because of their insistence on developing and adhering to sound financial policies.

Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures rests with WASA management. To the best of my knowledge and belief, the enclosed financial statements and schedules are accurate in all material respects and are reported in a manner designed to present fairly the financial position and results of operations of the Authority.

## REPORT SECTIONS

This report describes the Authority's financial activities, condition and services as a whole. As such, the report covers information from the Authority's history to its organizational structure to its financial data. This report is divided into three sections: Introductory, Financial, and Statistical. The Introductory Section includes the Authority's organization structure, a list of board members and senior management, a history of governance and operations, a description of facilities, discussion of financial results to date, a description of the budget process, internal controls and accounting standards, the Authority's major initiatives, a discussion of economic conditions of the metropolitan Washington D.C. area, and a description of the Authority's risk management program. The Financial Section includes the independent auditor's opinion, Management's Discussion and Analysis (MD&A), the Authority's FY 2002 and FY 2001 financial statements, the notes to the financial statements and required supplementary information. Finally, the Statistical Section presents selected financial and operating indicators of the Authority and statistics regarding the economic condition of the metropolitan Washington area.

## RECENT ACCOMPLISHMENTS

Using the framework of policies and goals the Board of Directors established in FY 1998, and the nine strategic goals developed by the Board in FY 2002, the Authority and its management continued to build on the successes of its first five years of operations. Major accomplishments in FY 2002 follow.

- WASA successfully closed on its commercial paper program in November 2001, issuing the first draw of \$60 million in December 2001. At the end of FY 2002, the Authority had issued \$90 million in commercial paper notes. Reception of these borrowings was good, with favorable low interest rates ranging from 1.40 percent to 1.70 percent.
- At the end of FY 2002, \$8 million was added to the rate stabilization fund, bringing total contributions to the fund to \$14.5 million. The fund will assist the Board of Directors in implementing their policy of gradual and predictable rate increases.
- In June 2002, the Board of Directors approved a new rate structure. The previous rates were based only on consumption charges; the new rate structure includes consumption charges, a metering fee, and a pass-through of the District of Columbia Government's right-of-way fee. At the same time, the Board determined that future rate increases would take effect on October 1 to correspond with the Authority's fiscal year.
- The Authority received the Government Finance Officer's Association *Distinguished Budget Presentation Award* for its FY 2003 Operating and Capital Budgets for the first time in its six-year history.

- In the spring of 2002, installation of automated meters began for residential customers, introducing new efficiencies and accuracies into metering and billing functions. This project will continue with installation of commercial meters beginning in FY 2003, and will impact finances by increasing revenues due to more accurate meter reads, and by reducing costs due to a more efficient meter reading operation.
- Corresponding to the implementation of the new customer information and billing system, the Department of Customer Service office operations were realigned to offer more efficient service to customers. This reorganization resulted in greatly improved response time to customer calls and savings in personnel services expenditures. Further realignment in the department will occur as the automated meter system is fully implemented.
- WASA's new website, dcwasa.com, was unveiled in the spring of 2002. Among the features offered were enhanced on-line access to customer account information, and a variety of payment options previously unavailable, such as electric funds transfer and credit/debit card payments. Ongoing enhancements include more credit card and bank draft payment options and Spanish language translation of the customer care web page.
- FY 2002 was marked by great improvement in WASA's relations with our federal customers. A federal law passed in December 2001 required federal agencies in northern Virginia to install individual meters at all points of service, and future water billings to be based on actual meter readings for each customer. WASA worked successfully with the Pentagon, Arlington Cemetery and the National Park Service to ensure that this was completed on time and according to WASA specifications, and has had continuing success in gaining timely access to these meters.
- During the past year, WASA received the prestigious silver award from the Association of Metropolitan Sewerage Agencies for the calendar year ending December 2001, adding to three gold and one silver awards earned over the previous four years. This award recognizes the Authority's high level of compliance with federal standards for discharges from the Blue Plains Wastewater Treatment Plant into the Potomac River.
- WASA has met all Environmental Protection Agency (EPA) drinking water quality requirements for the 76<sup>th</sup> consecutive month as of January 2003.
- WASA submitted its proposed Combined Sewer Overflow (CSO) long-term control plan to the Environmental Protection Agency in August 2002, a major accomplishment. The CSO issue has been studied by WASA and its predecessor agency for almost two

decades, and the development of this draft plan represents a significant milestone in WASA's history.

- WASA completed its second year as the District of Columbia's Storm water administrator. As part of this effort, WASA coordinates the operational and financial activities among itself, the City's Department of Health, and the Department of Public Works, to meet the requirements of the District's storm water permit. In FY 2001, a separate enterprise fund was established to account for the new storm water fee and associated storm water permit compliance activities. As administrator WASA prepared financial statements for both FY 2001 and FY 2002 that received unqualified opinions by outside auditors.

## **HIGHLIGHTS AND MAJOR INITIATIVES**

FY 2002 was marked by significant changes in the way the Authority serves the public. In accordance with the Board of Directors strategic goal of putting customers first, the Authority continued to build on its first five years of successful operation, essentially redesigning delivery of water and wastewater services, while implementing programs that will impact the Authority's financial operations.

Technology initiatives are a major focus of the Authority, and the automated meter project and the process computer control system will have major impacts on WASA's delivery of service. Internal Improvement Plans (IIP) continue to be implemented throughout the organization, and submission of the Long Term Control Plan to the EPA marked the beginning of the approval and planning phase for WASA's program to reduce combined sewer overflows. The Authority's ongoing \$1.6 billion capital improvement program will result in improved service to our customers, and at the same time offer significant cost saving opportunities.

### **Technology Initiatives**

In December 2001, the Authority presented its updated Information Technology Strategic Plan to the Board of Directors, which provided a vision for the delivery of information technology services at WASA. The plan included a recommended methodology for prioritization of projects, suggested network security and infrastructure improvements, project management initiatives, and other organizational enhancements. The Strategic Plan calls for completion of several major projects over the next few years.

- The automated meter reading project started in the spring of 2002, and by the end of the fiscal year, more than half of the 110,000 residential meters were replaced. The project will continue in FY 2003 with the installation of automated commercial meters, introducing further accuracy and efficiency and cost savings into our customer service operations.

- The new maintenance management system is scheduled to be online by mid-FY 2003, greatly enhancing our preventive maintenance and inventory management, with a primary focus being at the Blue Plains Wastewater Treatment Plant.
- The process computer control system is in the beginning stages of construction, and will automate a significant number of plant processes at Blue Plains. This will result in better management of chemical usage, better management of electricity consumption (minimizing peak demand usage), and other operating efficiencies. This project is critical to achieving the goals laid out in the Blue Plains Internal Improvement Plan, and continues the Authority's efforts to integrate information technology with operational functions.
- WASA's new customer-focused website, dcwasa.com, was unveiled in early spring 2002, containing features designed for better customer service. Online bill payment, credit and debit card transactions, and electronic funds transfers all became possible using the new web site. Additionally, online job application became possible. The Long Term Control Plan was posted on the website, and became one of the most frequently visited pages on the site.
- Since September 11, 2001, security concerns have extended from WASA's physical assets to its technology infrastructure. New measures are being taken to ensure additional protection for all network entry points, including an intrusion detection system and access secured by randomly generated passwords.

### **Internal Improvement Plans**

The Authority continued its focus on improving service and reducing costs in FY 2002 through the implementation of Internal Improvement Plans (IIP).

The first phase of the IIP in the Customer Service Department was completed in FY 2002, which included a reorganization of the call center and billing and collections operations. The reorganization and related training allowed for the reduction of 15 positions, while making improvements in customer care, such as the marked decrease in the time it took representatives to respond to customer calls. The second phase of the Customer Service IIP will begin in FY 2003 in conjunction with the implementation of AMR technology, which will eliminate the need for manual meter reading.

The Blue Plains IIP began in FY 2000, and will result in the reduction of 228 positions at the wastewater treatment plant when fully implemented. Additionally, contractor positions will be reduced by 130. The savings in Wastewater Treatment and Maintenance Services are

dependent on the completion of WASA's \$1.6 billion capital improvement program, including such initiatives as the process computer control system.

In the Water Services and Sewer Services Departments, 42 positions have been reduced through such measures as cross-functional sharing of resources during peak service demand periods in the winter months when water main breaks are more likely to occur. Additional savings are being recognized by right-sizing the fleet and providing the appropriate level of equipment to field crews.

### **Employee Investment and Labor Relations**

The first pay for performance system for non-union employees was completed early in FY 2002. The collective bargaining agreement that was reached in FY 2001 includes a similar pay for performance program for union employees, scheduled for implementation in FY 2003. Development of a gainsharing program for all employees is also scheduled for FY 2003 as part of the agreement. This program will set WASA-wide and department specific goals, based on the Board's strategic plan. If these goals are accomplished and budget savings are achieved, employees will be eligible for up to a \$1,200 cash award.

### **Combined Sewer Overflow Management**

Like many older systems, approximately one-third of the District of Columbia is served by a combined sewer system where both sanitary waste and storm water flow through the same pipes. When the collection system and/or Blue Plains reach capacity, typically during periods of heavy rainfall, the system is designed to overflow the excess water. These events are referred to as combined sewer overflows (CSO's). The Authority's EPA permit authorizes discharges and requires WASA to develop a long-term CSO control plan that will result in compliance with the requirements of the federal Clean Water Act. A proposed Long Term Control Plan (LTCP) was submitted to the EPA in August 2002. The proposal recommended a combination of large storage tunnels, rehabilitation of pumping stations, new pipelines, and other targeted improvements that will allow storage of combined flows during storm events until they can be sent to Blue Plains for treatment. In response to input from the public, revisions were made to the LTCP draft plan prior to submission to the EPA that pushed the cost of the plan to \$1.265 billion (in 2001 dollars). WASA has developed implementation scenarios that range from 15 to 40 years. A 15 to 20 year implementation schedule would produce annual double-digit rate increases in the near future. A schedule of up to 40 years, while still resulting in significant rate increases over time, allows for more gradual rate increases. Various rate and fee structures for recovery of costs associated with the LTCP are currently being studied and will be presented to the Board of Directors in FY 2003.. Significant federal or other outside assistance would allow for a more rapid implementation schedule, while mitigating the impact on our ratepayers.

## **Stormwater**

In FY 2001, WASA began its responsibilities as the District of Columbia's Storm water Administrator. Over the past few years WASA has been working with the District's Departments of Health and Public Works and the Mayor's Storm water Task Force to address the requirements of the District's storm water permit that was issued to the District in April 2000. During FY 2001 the District of Columbia Council passed legislation that named WASA as Storm water Administrator with responsibilities for coordination and administration of all three agencies' storm water control efforts. In addition, City Council established a fee (to appear on WASA's water and sewer bill) to support all three agencies' incremental efforts through permit expiration in FY 2003. WASA began implementing this fee in June 2001. Annual implementation costs are projected to total \$3 million for all three agencies, with WASA's share amounting to approximately \$1 million. In addition, a separate enterprise fund was established to account for the fee and storm water activities, and separate audited financial statements were prepared for FY 2001.

Major activities in FY 2002 included preparing and submitting the annual report, implementation and discharge monitoring reports, and an upgraded storm water management plan to the EPA. The Storm Water Advisory Panel Report was submitted to the District of Columbia Council, containing a recommendation to study the equitability of the current fee structure and how the fee might be changed to meet additional funding needs. Preparation for permit renewal was also undertaken.

FY 2003 will include additional outfall monitoring, and negotiating permit renewal. The District's current permit expires in April 2003, and it is anticipated that the EPA will issue the District a new storm water permit that could include substantially more rigorous requirements, including additional programmatic spending. It is anticipated that any incremental requirements of WASA due to the new permit will be fully paid from proceeds of the storm water fee or other outside sources.

## **Water Sold/Pumped Ratio**

Like other water utilities, the Authority closely monitors the amount of water that is pumped from its treatment source (in the Authority's case, the Washington Aqueduct) versus the amount that is sold to customers. In FY 2002, the Authority's sold/pumped ratio remained at approximately 66 percent. The Authority completed a comprehensive water audit in FY 2002, which identified and quantified the reasons for the difference between water purchased and sold. These reasons included meter under-registration, system leaks, system maintenance (e.g., flushing), firefighting and unauthorized water use. The AMR program is expected to address the most significant component of the sold/pumped ratio. As part of the departmental realignment that will accompany the automated meter program, an inspections function will be added to ensure that all new construction and redevelopment activities are accurately metered and billed. Additionally,

the Authority is strengthening its theft of service program, with a focus on illegal hydrant use and unauthorized connections.

### **Capital Improvement Program**

WASA's ultimate success in achieving the goals of the wastewater operations and maintenance Internal Improvement Plan and its continued success in regulatory compliance depends in large part on the implementation of our 10-year capital improvement program. This \$1.6 billion program will roughly double the value of our physical infrastructure, and will result in improved service to all of our customers, both wholesale and retail.

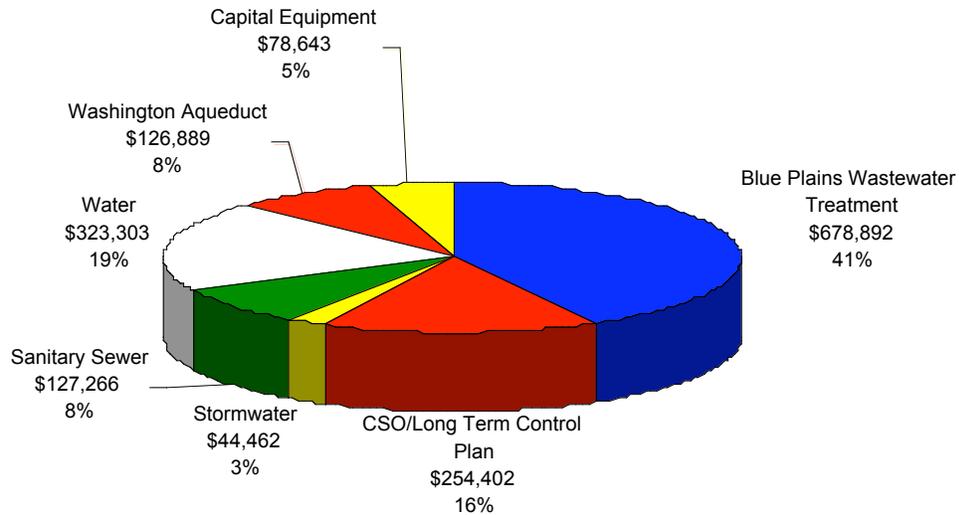
Major capital activities underway during FY 2002 at the Blue Plains Wastewater Treatment Plant were primary and secondary treatment facility upgrades, with budgets totaling \$104.2 million, the west grit chamber and influent screening facility upgrade, with a total project budget of \$103 million, additional dewatering facilities, with a total project budget of \$79.4 million, additional chemical systems, with a total project budget of \$73.3 million, and the process computer control system, with a budget of \$51.7 million. Other major capital initiatives in FY 2002 were the major rehabilitation of the Bryant Street Water Pumping Station, with a total project budget of \$54.8 million, and the Automated Meter Reading Project, with a lifetime budget of \$43.4 million.

Major projects scheduled for FY 2003 include anaerobic digestion facilities, which will increase digester capacity and reduce operating costs, and biological sludge thickening facilities and reduce sludge processing and chemical usage costs. The alternate disinfection facility is expected to come online before the end of FY 2003, completing the accelerated conversion from chlorine and sulfur dioxide to sodium hypochlorite and sodium bisulfite disinfection.

The proposed FY 2002 – 2011 capital improvement program is \$1.63 billion on a disbursements basis. The plan is broken into seven service areas, as shown in the graph below.

### FY 2002 – FY 2011 Capital Improvement Program

(\$ in 000's)



### Impact of September 11, 2001

FY 2002 started as a year of uncertainty, following the events of September 11. As a provider of essential water and wastewater services to residents and businesses in the nation's capital and to the federal government, the Authority took immediate actions to help ensure that critical infrastructure is protected. In the first quarter of FY 2002, the Authority accelerated its planned conversion from chlorine and sulfur dioxide disinfection to safer liquid chemicals, substantially reducing the risks associated with a chemical release. As the year progressed, the financial impact on the Authority was felt in increased expenditures for security personnel and insurance premiums, but savings in other areas allowed the Authority to end the year within budget.

### FINANCIAL RESULTS

In fiscal year 2002, the Authority implemented Governmental Accounting Standards Board Statement No. 34 – *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments*. This statement requires that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis. The MD&A (starting on page 39) summarizes and

reviews changes in the Authority's financial performance. This section is designed to complement the MD&A and should be read in conjunction with it.

As described in the MD&A, the Authority's financial performance remained strong in FY 2002, with total net assets increasing from FY 2001 by \$33.7 million. Further indications of the strong financial performance of the Authority in FY 2002 include an unrestricted cash balance of \$137 million at year end.

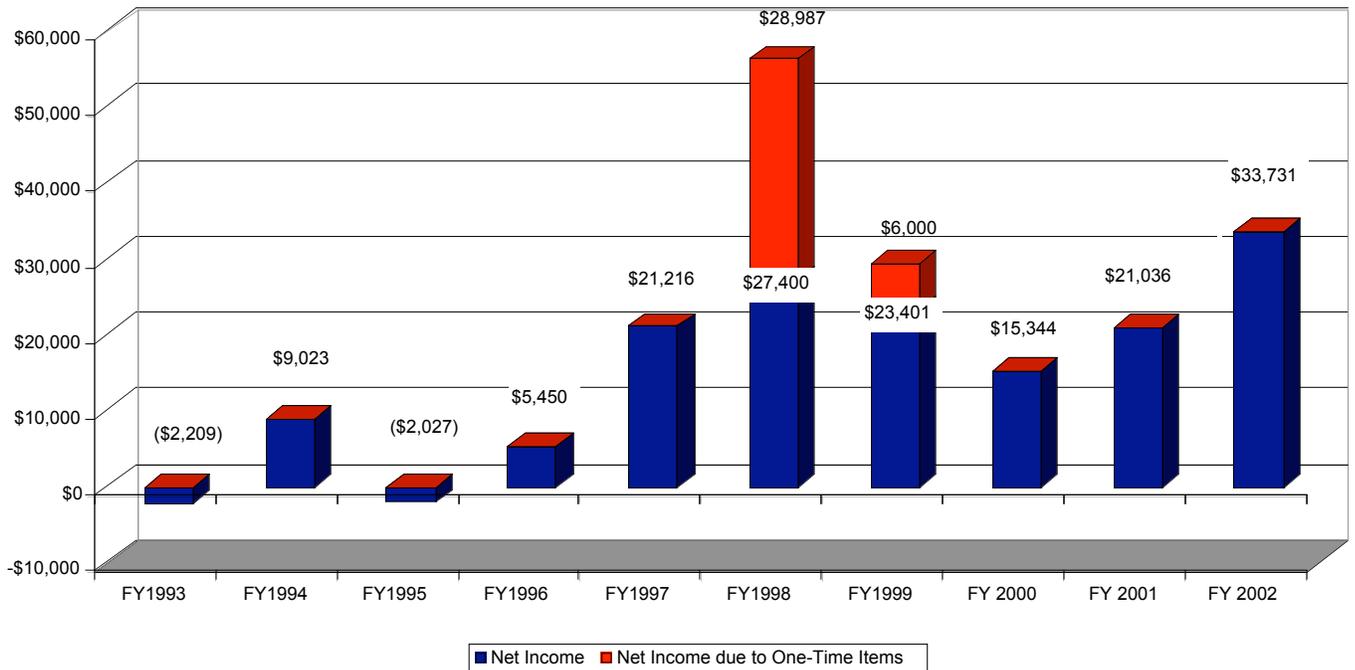
### Net Assets/Net Income

The Authority's total net assets increased by \$33.7 million in FY 2002, compared to \$21.0 million increase in FY 2001. FY 2002 increase in net assets were primarily due to:

- An \$11.2 million increase in operating revenues;
- A \$7.6 million increase in federal grants contributions;
- A \$3.6 million decrease in interest income;
- A \$0.9 million increase in interest expense; and,
- A \$1.3 million increase in operating expenses.

Explanations for each of the above changes are explained in the following sections.

**NET ASSETS/NET INCOME**  
**FY 1993 – 2002**  
**(In \$000's)**



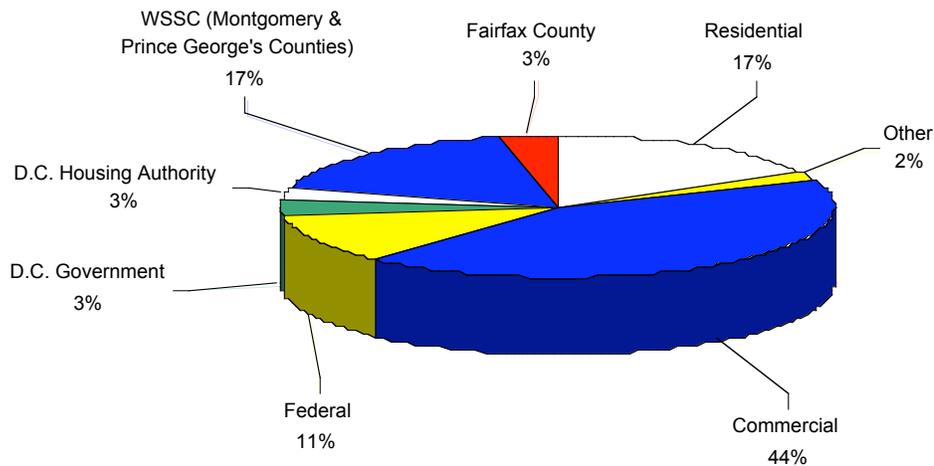
Notes to Net Assets/Net Income Chart on page 16:

- (1) Starting In FY 2001 as required by GASB 34 and 33, net income category was eliminated and replaced by *change in net assets*. For purpose of comparison with previous years, net income approximates change in net assets, except for federal grants contributions, which are now being recognized as revenues. Grants added \$11.2 million to net changes in net assets in FY 2001 and \$18.8 million to net assets in FY 2002. Prior to FY 2001 federal grants contributions were capitalized and amortized into revenues over 60 years.
- (2) In FY 1999, a downward revision was made to wholesale wastewater treatment deferred revenue (advance) from jurisdictions, which produced a one-time increase in net income of \$6 million.
- (3) In FY 1998, WASA reached a settlement with Loudoun County Sanitation Authority for \$40 million to compensate the Authority for the original cost of building additional capacity to serve Loudoun County, which resulted in \$19 million in additional interest income in FY 1998. Also, the Authority made a downward revision in the allowance for uncollectible account receivables from \$28.6 to \$18.7 million as a result of more aggressive collections actions initiated by the Board. This produced a one-time increase in revenues of \$10 million.

### Operating Revenue

As discussed in the MD&A, total operating revenues increased by \$11.2 million (five percent) in 2002 compared to 2001 mainly due to the full year impact of a rate increase in the water user charges. Interest income decreased by \$3.6 million (34 percent) compared to last year due to lower interest earnings on investments. Additionally, grants contributions increased by \$7.6 million (68 percent) compared to last year due to higher capital expenditures in FY 2002.

### REVENUE BY SOURCE FY 2002



## **Diversity and Stability of Revenues**

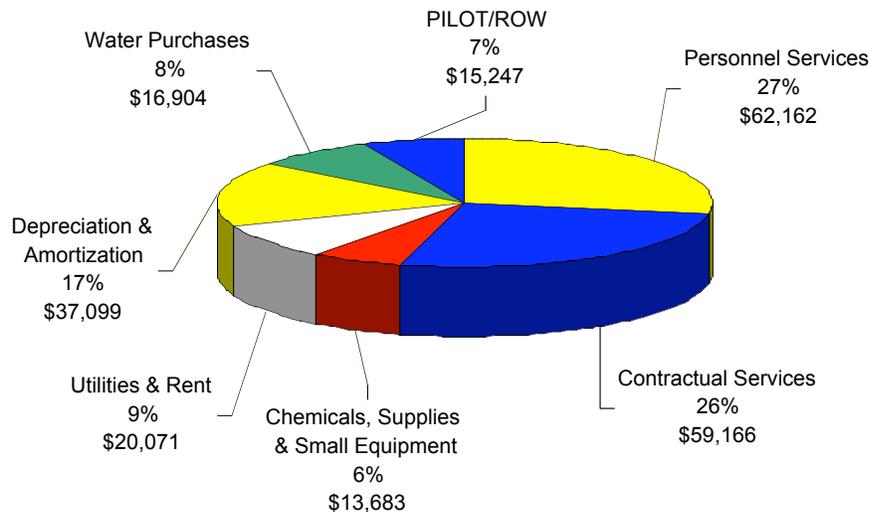
The Authority's revenue base is very diverse, including established customers such as the federal government, the District government, surrounding jurisdictions in Maryland and Virginia and commercial and residential customers within the District. No one category accounts for more than 44 percent of total revenue. A description of each revenue source as well as a discussion of recent trends in each category follows:

- Revenues from commercial customers in the District comprise approximately 44 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 these users account for 20 percent of the Authority's revenues, and are based on their share of operating costs at Blue Plains, allocated to each user based on sewer flows.
- Residential customers in the District account for only 17 percent of total revenues.
- Payments from the federal government comprise approximately 11 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 six percent of total operating revenue.

## Operating Expenses

As discussed in the MD&A, FY 2002 operating expenses increased by less than one percent over FY 2001 results, to \$209 million. Decreases in chemical spending and utilities expense due to good plant performance were offset by an increase in depreciation expense resulting from new additions to utility plant assets.

### OPERATING & MAINTENANCE EXPENSES (including transfers) FY 2002



- **Personnel Services:** Remained relatively stable at \$62 million. Authority wide increases in compensation of approximately four percent were offset by a reduction in average number of positions from 1,121 to 1,052 employees.
- **Contractual Services:** Remained relatively stable at \$59 million. Savings in contractual services across several WASA departments offset increases in legal expenditures.
- **Chemicals, Supplies and Small Equipment:** Decreased by \$1.8 million, to \$13.6 million, due to a decrease in the unit price for methanol, as well as efficient plant operation at Blue Plains.
- **Utilities and Rent:** Decreased by \$1.1 million, to \$20 million, due to a \$1.2 million divestiture credit issued to the Authority by its electrical service provider.

- **Depreciation and Amortization:** Non-cash depreciation charges, totaling \$37 million, increased by \$4.1 million compared to FY 2001, because of the \$164.9 million increase in total utility plant in service and purchased capacity.
- **Water Purchases:** Remained relatively stable at \$17 million, in line with the Authority's budget and prior years expense.

**Cash Position**

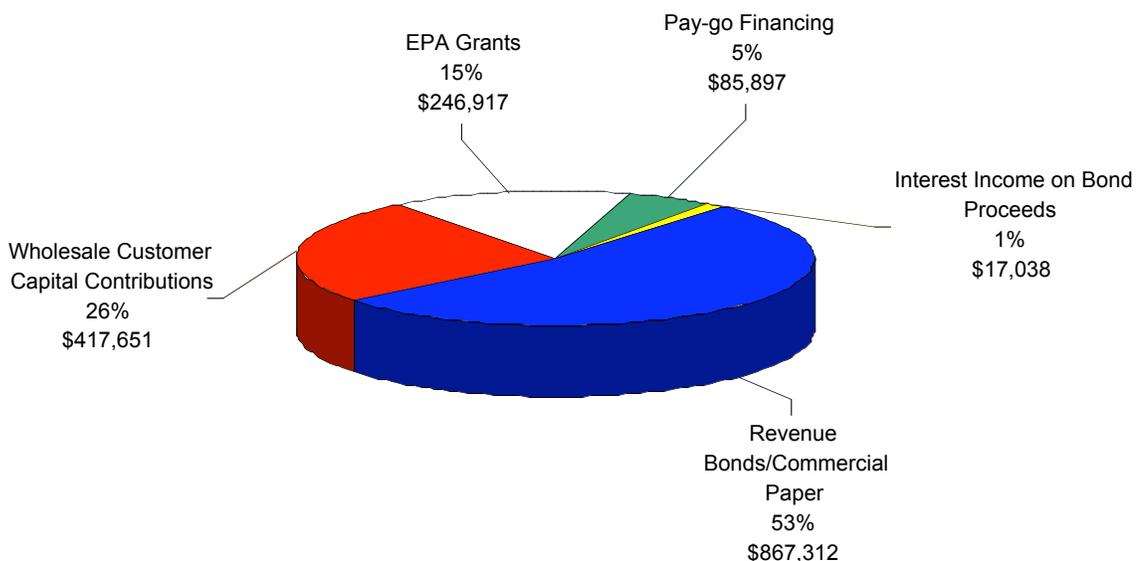
Consistent with Board policy, a substantial amount of the capital program was financed with pay-as-you-go financing in FY 2002. Unrestricted cash and investments totaled \$137.3 million as of September 30, 2002, an increase of approximately \$12.3 million. Board policy requires Authority reserves in excess of 180 days' operating and maintenance costs, rate stabilization fund deposits, and other reserves for upcoming one-time disbursements to be used to fund portions of the capital program on a pay-as-you-go basis.

**Capital Financing and Debt Administration**

The Authority plans to finance its \$1.6 billion capital improvement program with a variety of sources, including the issuance of revenue bonds, the tax exempt commercial paper program, grants from the U.S. Environmental Protection Agency (EPA), contributions from wholesale customers, and pay-go financing. Interim financing through issuance of commercial paper notes will be periodically converted to long-term financing through the issuance of fixed rate bonds. As shown on the following chart, 53 percent of capital financing will come from debt issuance, a relatively low share given the size of the Authority's capital program.

**FY 2002 – 2011 CAPITAL IMPROVEMENT PROGRAM**

**Sources of Funds  
(\$ in 000's)**



In FY 1999, the Authority developed a detailed capital financing plan, which continued into FY 2002. The financing plan's goals are securing the lowest reasonable cost of capital and maximizing administrative and operating flexibility. The plan includes:

- Establishing an interim commercial paper financing program for capital construction. The first borrowing under this program occurred in late calendar year 2001.
- Issue long term bonds, approximately annually, to take out interim financings.
- Utilize available pay-go financing, first to pay down any high cost debt, such as taxable U.S. Treasury notes for the Authority's share of Washington Aqueduct improvements, and second for the capital improvement program. Through FY 2002, the Authority has prepaid \$50 million in U.S. Treasury notes. Pay-go financing represents any available cash after funding the Authority's 180-day operating and maintenance reserve.

As of September 30, 2002, the Authority had approximately \$461 million in debt outstanding, as shown in the following table.

**LONG-TERM DEBT OUTSTANDING  
AS OF SEPTEMBER 30, 2002  
(\$ in 000's)**

<b>SENIOR DEBT</b>	<b>INTEREST RATES</b>	<b>FINAL MATURITY</b>	<b>AMOUNT OUTSTANDING</b>
Notes payable to the federal government for Washington Aqueduct	Variable	2018	\$ 7,984
1998 public utility revenue bonds	5.50 - 6.00	2028	<u>266,120</u>
<b>SUBTOTAL SENIOR DEBT</b>			<u>274,104</u>
<b>SUBORDINATE DEBT</b>			
Notes payable to the federal government for Jennings Randolph Reservoir	3.25	2041	17,143
Notes payable to WSSC for Little Seneca Reservoir	5.98 - 6.60	2014	531
1991 District of Columbia general obligation bonds	6.30 - 6.75	2008	465
1993 District of Columbia general obligation bonds	4.90 - 6.00	2012	55,980
1994 District of Columbia general obligation bonds	4.55 - 6.50	2011	14,100
2001 District of Columbia general obligation bonds	6.02	2008	8,525
2002 Series A commercial paper notes payable	1.40 - 1.50	2003	50,000
2002 Series B commercial paper notes payable	1.40 - 1.65	2003	<u>40,000</u>
<b>TOTAL SUBORDINATE DEBT</b>			<u>186,744</u>
<b>TOTAL DEBT OUTSTANDING</b>			460,848
<b>CURRENT PORTION OF DEBT OUTSTANDING</b>			<u>111,828</u>
<b>DEBT OUTSTANDING, LESS CURRENT PORTION</b>			<u>\$ 349,020</u>

Long term debt outstanding as presented on the accompanying statements of net assets includes net unamortized bond premiums of \$5,998 on September 30, 2002.

## **ACCOUNTING AND BUDGET PROCESSES**

### **Basis of Accounting**

The Authority is a single enterprise fund and maintains accounting records using the accrual basis of accounting. Under this basis of accounting, revenues are recorded when earned, and expenses are recorded when goods and services are received.

### **Internal Control**

The Authority's management is responsible for establishing and maintaining an internal control structure designed to ensure that Authority assets are adequately safeguarded against loss from unauthorized use or disposition and to maintain reliable financial records for the preparation of financial statements. The internal control structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that: 1) the cost of internal controls should not exceed the benefits derived therefrom; and 2) the evaluation of costs and benefits requires management's exercise of judgment. We believe the Authority's internal accounting controls adequately safeguard its assets and provide reasonable assurance of the proper recording of financial transactions.

### **Independent Audit**

The Authority's fiscal year is for the period from October 1 to September 30, and the Authority's financial statements are subject to an annual audit by independent certified public accountants. Thompson, Cobb, Bazilio & Associates, P.C. (TCBA) audited the Authority's financial statements for FY 2002. TCBA's opinion is included in the Financial Section.

### **Budgetary Control**

Budgetary control begins with the preparation of the annual operating and capital budgets, which are developed on an expenditure basis. After three months of extensive review by the Board's Finance and Budget and Operations Committees, the budgets are approved by the Board of Directors. The budgets are loaded into the Authority's financial management system, which prevents overspending without appropriate approvals. The Department of Finance and Budget prepares daily and monthly management reports for each operating unit, management staff, the Board of Directors and its various committees. The reports are reviewed each month to ensure the Authority complies with its authorized budget levels.

### **Annual Budget Process**

After approval by the Board of Directors, the Authority is required to submit its annual operating and capital budgets to the Mayor and Council of the District of Columbia for their review and comment; however, neither can change the annual budgets of the Authority. The District then

includes the Authority's budgets as an enterprise fund in the budget that it sends to the U.S. Congress for approval.

## **TEN-YEAR FINANCIAL PLAN**

First developed in FY 1997, the Authority's ten-year financial plan serves as its road map to strong, predictable long-term financial performance. This plan is updated and adopted annually by the Board of Directors. The Authority's ten-year plan and overall emphasis on long and short term planning were cited by the rating agencies as a critical factors in WASA's bond ratings. The objectives of the ten-year plan are:

- To proactively address all known regulatory requirements and other major infrastructure and operating issues, including the Internal Improvement Plan, over the ten-year planning period;
- To raise rates gradually and predictably as needed to meet its long-term operating, capital, and financial policy requirements; and
- To meet all of the financial policies laid out by the Board of Directors, including maintaining approximately 180 days of operating and maintenance expenses in cash reserves and maintaining senior debt service coverage of 140 percent.

Since its inception, the Authority has maintained the financial goals set out by Board policy and the ten-year financial plan.

## **FINANCIAL POLICIES**

During FY 1998, the Authority adopted critical policies for financing, rate setting and cash management. These policies have served as the key parameters used to successfully develop the Authority's ten-year financial plan, capital improvement program (CIP), and operating budgets. The policies will continue to guide the development and implementation of the Authority's long term plans in the future. A summary of these policies follows.

### **Financing Policies**

The primary objective of the financing policies is to ensure that the Authority's financial practices result in a high quality investment-grade bond rating so as to achieve the lowest reasonable cost of debt necessary to finance the Authority's long-term capital program. The Authority is committed to 140 percent debt service coverage on senior lien debt service and maintaining an operating cash reserve equivalent to 180 days of operating and maintenance expenses. In addition, the Authority will use any excess operating reserve amounts for capital financing to reduce the need for additional long term debt.

## **Rate Setting Policies**

The Authority's rate setting policy is simple and straightforward: the Authority will strive to set rates so that each customer will be charged for those costs necessary to provide each service, and rate increases will be predictable and gradual. The Authority will apply this rate-setting philosophy in a practical and prudent manner based on the following tenets:

- The Authority must achieve a positive net income and cash flow each year.
- Current rates must cover current costs and provide cash flow adequate to meet all bond covenant requirements.
- Rates and fees must be based on the actual cost to deliver each service.
- Rates must be based on annually updated ten-year forecasts of operating and capital budgets, with any required rate increases phased in gradually over time to avoid "rate shock."
- After the Authority achieved its required level of cash reserves, a rate stabilization fund was established to ensure gradual and predictable rate increases. In FY 2000, the Authority contributed \$3.5 million to the rate stabilization fund, an additional \$3 million was contributed at the end of FY 2001, and \$8 million more was contributed at the end of FY 2002, bringing the balance of the reserve to \$14.5 million.

## **Cash Management and Investment Policies**

The Authority manages its cash based on the following objectives, in order of priority: safety, liquidity, return on investment, and diversity.

With the adoption of the revised FY 1998 budget, the Authority's Board of Directors adopted comprehensive cash management and investment policies and implemented investment and cash management practices. These policies and practices are consistent with and based on the Government Finance Officers Association's (GFOA) guidelines and specify the amount of the total portfolio allowed in each type of investment.

In FY 2001, the Board adopted revisions to the investment policy that clarified portfolio diversity requirements. Specifically, the revisions formalized WASA's practice of limiting investment in any one corporate issuer to five percent of the total portfolio and limited each investment to 10 percent of the outstanding debt of any one corporate issuer. The Board further refined the investment policy in FY 2002 to address the length of maturity for investments of bond proceeds, and to adopt more stringent collateralization requirements for WASA's investments.

The Authority's Department of Finance and Budget produces daily and monthly reports on all cash management and investment activities with significant peer oversight. Monthly reports to

the General Manager and the Board of Directors' Finance and Budget Committee enable them to monitor the Authority's compliance with its policies.

## **RISK MANAGEMENT**

The Authority has a comprehensive risk management program designed to protect the Authority's assets and to reduce and transfer financial loss and risks to third parties by utilizing insurance contracts. The Authority maintains property and liability insurance that exceeds self-funded levels. The property coverage protects the Authority's owned or leased facilities, buildings, fleet vehicles and equipment. The self-funded limit for building and contents is \$250,000 and \$10,000 for equipment. The Authority self-funds 100 percent of the coverage for all vehicles owned or leased.

The Authority's liability insurance coverage provides protection from claims for damages and injuries caused by automobile accidents, broken water and sewer lines, construction, and other operational activities. The Authority self funds the first \$1,000,000 of any one loss. Limits of up to \$100,000,000 are purchased to protect the Authority in the event of a catastrophic loss that would exceed the self-funded limit. Directors and Officers/Public Officials liability insurance is maintained up to \$20,000,000 in excess of a self-funded limit of \$50,000.

The Authority is self insured to meet its workers' compensation statutory responsibilities for all work-related injuries up to \$1,000,000. Excess workers' compensation coverage is provided for any claim for statutory benefits in excess of the self-funded level. This insurance program also enables the Authority to reduce and contain medical and compensation costs resulting from on the job injuries.

Most of WASA's insurance policies expire on April 6, 2003. The Authority's independent insurance adviser will complete a comprehensive review of the existing risk management program and insurance coverage prior to renewing or changing policies.

## **AUTHORITY PROFILE**

### **Reporting Entity**

The Authority is an independent, multi-jurisdictional regional utility that provides drinking water distribution and wastewater conveyance and treatment services to residential, commercial and governmental customers in the District of Columbia, and wastewater conveyance and treatment to wholesale users in Montgomery and Prince George's Counties in Maryland and Fairfax and Loudoun Counties in Northern Virginia. The Authority's service area has a population of over two million people. These activities are fully accounted for in this report.

The operations of the Authority are accounted for as a component unit of the Government of the District of Columbia and are included in the Government of the District of Columbia's Comprehensive Annual Financial Report. This Comprehensive Annual Financial Report of the Authority is issued separately to provide the Board of Directors, Authority customers, local and federal government officials, employees, investors, suppliers and other interested parties a comprehensive financial accounting of the Authority's operations and financial position for FY 2001 and 2000.

## **History of the Authority**

### **(Legislative History and Relationship to the District of Columbia)**

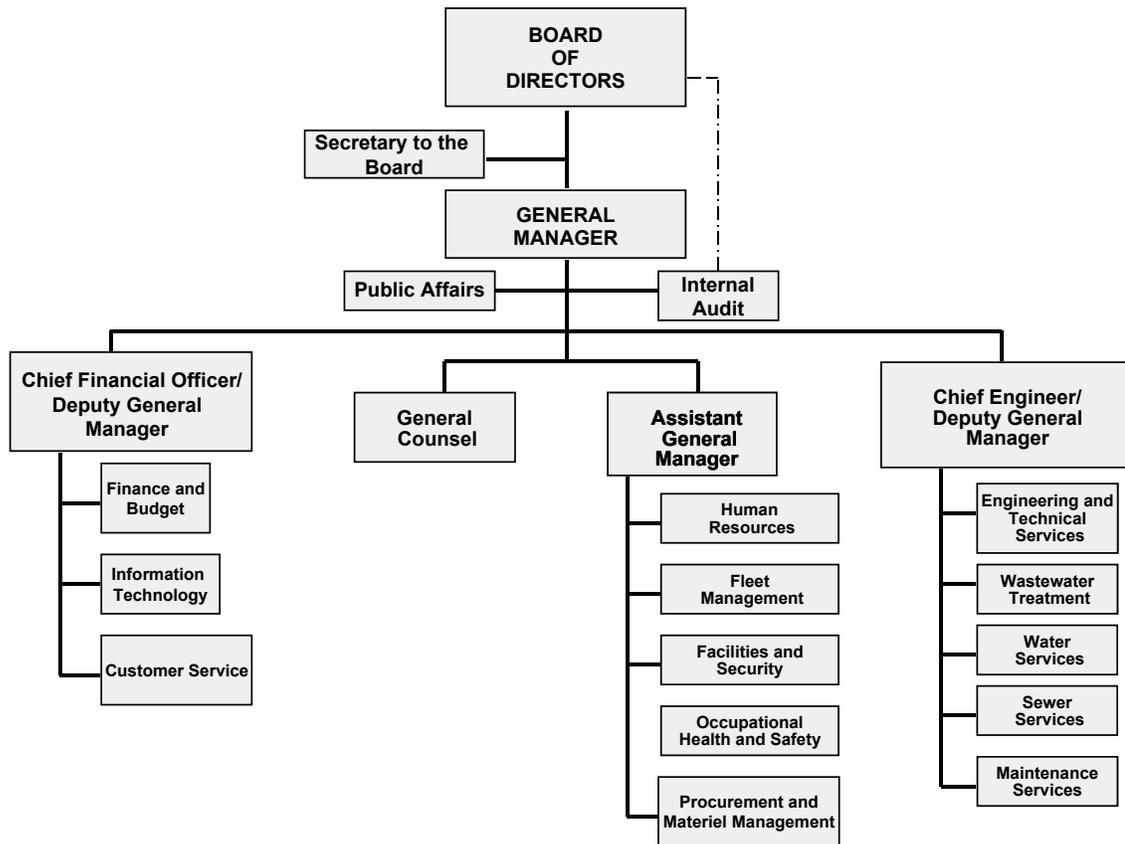
In 1996, the regional participants in the Authority's service area, including the District of Columbia, Montgomery and Prince George's Counties in Maryland, and Fairfax County in Virginia and the United States Congress, agreed to create an independent, multi-jurisdictional water and wastewater authority from its predecessor agency. In April 1996, the Council of the District of Columbia passed the "Water and Sewer Authority Establishment and Department of Public Works Reorganization Act of 1996" (the Act), a statute that provided the groundwork for the Authority to become operationally independent on October 1, 1996.

In accordance with the Act, the District has authorized the Authority to use all of the property and assets related to its water distribution and wastewater treatment and conveyance services and transferred to the Authority any liabilities that are directly attributable to those assets. The District has retained full legal title to these assets. The assets will remain under the control of the Authority for as long as any Authority revenue bonds remain outstanding.

The Authority is required by the Act to reimburse the District for debt service on general obligation debt issued by the District, the proceeds of which were used to finance certain water and wastewater projects undertaken by WASA's predecessor agency. The District's financial plan also provided for repayments by the District to the Authority of approximately \$83 million over a period of five years to reimburse the Authority for borrowings by the District from its predecessor agency; the final payment was made in FY 2001.

The Act also requires the Authority to establish rates, fees and other charges for all services provided by the Authority. These rates and charges, in addition to certain wholesale wastewater treatment contracts, generate revenues adequate to pay all of the costs of operating the Authority. The Authority's rate setting powers are not subject to the oversight of, or regulation by, the District or any other agency or authority.

## Governance and Organization Structure



The Authority is governed by a Board of Directors consisting of eleven principal and eleven alternate members who represent the District of Columbia, Montgomery and Prince George's Counties in Maryland, and Fairfax County in Virginia. The Mayor of the District of Columbia appoints, and the Council confirms, all District Board members, including the Chairperson. In addition, the Mayor appoints the five principals and five alternate members who represent the surrounding jurisdictions based on submissions from those jurisdictions. The Authority may only take action on policy matters after it receives a favorable vote of no less than six members of the Board of Directors. All Board members participate in decisions directly affecting the general management of the joint-use facilities, and only the District of Columbia members participate in those matters that affect only District ratepayers.

The Authority's day-to-day operations are managed by a General Manager, who is appointed by the Board of Directors. The General Manager is supported by the Chief Engineer, the Chief Financial Officer, and an Assistant General Manager. The Chief Engineer oversees all technical operations, including Wastewater Treatment Services, Water Services, Sewer Services, Engineering and Technical Services, and Maintenance Services. The Chief Financial Officer oversees Finance and

Budget, Customer Service, Procurement/Materiel Management, Risk Management, and Information Technology. The Assistant General Manager oversees Human Resources, Fleet Management, Facilities and Security, and Occupational Health and Safety. Also reporting to the General Manager are offices of the General Counsel, Internal Auditor, and Public Affairs.

### **Agreements with Other Jurisdictions and Entities**

#### **Wholesale Wastewater Treatment – Intermunicipal Agreements**

In 1985, the District signed the Blue Plains Intermunicipal Agreement (the IMA) with Fairfax County in Virginia, and Montgomery and Prince George's Counties in Maryland. The IMA outlines terms relating to facility location, sizing, capacity allocations and funding and long-term management of the wastewater treatment and disposal process. It also established a uniform payment basis for facilities and future improvements. IMA signatories share the cost of operations, maintenance, and the capital program of the Blue Plains facility, and comprise 60 percent of Blue Plains capacity.

#### **Other Wholesale Wastewater Treatment Agreements**

Beginning in October 1963, the Authority entered into separate agreements with other entities that did not participate in the IMA and that were tributary to the Potomac Interceptor sewer: Loudoun County Sanitation Authority (LCSA), Washington-Dulles International Airport, the Department of the Navy, the National Park Service, and the Town of Vienna. The agreements provide for the pro-rata recovery of the Authority's costs of constructing, operating, and maintaining the Potomac Interceptor and certain other sewers, and the Blue Plains facility. Under these agreements, the Authority recovers its capital and operating and maintenance costs from each user each quarter based on a rate per million gallons as applied to each user's metered sewage quantity. In November 1998, the Authority executed a new agreement with LCSA that increased its share of treatment capacity at Blue Plains to 13.8 million gallons per day (mgd). LCSA now pays its share of capital and operating costs on the same basis as the other IMA entities.

#### **Water Supply Agreements**

The Authority purchases water from the Washington Aqueduct, which is owned by the federal government and operated by the U.S. Army Corps of Engineers under the direction of the Secretary of the Army. All water treated by the Washington Aqueduct is purchased by the Authority and the Aqueduct's two other customers, Arlington County and the City of Falls Church, Virginia. In July 1997, the Authority executed a new operating agreement with the U.S. Army Corps of Engineers that provides for the continued ownership and operation of the Aqueduct by the Corps of Engineers, but gives the Authority and other Aqueduct customers greater participation in budget preparation and oversight of operations. The new agreement also outlines

each customers' pro rata share of operating and capital costs based on water purchased; the Authority's pro rata share of Aqueduct expenses is currently 76 percent.

In 1982, the District entered into the Water Supply Coordination Agreement with the Washington Suburban Sanitary Commission and the Fairfax County Water Authority. This agreement formalizes the region's commitments to cooperatively manage the region's water supply system. The Authority has provided for backup and peak day water supply through participation in the Little Seneca Lake and Bloomington Reservoir (now called Jennings Randolph Lake) projects. The Little Seneca project was constructed and is operated by the Washington Suburban Sanitary Commission. The Authority funds 40 percent of all capital and operating costs. The Bloomington Reservoir project was constructed by the federal government and is operated by the U.S. Army Corps of Engineers. The Authority funds 30 percent of applicable capital and operating costs.

## **AUTHORITY FACILITIES**

### **The Wastewater System**

#### **History and Service Area**

The first wastewater treatment facilities for the Washington metropolitan area were constructed at the site of the present Blue Plains Wastewater Treatment Plant. These facilities treated up to 130 mgd for a population of over 650,000, and provided primary treatment only. Since that time, there have been several expansions and upgrades. In 1949, Blue Plains was expanded to 175 mgd; and again to 240 mgd in 1959. Chlorination facilities and secondary (biological) treatment were also added. When the Federal Clean Water Act was enacted in 1972 requiring all municipal sewage treatment systems to incorporate secondary or advanced levels of treatment, Blue Plains was once again expanded and upgraded to comply with the federal regulations. Work on these tertiary treatment projects and expansion was completed in 1983. Finally, work was completed in FY 1997 to expand the Blue Plains tertiary treatment capacity to 370 mgd.

#### **Sewage Collection**

The sewage collection system consists of approximately 1,800 miles of sanitary and combined sewers, 22 flow-metering stations, nine off-site wastewater pumping stations, and 16 storm water pumping stations. The sewers range from eight inches in diameter to 27 foot arch sewers. The sewers are generally constructed of vitrified clay, brick, and concrete. Approximately two-thirds of the District is served by separate sanitary and storm sewers; however, combined sanitary and storm sewer systems are prevalent in the downtown area and older portions of the service area.

#### **Biosolids Disposal**

In 1984, officials from all the jurisdictions served by Blue Plains established procedures for soliciting and entering into contracts for hauling and disposing of biosolids from Blue Plains. This

high quality material consistently meets all applicable requirements of federal regulations. Most of the 1,100 tons per day of biosolids produced by the facility is directly land applied at various sites in Maryland and Virginia. Small quantities also are incinerated offsite. Montgomery and Prince George's Counties retain contractual responsibility for the disposal of their share of biosolids generated at Blue Plains, and they currently use land application or landfill methods to meet their obligations.

The Biosolids Management Program, developed by WASA through a stakeholders group that included neighboring jurisdictions, and adopted by the Board of Directors in 1999, calls for full biosolids digestion as our primary long-term alternative solution and continuing land application as long as financially advantageous. The Authority has reached the design phase for installation of new egg-shaped digesters, which will contribute greatly to onsite odor control and reduced odors in the product that leaves Blue Plains. When completed, this facility will significantly reduce the volume of biosolids produced.

## **The Water System**

### **History and Service Area**

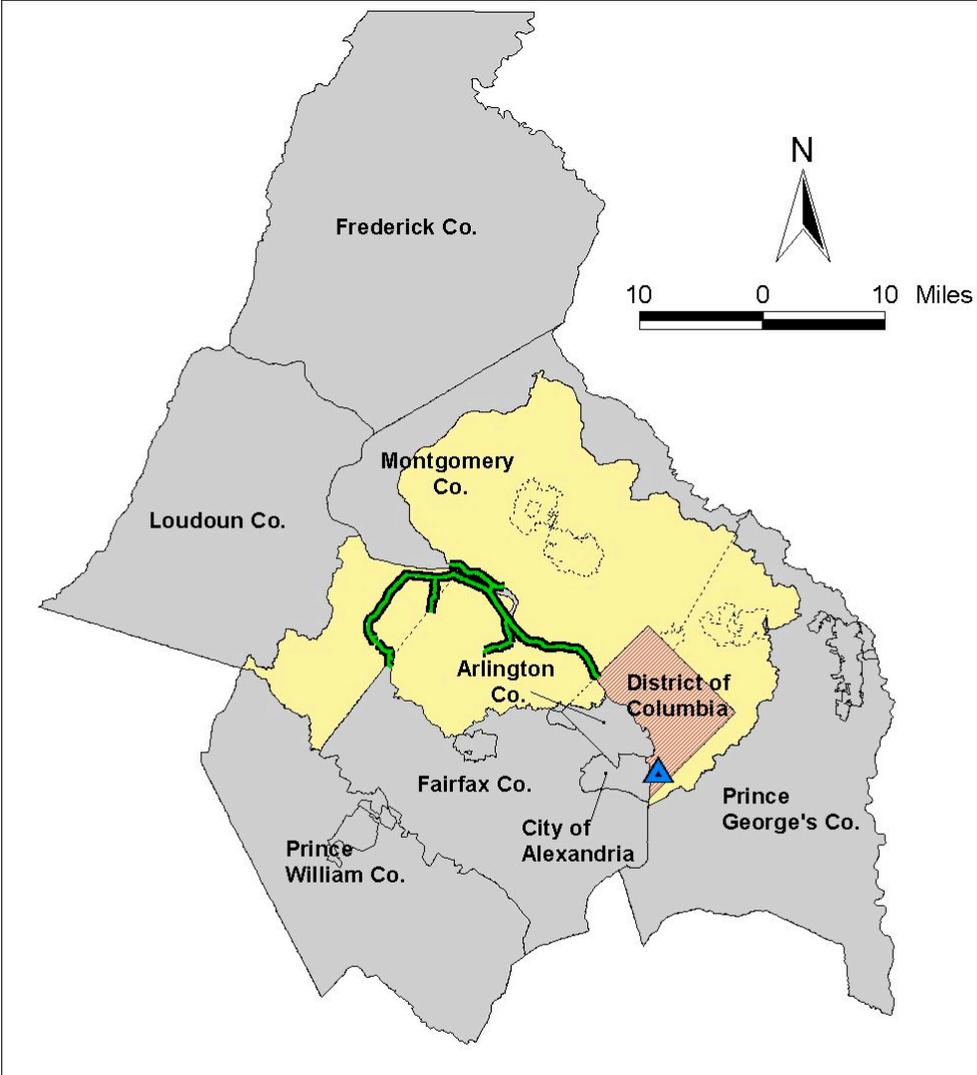
Prior to the establishment of the Washington Aqueduct Division of the United States Army Corps of Engineers (the Aqueduct) in 1858, residents of the District obtained their drinking water from springs and wells. The distribution system consisted primarily of bored logs and some cast iron pipes. Water from the Potomac River was tapped into the system in 1863. By 1905, the Washington City Tunnel, McMillan Reservoir and Filtration Plant, and the Bryant Street Pumping Station were completed. The Dalecarlia Filtration Plant and Pumping Station and all other major components of the present water supply and distribution system were in operation by 1928.

### **Water Treatment and Distribution System**

Although the Authority is responsible for management of the treated water distribution system serving the District and certain Department of Defense and other small customers outside the District, the water itself is treated by the Washington Aqueduct Division of the U.S. Army Corps of Engineers (the Aqueduct). The Authority purchases its water from the Aqueduct and transmits and distributes the water through five pumping stations, five distribution reservoirs and four elevated tanks. The Aqueduct's water treatment and transmission system consists of the Great Falls Intake on the Potomac River; two parallel nine-mile long raw water conduits from Great Falls to the Dalecarlia Reservoir; the Little Falls Intake and Pumping Station on the Potomac River; the Dalecarlia and McMillan Reservoirs and Water Treatment Plants; the Dalecarlia Pumping Station; the Georgetown conduit and reservoir; the Washington City Tunnel; the East Shaft Pumping Station; several treated water transmission lines and three ground storage reservoirs.

The Authority's Department of Water Services oversees the entire water distribution system serving the District. The Authority's water distribution system includes almost 1,300 miles of pipes and mains ranging from 4 to 78 inches in diameter. The system includes cast iron, ductile iron, reinforced and prestressed concrete, and steel pipe, and contains more than 36,000 valves and hydrants. The Authority also operates and maintains five pumping stations: Bryant Street, Old Fort Reno, New Fort Reno, 16th and Alaska, and Anacostia. All five pumping stations have adequate pumping capacity to meet peak demands.

**District of Columbia-Water and Sewer Authority (DCWASA)**



**Legend**  
**Facilities managed by & Service Areas served by DCWASA**

-  Blue Plains Wastewater Treatment Plant
-  Potomac Interceptor
-  Jurisdictional Boundaries
-  DC Water Distribution & Sewage Collection Systems
-  Blue Plains Service Area (suburban portion)
-  Blue Plains Service Area (DC portion)

Prepared for DCWASA by Department of Environmental Programs  
 Metropolitan Washington Council of Governments  
 Created on: February, 2001

Note: Service area covers the District of Columbia, most of Montgomery and Prince George's counties, and parts of Fairfax and Loudoun counties.

## **ECONOMIC CONDITION**

Although the District of Columbia is known primarily as the nation's capital, it is an international city with a vibrant tourism industry and business climate. It is also the nucleus of the fifth largest metropolitan area in the United States. In 2000, the District's estimated resident population was 572,059, while the 2000 estimate of the metropolitan area population was 4.9 million and encompassed 24 additional jurisdictions in Maryland and Virginia. In 2000, the District had the second highest per capita personal income of all states.

The District's economic base is driven by the federal and local governments and the related diplomatic embassies and international organizations. The federal civilian workforce in the District averaged 181,300 employees in 2002, while an additional 150,600 federal employees worked elsewhere in the metropolitan area. The District is host to 170 foreign embassies and other recognized diplomatic missions. A number of international organizations, such as the International Monetary Fund, the World Bank, the World Health Organization, and the Organization of American States are headquartered in the District. In 2001, an estimated 18.1 million persons visited the Washington Metropolitan Area not only to do business with federal government and regional enterprises but also to visit the national monuments, historic sites, museums, and other major cultural attractions.

Per capita personal income in the District was \$38,374 in 2000 compared to \$29,469 in 2000 for the United States. The relatively high per capita and household incomes in the District is a direct result of a combination of factors, including a high labor force participation rate, multiple earner households, small household size (average of 2.21 persons), a large percentage of college graduates and a substantial concentration of employed residents in highly-skilled occupations.

## **AWARDS**

The Government Finance Officers Association awarded a Certificate of Achievement for Excellence in Financial Reporting to the Authority for its comprehensive annual financial report for the fiscal year ended September 30, 2001 (see page 3). The Certificate of Achievement is a prestigious national award, recognizing conformance with the highest standards for preparation of financial reports. A Certificate of Achievement is valid for a period of one year only. The Authority believes its current report continues to conform to the Certificate of Achievement program requirements, and plans to submit it to GFOA.

The Authority received the GFOA's *Distinguished Budget Presentation Award* for its FY 2003 Operating and Capital budgets for the first time in its six-year history. In order to qualify for the distinguished Budget Presentation Award, the Authority's budget document was judged to be proficient in several categories, including presentation as a policy document, financial plan, operations guide and a communication device.

## **ACKNOWLEDGEMENTS**

I acknowledge and thank our members of the Board of Directors, led by Glenn S. Gerstell, Chairman, for providing strong financial policy direction and in depth monthly reviews of WASA's financial performance. Our increasingly strong financial results and position directly flow from the Board's policy direction and oversight.

I also gratefully acknowledge the hard work and dedication of the Authority's financial operation staff, other departments and staff, and the General Manager's staff in preparing this report. Special thanks go to Olu Adebo, Controller; Michelle Cowan, Director of Finance and Budget; Jean Wilson, Senior Financial Analyst, and Temi Abosedo, Senior Accountant for their outstanding financial leadership in FY 2002 and their work in completing this report.

## **CONCLUSION**

The Authority, in its sixth year, continued to build on its record of success. Financial performance was strong, and we continued to meet or exceed all targets, including all Board of Directors' policies. It is a remarkable tribute to those who helped establish the Authority, and to those who continue to work here, that strong financial performance is now seen as the norm.

Respectfully submitted,

Paul L. Bender

Chief Financial Officer



**Financial  
Section**

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**THOMPSON, COBB, BAZILIO & ASSOCIATES, PC**  
*Certified Public Accountants and Management, Systems, and Financial Consultants*

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**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, 2002 and 2001, 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.

As described in Note 2, WASA adopted the provisions of Governmental Accounting Standards Board Statement No. 34, "*Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments*", Statement No. 37, "*Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments: Omnibus*", and Statement No. 38, "*Certain Financial Statement Note Disclosures*", as of and for the year ended September 30, 2002.

The Management's Discussion and Analysis on pages thirty-nine through forty-six and the budgetary comparison schedule and related note on pages seventy-one and seventy-two are not required parts of the basic financial statements but are 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, 2002 and 2001, 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.

Washington, DC  
January 2, 2003

*Thompson, Cobb, Bazilio & Associates, P.C.*

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# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Management's Discussion and Analysis

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This section of the District of Columbia Water and Sewer Authority's (the "Authority" or "WASA") annual financial report presents the analysis of the Authority's financial performance during the fiscal year that ended on September 30, 2002. The Management's Discussion and Analysis (MD&A) should be read in conjunction with the Authority's basic financial statements, beginning on page 47.

### HIGHLIGHTS

#### Financial highlights

- The Authority's net assets increased by \$33.7 million, or 4.7 percent, as a result of this year's operations.
- Operating revenues increased by \$11.2 million, or approximately 5.0 percent in FY 2002, primarily due to the impact of the full year increase in water consumption charges.
- Nonoperating revenues decreased by \$3.8 million, or approximately 36 percent, due to historically low interest rates and earnings in FY 2002.
- FY 2002 transfers-in increased by \$7.6 million, or 68 percent, due to an increase in reimbursable capital expenditures and higher federal grant contributions.
- The Authority's debt increased by \$69 million to \$467 million, an increase of more than 17 percent over FY 2001, due primarily to issuance of \$90 million in commercial paper notes.

#### Authority Highlights

*Commercial Paper Program* – The Board of Directors of the Authority approved WASA's commercial paper program on November 1, 2001, with both Series A notes not to exceed \$50 million outstanding at any one time and Series B notes not to exceed \$50 million outstanding at any one time. Proceeds from the sale of the notes must be used to finance costs incurred in connection with the construction of certain capital improvements to WASA's wastewater collection and disposal system and its water distribution system. At the end of FY 2002, the Authority had issued \$90 million in notes, with interest rates ranging from 1.40 to 1.65 percent. All maturities were less than 270 days, as stipulated by the Board resolution authorizing the program.

*Automated Meter Reading Project* – Installation of residential automated meters started in FY 2002, and by the end of the fiscal year, approximately 54,000 meters were in place. Residential installations will be completed in FY 2003, while commercial meter installations will begin in FY 2003. This new system relies on cellular technology to transmit water consumption information to WASA and introduces new accuracy and efficiency into our customer service activities. The automated meter project will enable the Authority to move from the current quarterly billing process to monthly billing for residential accounts.

*Rate Stabilization Fund* – The Authority's rate stabilization fund was increased to \$14.5 million, with the contribution of \$8 million from operating cash reserves at the end of FY 2002. The Board's rate setting policy and the Authority's indenture allow for contributions to this account annually as cash reserves and debt service coverage permit. The balance in this account can be used in future years to smooth out peak rate increases.

*New Website ([www.dcwasa.com](http://www.dcwasa.com))* - WASA's new website was unveiled in spring 2002. The new website and the new customer billing and information system allow for enhanced on-line access to customer account information, as well as providing customers a variety of payment options previously unavailable, including electronic funds transfer and credit/debit card payments.

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Management's Discussion and Analysis

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### USING THIS ANNUAL REPORT

This annual report consists of three parts: Management's Discussion and Analysis; the Financial Statements; and, Required Supplementary Information. The Financial Statements also include notes that explain in more detail some of the information in the Financial Statements.

### Required Financial Statements

The Financial Statements of the Authority report information about the Authority using accounting methods similar to those used by private sector companies. These statements offer short-term and long-term financial information about its activities. The *Statement of Net Assets* includes all of the Authority's assets and liabilities and provides information about the nature and amounts of investments in resources (assets) and obligations to creditors (liabilities). It also provides the basis for computing rate of return, evaluating the capital structure of the Authority and assessing the liquidity and financial flexibility of the Authority. All of the current year's revenues and expenses are accounted for in the *Statement of Revenues, Expenses, and Changes in Net Assets*. This statement measures the success of the Authority's operations over the past year and can be used to determine whether the Authority has successfully recovered all its costs through its user fees and other charges, profitability, and credit worthiness. The final required financial statement is the *Statement of Cash Flows*. The primary purpose of this statement is to provide information about the Authority's cash receipts, cash payments, and net changes in cash resulting from operations, investing, and capital and non-capital financing activities. It also provides information regarding sources of cash, uses of cash, and the changes in the cash balance during the reporting period.

### FINANCIAL ANALYSIS OF THE AUTHORITY AS A WHOLE

The *Statement of Net Assets* and the *Statement of Revenues, Expenses and Changes in Net Assets* report information about the Authority's financial condition. The Authority's net assets, i.e., the difference between assets and liabilities, are a measure of financial health or financial position. Over time, increases or decreases in the Authority's net assets are one indicator of whether its financial health is improving or deteriorating. However, other non-financial factors such as changes in economic conditions, population growth, and new or changed legislation also need to be considered in assessing the Authority's financial condition.

The Authority's financial performance remained strong in FY 2002, with total net assets increasing from FY 2001 by \$33.7 million. Further indications of the strong financial performance of the Authority in FY 2002 include a year-end contribution of \$8 million to the rate stabilization fund and a cash balance of \$133 million on September 30.

The analysis below focuses on the Authority's net assets (Table 1) and changes in net assets (Table 2) during the year. For comparability purposes, reclassifications have been made to the September 30, 2001 information to conform to September 30, 2002 presentation.

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Management's Discussion and Analysis

**Table 1.**  
**D.C. Water and Sewer Authority**  
**Condensed Statements of Net Assets**  
**FY 2001 – FY 2002**  
**(\$ in 000's)**

	<b>FY 2002</b>	<b>FY 2001</b>
Capital Assets	\$ 1,326,290	\$ 1,220,838
Current and Other Assets	<u>482,729</u>	<u>423,255</u>
<b>Total Assets</b>	<u><u>1,809,019</u></u>	<u><u>1,644,093</u></u>
Current Liabilities	233,256	152,581
Long Term Debt Outstanding	355,018	369,123
Long Term Liabilities	<u>465,979</u>	<u>401,354</u>
<b>Total Liabilities</b>	<u><u>1,054,253</u></u>	<u><u>923,058</u></u>
Net Assets		
Invested in Capital Assets, Net of Debt	534,819	554,502
Restricted	41,596	24,529
Unrestricted	<u>178,351</u>	<u>142,004</u>
<b>Total Net Assets</b>	<u><u>\$ 754,766</u></u>	<u><u>\$ 721,035</u></u>

**Table 2.**  
**Condensed Statements of Revenues, Expenses and Changes in Net Assets**  
**FY 2001 – FY 2002**  
**(\$ in 000's)**

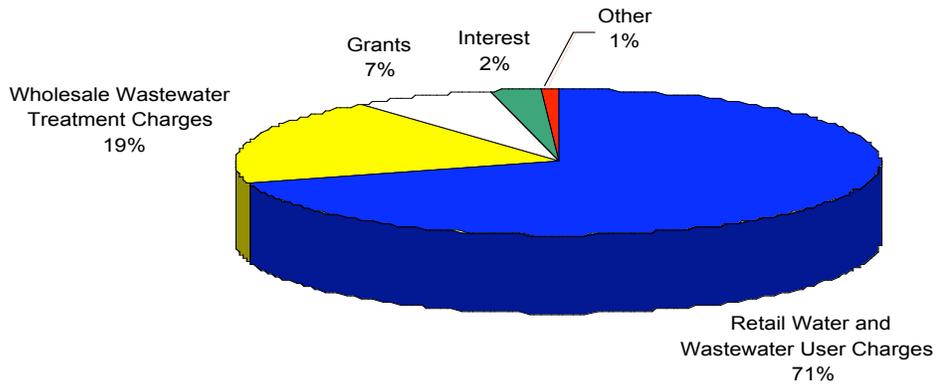
	<b>FY 2002</b>	<b>FY 2001</b>
Operating Revenues	\$ 248,729	\$ 237,480
Interest Income	6,806	10,382
Other Income	19	278
<b>Total Revenues</b>	<u>255,554</u>	<u>248,140</u>
Operating Expenses	209,085	207,794
Interest Expense	<u>16,339</u>	<u>15,486</u>
<b>Total Expenses</b>	<u><u>225,424</u></u>	<u><u>223,280</u></u>
Excess of Revenues over Expenses	<u>30,130</u>	<u>24,860</u>
Transfers-out (Payment in Lieu of Taxes)	(15,247)	(15,026)
Transfers-in ((Federal Grants Contributions)	<u>18,848</u>	<u>11,202</u>
<b>Changes in Net Assets</b>	<u>33,731</u>	<u>21,036</u>
Net Assets at Beginning of Year	721,035	699,999
<b>Net Assets at End of Year</b>	<u><u>\$ 754,766</u></u>	<u><u>\$ 721,035</u></u>

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

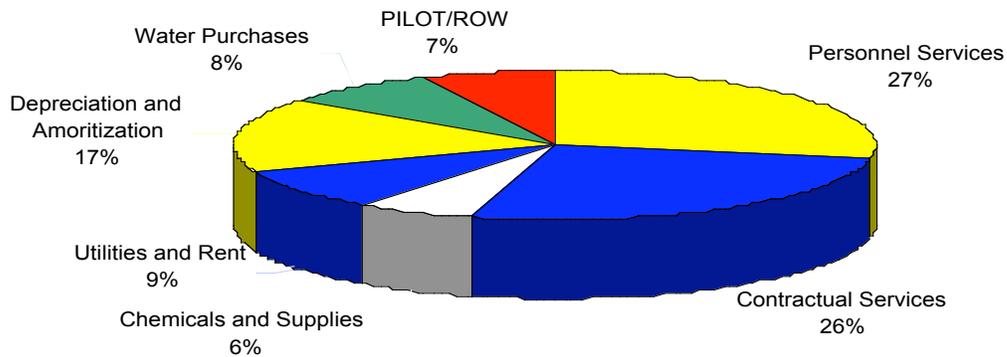
## Management's Discussion and Analysis

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**Revenues by Source  
FY 2002 Actual**



**Expenditures by Type  
FY 2002 Actual**



## DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

### Management's Discussion and Analysis

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Total operating revenues increased by five percent in 2002 compared to 2001 mainly due to the full year impact of a rate increase in the water user charges. Interest income decreased by 34 percent compared to last year due to lower interest rates on investments. Additionally, grants contributions increased by 68 percent compared to last year due to higher capital expenditures in FY 2002.

Operating expenses increased slightly to \$209 million, or by one percent in FY 2002 compared to FY 2001. Decreases in chemical spending and utilities expense due to good plant performance were offset by an increase in depreciation expense resulting from new additions to utility plant assets.

### CAPITAL ASSETS AND DEBT ADMINISTRATION

#### Capital Assets

At the end of FY 2002, the Authority had \$1.3 billion invested in a broad range of capital assets, including its wastewater collection and treatment facilities and water distribution systems. This amount represents a net increase (including additions and deductions) of nearly \$106 million, or more than eight percent over last year.

Table 3 summarizes the Authority's capital assets, net of accumulated depreciation, for the years ended September 30, 2002 and 2001. The changes are presented in detail in Note 4 to the financial statements.

**Table 3.**  
**Capital Assets**  
**Net of Accumulated Depreciation**  
**(\$ in 000's)**

	<b>FY 2002</b>	<b>FY 2001</b>
Blue Plains Regional Wastewater Treatment Plant	\$ 1,020,109	\$ 924,241
Wastewater Collection Facilities	321,685	302,178
Water Distribution System	304,026	266,441
Capital Equipment	76,743	68,555
Less Accumulated Depreciation	(567,638)	(533,709)
Net Depreciable Capital Assets	<u>1,154,925</u>	<u>1,027,706</u>
Construction in Progress	171,365	193,132
<b>Net Capital Assets</b>	<u>\$ 1,326,290</u>	<u>\$ 1,220,838</u>

## DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

### Management's Discussion and Analysis

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The Authority's FY 2003 capital budget plans for investing another \$1.6 billion in capital projects over the next 10 years, including the following:

**Table 4.**  
**FY 2002 – FY 2011 Projected Capital Improvement Plan**  
**(\$ in 000's)**

	<b>Dollar Amount</b>	<b>Percent</b>
Wastewater Treatment Plant	\$ 678,892	42%
Water Distribution System	323,303	20%
Combined Sewer Overflow	254,402	16%
Wastewater Collection Facilities	127,266	8%
Washington Aqueduct	126,889	8%
Capital Equipment	78,643	5%
Stormwater	44,462	3%
	<u>\$ 1,633,857</u>	<u>100%</u>

The sources of funding for these capital improvements are shown in the table below.

**Table 5.**  
**Sources of Funds for 10-Year Capital Improvement Program**  
**(\$ in 000's)**

	<b>Dollar Amount</b>	<b>Percent</b>
Revenue Bonds/Commercial Paper	\$ 867,312	53%
Wholesale Customer Capital Contributions	417,651	26%
EPA Grants	246,917	15%
Pay-as-you-go financing	85,897	5%
Interest Income on Bond	17,038	1%
<b>Total</b>	<u>\$ 1,634,815</u>	<u>100%</u>

Pay-as-you-go financing uses funds that are available in excess of the Board mandated 180-day operating cash reserve.

#### **Debt Administration**

At the end of FY 2002, the Authority had a total of \$467 million in bonds and commercial paper outstanding, including unamortized bond premiums, an increase of \$69 million, or 17 percent, over FY 2001 total debt outstanding.

## DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

### Management's Discussion and Analysis

**Table 6.**  
**Total Debt Outstanding**  
**(\$ in 000's)**

	FY 2002	FY 2001
Notes Payable to the Federal Government		
Washington Aqueduct	\$ 7,984	\$ 15,708
Notes Payable to the Federal Government		
Jennings Randolph Reservoir (Bloomington Dam)	17,143	17,383
Notes Payable to WSSC for Little Seneca Lake	531	935
1998 WASA Public Utility Revenue Bonds	266,120	266,120
District of Columbia General Obligation Bonds	79,070	91,204
Commercial Paper	90,000	-
Unamortized Bond Issue Premiums	5,997	6,271
<b>Total Debt Outstanding</b>	<u>\$ 466,845</u>	<u>\$ 397,621</u>

In December 2001, the Authority closed on its \$100 million commercial paper program. This program will provide interim financing for a portion of the Authority's \$1.6 billion Capital Improvement Program. Other financing sources include EPA grants, wholesale customer contributions, and pay-as-you-go financing. Under the commercial paper program, the Authority issues fixed rate, short-term (no greater than 270 days) notes. WASA's commercial paper program is backed by a direct pay letter of credit issued by Westdeutsche Landesbank Giroznetrale (West LB). The notes are rated based on West LB's rating; in effect the letter of credit of the bank substitutes the Authority's security with the paying ability of the bank, enhancing the appeal and marketability of the notes.

**Table 7.**  
**WASA's Commercial Paper Ratings**

Moody's Investors' Service	P1	superior ability to repay
Standard & Poor's Corporation	A1+	extremely strong capacity to repay
Fitch Ratings	F1+	extremely strong capacity to repay

In April 1998, the Authority issued its first series of senior lien revenue bonds in the amount of \$266 million. Gross proceeds from the Series 1998 bonds totaled \$285.2 million, including \$18.8 million of original issue premium. Approximately \$77.2 million was used to fund new capital projects; \$181.0 million was used to repay the outstanding balances of a revolving line of credit, certain notes payable to the federal government, and to advance refund the Authority's share of certain District of Columbia general obligation bonds. The Authority expects to issue long-term debt again mid-year in FY 2003.

Current WASA debt outstanding includes notes payable to the federal government for the Washington Aqueduct and Jennings Randolph Reservoir, notes payable to the Washington Suburban Sanitary Commission for the Little Seneca Lake, and District of Columbia General Obligation bonds, in addition to outstanding revenue bonds and commercial paper.

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Management's Discussion and Analysis

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Table 8.

### WASA's Bond Ratings

Moody's Investors' Service	A1	Stable Outlook
Standard & Poor's Corporation	A	Positive Outlook
Fitch Ratings	A+	Stable Outlook

## RATES

In June 2002, WASA's Board of Directors approved a revised rate and fee structure, which includes the following components:

- Maintaining retail rates at existing levels through the end of FY 2002
- Changing the effective date of future retail rate increases from April 1 to October 1 to match WASA's budget cycle
- Raising WASA's overall retail revenues by approximately \$10.6 million in FY 2003 through the following actions:
  - Implementing new metering fees to recover costs associated with installing, operating, and maintaining meters;
  - Passing through the District of Columbia's right-of-way fee as a separate line item on WASA's bill; and
  - Reducing existing retail rates by approximately 5.3 percent.

The primary factor underlying WASA's rate increases is its Capital Improvement Program. Over the next 10 years, WASA will issue of \$837 million in new debt, increasing total debt outstanding from \$467 million at the end of FY 2002 to \$1.2 billion at the end of FY 2011. While operating and maintenance costs are expected to increase 3.8 percent per year on average, debt service expenditures are expected to grow by 12 percent per year.

In August 2002, the Board of Directors approved the proposed Combined Sewer Overflow Long Term Control Plan, with capital costs of approximately \$1.3 billion in FY 2001 dollars. The effects on WASA's ratepayers for implementing this plan will depend on the final plan that is approved by the Environmental Protection Agency, its implementation schedule, and the availability of federal and other outside funding.

## BUDGET VARIANCE

There was no variance from the FY 2002 Congressionally-approved operating budget, and there were no material variances in actual versus budgeted amounts for either revenues or expenditures.

## CONTACTING THE AUTHORITY'S FINANCIAL MANAGEMENT

This financial report is designed to provide our customers and creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the money it receives. If you have questions about this report or need additional financial information, contact the Authority's Finance Office at 5000 Overlook Avenue, S.W. Washington D.C. 20032.

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

Statements of Net Assets

September 30, 2002 and 2001

(In thousands)

<b>Assets</b>	<b>2002</b>	<b>2001</b>
Current assets:		
Cash and cash equivalents (notes 2 and 3)	\$ 132,391	\$ 71,763
Investments (notes 2 and 3)	4,900	53,201
Customer receivables, net of allowance for doubtful accounts of \$6,671 in 2002 and 2001 (note 8)	52,356	52,872
Due from federal government (note 7)	33,932	24,095
Due from District of Columbia (notes 6 and 14)	17,627	17,080
Due from other jurisdictions (note 9)	28,075	3,662
Inventory (note 2)	7,758	8,841
Prepaid insurance	5	43
Total current assets	277,044	231,557
Noncurrent assets:		
Restricted assets (notes 2, 3 and 11):		
Revenue bond debt service reserve fund	23,726	24,529
Revenue bond fund - interest account	7,454	7,446
Unexpended commercial paper proceeds	18,115	—
Total restricted assets	49,295	31,975
Utility plant (note 4):		
In-service	1,722,563	1,561,415
Less accumulated depreciation	(567,638)	(533,709)
Net utility plant in service	1,154,925	1,027,706
Construction in progress	171,365	193,132
Net utility plant	1,326,290	1,220,838
Other noncurrent assets:		
Due from other jurisdictions (note 9)	24,707	34,420
Purchased capacity (less accumulated amortization of \$28,964 in 2002 and \$26,300 in 2001) (notes 2 and 5)	131,683	125,303
Total other noncurrent assets	156,390	159,723
Total noncurrent assets	1,531,975	1,412,536
Total Assets	1,809,019	1,644,093
<b>Liabilities</b>		
Current liabilities:		
Accounts payable and accrued expenses	67,086	51,608
Compensation payable (notes 2 and 10)	7,844	14,291
Accrued interest	9,076	8,975
Due to stormwater fund (note 14)	149	483
Due to jurisdictions	5,969	4,003
Deferred revenue (note 2)	31,304	44,723
Commercial paper note payable (note 12)	90,000	—
Current installments of long-term debt (note 11)	21,828	28,498
Total current liabilities	233,256	152,581
Noncurrent liabilities:		
Deferred revenue (note 2)	454,931	392,489
Other liabilities	11,048	8,865
Long-term debt excluding current installments (note 11)	355,018	369,123
Total noncurrent liabilities	820,997	770,477
Total liabilities	1,054,253	923,058
<b>Net Assets (note 2)</b>		
Invested in capital assets, net of related debt	534,819	554,502
Restricted for:		
Debt service	23,481	24,529
Capital projects	18,115	—
Unrestricted	178,351	142,004
Total net assets	\$ 754,766	\$ 721,035

See accompanying notes to financial statements.

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

## Statements of Revenues, Expenses and Changes in Net Assets

Years ended September 30, 2002 and 2001

(In thousands)

	2002	2001
Operating revenue:		
Water and waste water user charges:		
Residential and commercial customers	\$ 148,134	\$ 139,429
Federal government	28,501	26,199
District government	16,496	15,827
Charges for wholesale waste water treatment	53,211	52,542
Other	2,387	3,483
<b>Total operating revenue</b>	<b>248,729</b>	<b>237,480</b>
Operating expenses:		
Personnel services	62,162	62,055
Contractual services	59,166	58,976
Chemicals, supplies and small equipment	13,683	15,488
Utilities and rent	20,071	21,219
Depreciation and amortization	37,099	32,971
Water purchases	16,904	17,085
<b>Total operating expenses</b>	<b>209,085</b>	<b>207,794</b>
Operating income	39,644	29,686
Nonoperating revenue (expense):		
Interest income	6,806	10,382
Other nonoperating income	19	278
Interest and fiscal charges	(16,339)	(15,486)
<b>Total nonoperating revenue (expenses)</b>	<b>(9,514)</b>	<b>(4,826)</b>
Income before contributions and transfers	30,130	24,860
Federal grants contributions(net) (note 2a)	18,848	11,202
Payment in lieu of tax & right-of-way fee	(15,247)	(15,026)
Change in net assets	33,731	21,036
Total net assets, beginning of year	721,035	699,999
<b>Total net assets, ending of year</b>	<b>\$ 754,766</b>	<b>\$ 721,035</b>

See accompanying notes to financial statements.

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

Statements of Cash Flows

Years ended September 30, 2002 and 2001

(In thousands)

	2002	2001
Cash flows from operating activities:		
Cash received from customers	\$ 250,347	\$ 225,335
Cash paid to suppliers for goods and services	(101,930)	(110,077)
Cash paid to employees for services	(73,961)	(55,635)
<b>Net cash provided by operating activities</b>	<b>74,456</b>	<b>59,623</b>
Cash flows from capital and related financing activities:		
Proceeds from notes payable to federal government	7,836	15,707
Proceeds from issuance of commercial paper	90,000	—
Proceeds from other jurisdictions	37,648	28,910
Repayments of bond principal and notes payable to federal and District government	(29,033)	(20,386)
Acquisition of utility plant and purchased capacity	(140,361)	(104,940)
Payments of interest and fiscal charges	(21,504)	(20,007)
Contributions of capital from federal government	15,957	4,580
<b>Net cash used in capital and related financing activities</b>	<b>(39,457)</b>	<b>(96,136)</b>
Cash flows from non-capital financing activities -		
( Transfers-Out (payment-in-lieu-of-tax)	(9,629)	(17,209)
Cash repayments of loan to District	—	10,434
<b>Net cash used by non-capital financing activities</b>	<b>(9,629)</b>	<b>(6,775)</b>
Cash flows from investing activities:		
Cash received for interest	4,276	11,558
Net sales (purchases) and maturities of investments	48,301	(28,809)
<b>Net cash provided by investing activities</b>	<b>52,577</b>	<b>(17,251)</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>77,947</b>	<b>(60,539)</b>
<b>Cash and cash equivalents (including restricted) at beginning of year</b>	<b>103,739</b>	<b>164,278</b>
<b>Cash and cash equivalents (including restricted) at end of year</b>	<b>\$ 181,686</b>	<b>\$ 103,739</b>
Operating income	\$ 39,644	\$ 29,686
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	37,099	32,971
Change in operating assets and liabilities:		
(Increase) decrease in customer and other receivables	1,885	(8,631)
Decrease in inventory	1,120	1,221
Increase in payables and accrued liabilities	(3,261)	12,931
Increase (decrease) in deferred revenue	(2,031)	(8,555)
<b>Net cash provided by operating activities</b>	<b>\$ 74,456</b>	<b>\$ 59,623</b>

See accompanying notes to financial statements.

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# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (1) Reporting Entity

The District of Columbia Water and Sewer Enterprise Fund (the Fund) was established in 1979 and was operated by the Water and Sewer Utility Administration, a division of the District of Columbia (the District) Department of Public Works. The District of Columbia Water and Sewer Authority (WASA or Authority), an independent authority of the District was created in April 1996 and began operating October 1, 1996 under and pursuant to an act of the Council of the District entitled the "Water and Sewer Authority and Department of Public Works Reorganization Act of 1996 (as amended), and an act of the United States Congress entitled the "District of Columbia Water and Sewer Authority Act of 1996."

WASA provides water and sewer services to District residents, businesses, federal and municipal customers, and certain facilities of the federal government in Virginia and Maryland. WASA also operates a regional wastewater treatment plant (Plant) and an interceptor trunk line that carries wastewater primarily from Loudoun County and Dulles Airport to the Plant.

WASA's wastewater service territory includes over 2 million people in Montgomery and Prince George's Counties in Maryland, Fairfax and Loudoun Counties in Virginia, and the District. The Blue Plains Intermunicipal Agreement (IMA) was executed in September 1985 among the District; Fairfax County, Virginia; and the Washington Suburban Sanitary Commission (WSSC), which comprises Montgomery and Prince George's Counties in Maryland (collectively referred to as "the Participants"). The IMA provided for the expansion of the Plant's processing capacity to 370 million gallons per day. The IMA also provided for the allocation of capital, operating, and maintenance costs among the Participants. Capital costs of the Plant are allocated among the Participants in proportion to their respective wastewater treatment capacity allocation as defined in the IMA.

The Loudoun County Sanitation Authority and the Potomac Interceptor Group also purchase wastewater services from WASA. The Potomac Interceptor Group consists of the Town of Vienna, Virginia; the U.S. Park Service; the Department of the Navy; and the Metropolitan Washington Airport Authority (Dulles Airport).

WASA purchases water from the Washington Aqueduct (Aqueduct), which is owned by the U.S. Government and operated by the U.S. Army Corps of Engineers under the direction of the Secretary of the Army. The Aqueduct operates two water purification plants for the exclusive benefit of WASA, Arlington County, Virginia and the City of Falls Church, Virginia. WASA purchases approximately 76 percent of the water produced by the Aqueduct, which is reported as water purchases.

WASA is an independent authority under its enabling legislation. WASA is also responsible for the payment of certain District long-term debt issued before WASA's creation to finance capital improvements for WASA's predecessor agency. Therefore, WASA is a component unit of the District.

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (2) Summary of Significant Accounting Policies

The financial statements of WASA have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted primary standard-setting body for establishing governmental accounting and financial reporting principles. WASA's significant accounting policies are described below.

#### (a) *Measurement Focus And Basis of Accounting*

The term measurement focus is used to denote what is being measured and reported in the Authority's operating statements. The Authority is accounted for on the flow of "economic resources" measurement focus. The accounting objectives of this measurement focus are the determination of operating income, changes in net assets (or cost recovery), financial position and cash flows. All assets and liabilities (whether current or noncurrent) associated with their activities are reported and equity is reported as net assets.

The term basis of accounting is used to determine when a transaction or event is recognized on the Authority's operating statements. The Authority uses the full accrual basis of accounting, with revenues recorded when earned and expenses recorded when incurred, even though actual payment or receipt may not occur until after the period ends.

WASA has elected, as allowed in paragraph 7 of *GASB Statement No. 20, Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities that use Proprietary Fund Accounting*, not to follow FASB pronouncements issued subsequent to November 30, 1989. Therefore, WASA follows all GASB pronouncements; and FASB pronouncements issued on or before November 30, 1989, unless those pronouncements conflict or contradict GASB pronouncements.

As allowed by GASB 20, WASA accounts for its regulatory assets and liabilities in accordance with the *Statement of Financial Accounting Standards Board Statement No. 71, Accounting for the Effects of Certain Types of Regulation (SFAS 71)*. In general, SFAS 71 covers the type of regulation that permits rates to be set at levels intended to recover the estimated costs of providing regulated services, including the cost of capital. There are times in which the revenues intended to cover certain costs are provided either before or after the costs have been incurred. If the costs will be recovered in the future, a regulatory asset is capitalized and reduced as the related revenues are provided. If the current recovery is for costs that will be incurred in future periods, regulatory liabilities are accrued and reduced as those costs are incurred. As of September 30, 2002 and 2001, no regulatory assets or liabilities were required to be reported in accordance with SFAS 71.

The Authority adopted the provisions of GASB Statement No. 33 *Accounting and Financial Reporting for Nonexchange Transactions* in FY 2001. Statement 33 establishes accounting and financial reporting standards for nonexchange transactions involving financial or capital resources. This statement requires governments to recognize capital contributions as revenues, not contributed capital.

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (2) Summary of Significant Accounting Policies (Continued)

For the fiscal year ended September 30, 2002, WASA adopted the provisions of Governmental Accounting Standards Board Statement No. 34 "*Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments.*" Statement 34 established standards for external financial reporting for all state and local governmental entities, which includes a statement of net assets, a statement of activities and changes in net assets and a statement of cash flows. It requires the classification of net assets into three components as described below:

- *Invested in capital assets, net of related debt* – This component of net assets consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
- *Restricted* – This component of net assets consists of restrictions placed on net assets as a result of external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.
- *Unrestricted net assets* – This component of net assets consist of net assets that do not meet the definition of "restricted" or "invested in capital assets, net of related debt."

#### (b) Revenues and Expenses

Revenues and expenses are distinguished between operating and nonoperating items.

Operating revenues generally result from providing services in connection with the Authority's principal ongoing operations. The principal operating revenues of the Authority are water and sewer user charges, and charges for wholesale wastewater treatment. Revenue from user charges and sales of services is recognized as the related service is provided. Refunds to customers are charged to income in the period in which those refunds are paid.

Operating expenses include the costs associated with the conveyance water and wastewater, treatment of wastewater, administrative expenses, and depreciation of capital assets.

All revenues and expenses not meeting these definitions are reported as nonoperating revenues and expenses.

#### *Water and Sewer User Charges*

Retail water and sewer rates are approved by the WASA Board of Directors. Charges to the District and the Federal government are the same as those charged to retail customers. Charges for services provided but unbilled at the end of the year are recorded as revenue on an estimated basis, which considers historical usage patterns and current rates. Allowances for customer receivables that ultimately may be uncollectible are estimated and charged to expense.

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (2) Summary of Significant Accounting Policies (Continued)

#### *Charges for Wholesale Wastewater Treatment and Deferred Revenue*

The cost of operating and maintaining the Plant and related collection facilities applicable to non-District users is billed to participating jurisdictions based upon their share of flows into the Plant. The charges for operating and maintenance costs, and for overhead costs incurred on capital projects, are recorded as charges for wholesale wastewater treatment revenue in the year the costs are incurred.

The costs of capital projects required for the facilities are allocated to the participating jurisdictions based on their applicable capacity allocation in the Plant. The reimbursements for capital related costs are recorded as deferred revenue and amortized into charges for wholesale wastewater treatment revenue over the estimated useful lives of the related assets.

#### (c) **Cash and Cash Equivalents**

WASA maintains its own cash accounts for the collection of all revenue and payment of all expenses. WASA invests all unrestricted cash balances, in excess of the required compensating balances, in interest bearing accounts. The Authority's cash equivalents consist of unrestricted and restricted investments such as certificates of deposits, overnight repurchase agreements, and U.S. Government obligations, which have an original maturity of 90 days or less, and are readily convertible to known amounts of cash. For purposes of the accompanying statements of cash flows, cash and cash equivalents also include WASA's restricted cash.

#### (d) **Investments**

The Authority's investments consist of unrestricted and restricted investments such as commercial paper, overnight repurchase agreements, and U.S. Government obligations, which have an original maturity in excess of 90 days. Investments are recorded at amortized cost, and certain nonparticipating contracts that are recorded at cost. Recorded amounts approximate fair value.

#### (e) **Restricted Assets**

Restricted assets consist of invested unexpended commercial paper proceeds, debt service reserves and funds for the current payment of revenue bond debt service. These investments, which cannot be used for routine operations, are classified as restricted assets since their use is limited by applicable bond covenants and other legal indentures.

#### (f) **Utility Plant**

Utility plant is stated at original construction cost, which includes personal service and interest costs incurred during construction. Normal recurring maintenance and repair costs are charged to operations, whereas major repairs, improvements and replacements, which materially extend the useful lives of the assets, are capitalized. Plant in-service is depreciated on the straight-line basis over an estimated useful life of 60 years, except for capital equipment, which is depreciated over

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (2) Summary of Significant Accounting Policies (Continued)

estimated useful lives ranging from five to eight years. Construction in progress is reclassified to in-service upon substantial completion or when placed in service, with related depreciation commencing at that time.

#### (g) *Purchased Capacity*

Historically, the District issued long-term debt to finance most of the Aqueduct's capital facilities and WASA recorded this debt and related capital costs in its financial statements. On April 1, 1997, WASA and the other Northern Virginia customers entered into an agreement with the federal government, which provides for the funding of the Aqueduct's capital improvement program directly by the federal government through borrowings. WASA is now responsible for funding only its portion of this debt, other related capital projects, and operating costs calculated as its pro-rata share of water purchased.

WASA's payments for capital costs are recorded as purchased capacity; the Aqueduct's capital costs allocable to other jurisdictions, but funded by WASA prior to April 1, 1997, are reported as due from other jurisdictions.

Additionally, WASA's participation in the Little Seneca Lake and Jennings Randolph Reservoir (Bloomington Dam) projects is included in purchased capacity. The two projects provide backup and peak-day water supply for WASA and the other two Aqueduct customers as well as other area jurisdictions. The Jennings Randolph Reservoir was constructed by the federal government and is operated by the U.S. Army Corps of Engineers, Baltimore District. WASA funds 30 percent of all operating and capital costs. The Little Seneca Lake was constructed and is operated by the Washington Suburban Sanitary Commission (WSSC). WASA funds 40 percent of all capital and operating costs.

Purchased capacity is generally amortized over the estimated useful lives of the facilities of 60 years.

#### (h) *Inventory*

Inventory is recorded at the lower of weighted average cost or market value and consists primarily of operating and maintenance materials.

#### (i) *Debt Financing Costs*

Bond discount and premium and expenses incurred to issue debt are capitalized and amortized into interest expense over the related bond issue period using the effective interest method.

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (2) Summary of Significant Accounting Policies (Continued)

#### (j) *Vacation and Sick Leave*

Employees earn vacation and sick leave based on a prescribed formula, which allows employees to accumulate a maximum of 30 days in vacation pay and an unlimited amount of sick pay. The amount of vacation leave earned but unused by employees vests and is accrued as a liability. Sick pay does not vest and accordingly, it is recorded when used.

#### (k) *Reclassifications*

Certain prior year amounts have been reclassified to conform to the current year presentation.

### (3) Cash Deposits and Investments

#### (a) *Cash Deposits*

At September 30, 2002 and 2001, the carrying amounts of WASA's unrestricted bank deposits and cash on hand (petty cash) were \$20,130 and \$7,300 respectively. These bank deposits are entirely insured or collateralized with securities held by WASA's agent in its name.

#### (b) *Cash Equivalents and Investments*

WASA's Board of Directors has approved a cash management and investment policy and WASA has adopted investment practices based on guidelines established by the Government Finance Officer's Association. Allowable investments include obligations of the U.S. Treasury and U.S. agencies. WASA may also invest in highly rated bankers acceptances, repurchase agreements, commercial paper, corporate notes and bonds, certificates of deposit and money market mutual funds. Repurchase agreements are collateralized at 102 percent of the investment with obligations of the U.S. Treasury or U.S. agencies, or investment grade obligations of the District or state or local governments. Highly rated means investments with a rating of AA or A-1/P-1 or better. Investments are restricted as to the amount in each type of investment to ensure appropriate diversification.

WASA's investments are categorized in accordance with GASB Statement No. 3, "*Deposits with Financial Institutions, Investments (including repurchase agreements), and Reverse Repurchase Agreements*," to give an indication of the level of risk assumed by WASA at year-end.

The three categories of credit risk are:

- Investments that are insured or registered, or securities held by WASA or its agent in WASA's name;
- Investments that are uninsured and unregistered, with securities held by the counterparty's trust department or agent in WASA's name; and

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

### (3) Cash Deposits and Investments (Continued)

- Investments that are uninsured and unregistered, with securities held by the counterparty, or by its trust department or agent but not in WASA's name.

All of WASA's investments are categorized in the first category except for the money market mutual fund, which consists of United States Government Agencies and Securities and other investments. These investments are not categorized because they represent an interest in a group of securities and have no specific security subject to custodial risk.

Description	2002	2001
Cash and cash equivalents		
Unrestricted		
Demand Deposit	\$ 20,130	\$ 7,300
Repurchase agreements	32,361	20,806
U.S. government notes and agency securities	59,894	23,709
Money market mutual fund	20,006	-
Commercial paper	-	19,948
Total unrestricted cash and cash equivalents	<u>132,391</u>	<u>71,763</u>
Restricted		
U.S. government notes and agency securities	-	24,529
Money market mutual fund	<u>49,295</u>	<u>7,446</u>
Total restricted cash and cash equivalents	<u>49,295</u>	<u>31,975</u>
Investments		
Unrestricted		
Repurchase agreements	-	30,000
U.S government notes and agency securities	-	18,301
Commercial paper	<u>4,900</u>	<u>4,900</u>
Total Investments	<u>4,900</u>	<u>53,201</u>
Total unrestricted and restricted cash, and cash equivalents, and investments	<u>\$ 186,586</u>	<u>\$ 156,939</u>

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

### (4) Capital Assets

The net utility plant, including capitalized interest of \$4,992 and \$4,221 for the years ended September 30, 2002 and 2001, respectively, consists of the following:

	Balance 9/30/2001	Additions	Disposals	Transfers	Balance 9/30/2002
Utility Plant					
Waste water treatment plant	\$ 924,241	\$ 95,868	\$ -	\$ -	\$ 1,020,109
Waste water collection facilities	302,178	19,507	-	-	321,685
Water distribution system	266,441	37,585	-	-	304,026
Capital Equipment	68,555	8,756	(568)	-	76,743
Total utility plant in service	1,561,415	161,716	(568)	-	1,722,563
Less accumulated depreciation:					
Waste water treatment plant	(249,800)	(14,461)	-	-	(264,261)
Waste water collection facilities	(137,250)	(5,149)	-	-	(142,399)
Water distribution system	(111,597)	(4,507)	-	-	(116,104)
Capital Equipment	(35,062)	(10,320)	508	-	(44,874)
Total accumulated depreciation	(533,709)	(34,437)	508	-	(567,638)
Net Utility Plant in service	1,027,706	127,279	(60)	-	1,154,925
Construction in progress	193,132	139,949	-	(161,716)	171,365
Capital Assets, net	<u>\$ 1,220,838</u>	<u>\$ 267,228</u>	<u>\$ (60)</u>	<u>\$ (161,716)</u>	<u>\$ 1,326,290</u>

### (5) Purchased Capacity

Purchased capacity consists of the following as of September 30:

	Balance 9/30/2001	Additions	Balance 9/30/2002
Purchased Capacity			
Jennings Randolph Reservoir	\$ 19,863	\$ -	\$ 19,863
Little Seneca Lake	12,327	-	12,327
Washington Aqueduct	119,413	9,044	128,457
Total in service	<u>151,603</u>	<u>9,044</u>	<u>160,647</u>
Less accumulated depreciation:			
Jennings Randolph Reservoir	(3,537)	(393)	(3,930)
Little Seneca Lake	(3,390)	(205)	(3,595)
Washington Aqueduct	(19,373)	(2,066)	(21,439)
Total accumulated depreciation	<u>(26,300)</u>	<u>(2,664)</u>	<u>(28,964)</u>
Purchased capacity, net	<u>\$ 125,303</u>	<u>\$ 6,380</u>	<u>\$ 131,683</u>

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

### (6) Due from the District of Columbia

The amount due from the District of Columbia for the years ended September 30, 2002 and 2001 were \$17,627 and \$17,080 respectively. These amounts include advance debt service payments of \$17,554 and \$16,885 made to the District for WASA's share of fiscal year 2002 and 2001 debt service on general obligation bonds originally issued to finance WASA's capital improvements.

### (7) Due from Federal Government

The amount due from the federal government consists of the following at September 30:

	<u>2002</u>	<u>2001</u>
Federal grants receivable	\$ 21,186	\$ 17,438
Washington Aqueduct advances	12,746	6,657
	<u>\$ 33,932</u>	<u>\$ 24,095</u>

### (8) Customer Receivables

Customer receivables include unbilled revenues of \$14,979 and \$14,697 at September 30, 2002 and 2001, respectively.

### (9) Due From Other Jurisdictions

The amount due from other jurisdictions consists of the following at September 30:

	<u>2002</u>	<u>2001</u>
Current:		
Loudoun County Sanitation Authority	\$ 2,541	\$ 131
Northern Virginia (a)	1,388	1,379
Fairfax	5,326	293
WSSC	18,516	1,603
Potomac Interceptor	304	256
	<u>28,075</u>	<u>3,662</u>
Noncurrent:		
Wholesale wastewater users	15,147	23,473
Northern Virginia (a)	9,560	10,947
	<u>24,707</u>	<u>34,420</u>
	<u>\$ 52,782</u>	<u>\$ 38,082</u>

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

**Notes to the Financial Statements**

**September 30, 2002 and 2001**

**(In thousands)**

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**(9) Due From Other Jurisdictions (Continued)**

**(a) Northern Virginia**

The amount due from Northern Virginia represents the Arlington County and the City of Falls Church, Virginia portions of the debt incurred by WASA for the purpose of funding capital expenditures of the Aqueduct prior to April 1, 1997.

**(10) Compensated Absences**

Compensation payables for the years ended September 30, 2002 and 2001 were \$7,844 and \$14,291 respectively. These amounts include accrual for compensated absences (vacation) for the stated years as shown below:

	<u>2002</u>	<u>2001</u>
Balance, beginning of year	\$ 3,851	\$ 3,833
change	<u>256</u>	<u>18</u>
Balance, end of year	<u>\$ 4,107</u>	<u>\$ 3,851</u>

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

### (11) Long-Term Debt

WASA derives its funding for past and future capital projects from the issuance of revenue bonds, District general obligation bonds, notes payable to the federal government and various other non-debt sources of financing. Long-term debt consists of the following at September 30, 2002 and 2001, respectively:

	Balance 9/30/2001	Addition	Reduction	Balance 9/30/2002	Due Within One year
Notes payable to the federal government for Washington Aqueduct; interest is variable based on a three month taxable municipal index which, for 2002, was between 1.38% and 3.36%, maturing in 2018	\$ 15,708	\$ 7,984	\$ (15,708)	\$ 7,984	\$ 7,984
Notes payable to the federal government for Jennings Randolph Reservoir (Bloomington Dam); interest at 3.25 %, maturing in 2041	17,383	-	(240)	17,143	248
Notes payable to WSSC for Little Seneca; interest ranges from 5.98% to 6.60%, maturing in 2014	935	-	(404)	531	171
1998 public utility revenue bonds; interest ranges from 5.50% to 6.00%, maturing in 2028	266,120	-	-	266,120	-
District Columbia general obligation bonds:					
1991; interest ranges from 6.3% to 6.75%, maturing in 2008	525	-	(60)	465	65
1993; interest ranges from 4.9% to 6.0%, maturing in 2012	62,267	-	(6,287)	55,980	8,249
1994; interest ranges from 4.55% to 6.50%, maturing though 2011	17,920	-	(3,820)	14,100	3,190
2001; interest at 6.02%, maturing in 2008	10,492	-	(1,967)	8,525	1,921
Total Bonds and Notes	<u>\$ 391,350</u>	<u>\$ 7,984</u>	<u>\$ (28,486)</u>	<u>\$ 370,848</u>	<u>\$21,828</u>

Long-term debt outstanding, as presented on the accompanying statement of net assets, includes net unamortized bond premiums of \$5,998 and \$6,271 at September 30, 2002 and 2001, respectively.

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (11) Long Term Debt (Continued)

#### (a) Senior Debt

Payment of the principal and interest on WASA's senior debt is secured by a pledge of WASA's gross revenues (excluding any capital contributions or grants) after provisions for payment of the operating expenses. The public utility revenue bonds and notes payable to the federal government for the Washington Aqueduct are considered senior debt under the related Master Indenture of Trust (Master Indenture).

Notes payable to the federal government for the Washington Aqueduct are specifically secured by user charges assessed on retail customers. The proceeds of these notes are used to make capital improvements to the Washington Aqueduct. The interest rates on these notes are reset each quarter as determined by the U.S. Treasury based on a comparable three-month taxable special fund obligation. During the years ended September 30, 2002 and 2001, the highest rate on these notes was 3.36 and 6.68 percent and the lowest rate was 1.38 and 3.05 percent, respectively.

In April 1998, WASA issued approximately \$266,120 of senior lien public utility revenue bonds (Series 1998 Bonds). As required by the Master Indenture, WASA has agreed to fix, charge, and collect rates and fees at levels sufficient to cover annual senior principal and interest requirements by 120 percent (see "Bond Covenants" below). Gross proceeds from the Series 1998 Bonds totaled \$285,200, including \$18,800 of original issue premium. Approximately \$77,200 was used to fund various capital projects; \$181,000 was used to repay the outstanding balances of a revolving line of credit and certain notes payable to the federal government and to advance refund approximately \$152,200 of District general obligation bonds. The remainder of the gross proceeds, approximately \$27,000, was used to fund the debt service reserve fund and to pay costs of issuance. The payment of principal and interest on the Series 1998 bonds is insured by Financial Security Assurance, Inc.

WASA completed the advance-refunding portion of the April 1998 bond issuance to restructure its front-loaded debt service schedule. Approximately \$160,000 of the issuance proceeds was used to purchase securities that were placed in an irrevocable trust, which provides resources for all future debt service payments on the refunded debt. The refunded debt is considered defeased and the respective liabilities have been removed from the balance sheet. The advance refunding in 1998 resulted in an economic cost (difference between the present values of the old and new debt service payments) of \$241 and an increase in aggregate debt service payments of \$119,000. The difference between the refunded debt and the new debt will be amortized as a component of interest expense over the remaining life of the refunded debt.

The total amount of refunded debt outstanding was \$67,855 and \$84,110 at September 30, 2002 and 2001, respectively.

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (11) Long Term Debt (Continued)

#### **(b) Subordinate Debt**

Payment of WASA's subordinate debt is made after payment of senior debt and after certain reserves have been funded (see "Bond Covenants" below).

Notes payable to the federal government for Jennings Randolph Reservoir are considered subordinate debt under the Master Indenture and contain no pledge of property, sinking fund provisions, or restrictive covenants. The proceeds of the notes were used to make improvements to the Jennings Randolph Reservoir for backup and peak-day water supply.

Notes payable to WSSC for the Little Seneca Reservoir are considered subordinate debt under the Master Indenture and contain no pledge of property, sinking fund provisions, or restrictive covenants. The proceeds of the notes were used by WSSC to construct the Little Seneca Dam and Lake for backup and peak day water supply for the Authority.

Prior to the creation of WASA as an independent entity, the District issued general obligation bonds to fund improvements to the water and wastewater system. WASA is responsible for this debt, which is considered subordinate under the Master Indenture. General obligation bonds are also supported by the full faith and credit of the District and by special real property and tax deposits accounted for in the District's general fund. While WASA is not directly liable for the general obligation bonds, it is required by the enabling legislation to transfer to the District the funds necessary to pay its portion of the debt service on the bonds.

In March 1998, WASA and the District executed a memorandum of understanding that outlined certain terms for payment of WASA's share of District general obligation bonds. In particular, it contained the following three provisions: (1) WASA will establish a debt service reserve equal to 10 percent of the subsequent fiscal year's general obligation debt service; (2) on each September 1, commencing September 1, 1999, WASA will prepay the general obligation debt service due for the subsequent fiscal year; and (3) WASA will annually establish rates sufficient to provide at least 100 percent debt service coverage of WASA's share of District general obligation bonds, in accordance with the Master Indenture. As of September 30, 2002 and 2001, WASA had reserved \$1.798 million and \$1.707 million, respectively, of its unrestricted cash in connection with the debt service reserve requirement described above, and was in compliance with the other provisions of the memorandum of understanding.

#### **(c) Bond Covenants**

The Master Indenture sets forth the establishment of accounts, the application of revenues, and certain other covenants to ensure proper operation and maintenance of the water and wastewater system and payment of debt service. Management believes the Authority was in compliance with all bond covenants as of and for the years ended September 30, 2002 and 2001. The primary requirements of the Master Indenture are summarized below:

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (11) Long Term Debt (Continued)

*Rate Covenant* — The Authority has covenanted to establish and maintain rates and charges to produce revenues sufficient to pay operating expenses and annual debt service on senior and subordinate debt, to fund certain required reserves, to fund any payment in lieu of taxes and to produce net revenues sufficient at least equal to the sum of: (1) 120 percent of annual debt service on senior debt and (2) 100 percent of annual debt service on subordinate debt. Net revenues are defined generally as all Authority revenues (excluding capital contributions from wholesale customers, Environmental Protection Agency (EPA) grants, or any proceeds derived from the sale of capital assets) less operating and maintenance expenses (excluding any payment in lieu of taxes, depreciation and amortization charges and certain extraordinary, nonrecurring expenses).

*Debt Service Reserve Fund* — For each series of senior debt issued, the Authority is required to establish a debt service reserve fund, which is only to be used to pay senior debt service in the event of insufficient funds. The Series 1998 Bonds debt service reserve fund balance as of September 30, 2002 and 2001 was \$23,726 and \$24,529, respectively, and is required to be maintained at 125 percent of current and future average annual Series 1998 debt service.

#### (d) Debt Service to Maturity

The future debt-servicing obligations at September 30, 2002 are as follows:

<u>Fiscal year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2003	\$ 21,828	\$ 19,834	\$ 41,662
2004	14,719	19,082	33,801
2005	16,134	18,274	34,408
2006	13,385	17,409	30,794
2007	16,023	16,685	32,708
2008 - 2012	66,692	71,289	137,981
2013 - 2017	67,762	53,169	120,931
2018 - 2022	88,999	31,856	120,855
2023 - 2027	49,805	10,043	59,848
2028 - 2032	10,353	1,513	11,866
2033 - 2037	2,676	669	3,345
2038 - 2042	2,472	204	2,676
	<u>\$370,848</u>	<u>\$260,027</u>	<u>\$630,875</u>

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

### (12) Commercial Paper – Notes Payable

*Commercial Paper* — The Board of Directors of the Authority approved WASA’s commercial paper program on November 1, 2001, with both Series A notes not to exceed \$50,000,000 at any one time and Series B notes not to exceed \$50,000,000 outstanding at any one time. Proceeds from the sale of the notes are used to finance certain costs incurred in connection with the construction of certain capital improvements to WASA’s wastewater treatment collection and disposal system, its water distribution system and capital equipment.

Series A and B notes are secured by separate letters of credit, issued by Westdeutsche Landesbank Girozentrale (WestLB) and are rated P1, A1+ and F1 by Moody’s, S&P and Fitch respectively.

At the end of FY 2002, the Authority had issued \$90 million in notes, with interest rates ranging from 1.40 to 1.65 percent. All maturities were less than 270 days, as stipulated in the Board resolution authorizing the program. The remaining \$10 million authorized under this program was issued early in FY 2003.

A schedule of commercial paper activity for period ending September 30, 2002 is shown below:

	Balance 9/30/2001	Addition	Reduction	Balance 9/30/2002	Due Within One year
Commercial Paper Notes Payable					
2002; series A, interest ranges from 1.40% to 1.50%, maturing through 2003	-	\$ 50,000	-	\$ 50,000	\$ 50,000
2002; series B, interest ranges from 1.40% to 1.65%, maturing through 2003	-	40,000	-	40,000	40,000
Total Bonds and Notes	-	\$ 90,000	-	\$ 90,000	\$ 90,000

### (13) Commitments and Contingencies

#### (a) Federal Grants

WASA’s capital and operating grants are subject to financial and compliance audits by the EPA, the grantor, or its representatives. WASA’s management does not expect that the results of these audits will have a material adverse effect on the accompanying financial statements.

#### (b) Litigation

WASA is a party in various legal actions and claims brought by or against it. In the opinion of WASA’s management and legal counsel, the ultimate resolution of these actions and claims will not materially affect the financial position or results of operations of WASA.

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (13) Commitments and Contingencies (Continued)

#### (c) Risk Management

WASA is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Effective April 7, 1998, WASA purchased certain commercial insurance coverages. Prior to that date WASA was either self-insured or covered under District programs. For each of the four most recent years, settlement of claims has not exceeded insurance coverages.

WASA has purchased \$500,000 property coverage to protect its owned or leased facilities, buildings and contents. Certain off-site equipment is insured under an Inland Marine Policy. Except for catastrophic on-site protection provided on the Property Policy, WASA self-insures its fleet of vehicles. The deductible for each claim for buildings and contents is \$250, for equipment is \$10 and for off-site equipment is \$25.

WASA has purchased liability insurance coverage to protect it from claims alleging damages and injuries caused by automobile accidents, broken water lines, construction, and other activities. Limits up to \$100,000 have been secured in excess of a deductible of \$1,000 for each claim. Public officials liability insurance has been secured with limits up to \$20,000 in excess of a deductible of \$50.

WASA self-insures all workers' compensation claims for work-related injuries. In order to reduce the cost of medical expenses, rehabilitation and lost wages, WASA has contracted with a third party administrator to manage the workers' compensation program.

Liabilities are recognized when it is probable that losses have occurred and the amounts of the losses can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported to date. Because actual claims liabilities depend on such complex factors as inflation, changes in governing laws and standards, and court awards, the process used in computing claims liabilities is reevaluated periodically to take into consideration the history, frequency and severity of recent claims and other economic and social factors. These liabilities are computed using a combination of actual claims experience and actuarially determined amounts. WASA has computed contingency amounts for grants disallowance, litigation and claims and are included in other liabilities on the accompanying balance sheet.

Changes in the balances of workers' compensation claims and general liability claims during the years ended September 30, 2002 and 2001, were as follows:

	<u>2002</u>	<u>2001</u>
Balance, beginning of year	\$ 4,101	\$ 2,692
Current year claims and changes in estimates	4,458	3,059
Claim payments	(3,084)	(1,650)
Balance, end of year	<u>\$ 5,475</u>	<u>\$ 4,101</u>

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (13) Commitments and Contingencies (Continued)

#### (d) Construction Commitments

Contractual commitments for utility plant construction and capital equipment for WASA at September 30, 2002 was \$309,717:

Total contract commitments	\$ 449,666
Less work performed and retainage	(139,949)
Outstanding contract commitments	\$ <u>309,717</u>

### (14) Related Party and Similar Transactions

The enabling legislation, described in Note 1, established that the District would pay for water and sewer services. WASA recorded revenue of \$16,496 and \$15,827 from the District for these services for years 2002 and 2001, respectively, which are included in water and wastewater user charges in the accompanying statements of revenues, expenses and changes in net assets

WASA recorded expenses of \$9,847 and \$9,625, for payments-in-lieu-of-taxes to the District for services such as road repairs, fire protection, police protection, and other services for the years ended September 30, 2002 and 2001, respectively. WASA also recorded an expense of \$5,400 for years 2002 and 2001, for the District's Right of Way fee, charged to all area utilities for infrastructure occupancy in public streets.

On October 18, 2000, District of Columbia City Council established legislation to create the Storm Water Compliance Amendment Act of 2000. The Act established the Authority as the Storm Water Administrator. The Administrator shall be responsible for monitoring and coordinating the activities of all District agencies, including the activities of the Authority, which are required to maintain compliance with the Storm Water Permit. The permit was issued to the District of Columbia government by the Environmental Protection Agency. The legislation also required the Authority to charge its customers a fee for Storm Water. The Authority incurred \$526 and \$135 of administrative expenses for years ended September 30, 2002 and 2001, respectively. Additionally, the Authority had \$149 and \$483 of receivables due to Storm Water Fund for years ended September 30, 2002 and 2001. The amount shown on the balance sheet as Due to Storm Water Fund is a net of collection and administrative costs.

# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## Notes to the Financial Statements

September 30, 2002 and 2001

(In thousands)

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### (15) Employee Benefits

#### (a) *Defined Benefit Plans*

WASA employees hired prior to October 1, 1987, participate in certain federal benefit plans. The plans are cost sharing multi-employer plans, which provide retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan participants and beneficiaries. In addition, the plans issue a publicly available financial report that includes financial statements and required supplementary information. Employees and WASA each contribute a percentage of the employees' salaries to the federal government, which administers the plans. During fiscal years 2002, 2001 and 2000, WASA's contributions to the plans were \$2,043, \$1,995, and \$1,914, respectively. These amounts were 100 percent of the required contributions under the plans for each of the fiscal years presented. The required percent of salaries to be contributed by the employees were 7.00 percent for 2002, 7.00 percent for 2001 and 7.40 percent for 2000. The required percent of salaries to be contributed by WASA was 8.51 percent for the three fiscal years ending 2002.

#### (b) *Defined Contribution Plan*

Employees who were hired after September 30, 1987, participate in the U.S. Social Security system and a defined contribution plan sponsored by the District government. The District of Columbia Defined Contribution Plan (D.C. Code 1-627) is a qualified trust under Internal Revenue

Code Section 401. During fiscal years 2002 and 2001, the Authority's contribution was seven percent of base pay toward the plan on behalf of each eligible employee. Employees do not contribute to the plan, and they become eligible participants after a one-year waiting period. Employees become 100 percent vested in their account balance after five years of service.

Starting in January 2000, non-represented employees who were hired after September 30, 1987, participate in the U.S. Social Security system and a defined contribution plan sponsored by the Authority. The District of Columbia Water and Sewer Defined Contribution Plan is a qualified trust under Internal Revenue Code Section 401. The Authority makes a contribution of seven percent of base pay toward the plan on behalf of each eligible employee. The Authority also makes an additional contribution of five percent of all base earnings above the Social Security Wage Base. In addition, the Authority makes a matching contribution of 100 percent of the amount that the employee defers to the Section 457(b) Deferred Compensation Plan up to a maximum contribution of three percent of base pay. There is no waiting period before an employee becomes a participant of this plan and employees do not contribute to the plan. Employees become 100 percent vested in their account balance after three years of service

During fiscal years 2002 and 2001, the Authority's contributions to both defined contribution plans were \$2,341 and \$1,760 respectively.

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

**Notes to the Financial Statements**

**September 30, 2002 and 2001**

**(In thousands)**

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**(15) Employee Benefits (Continued)**

**(c) *Post Employment Insurance Plans***

At no cost to WASA, the federal government provides healthcare and life insurance benefits to certain retired WASA employees under the Federal Employees' Health Benefits Program and the Federal Employees' Group Life Insurance Program.

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# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

## REQUIRED SUPPLEMENTARY INFORMATION

**District of Columbia Water and Sewer Authority  
Budgetary Comparison Schedule  
Year Ended September 30, 2002  
(\$ in 000's)**

	Budget	Actual	Variance
<b>Operating revenues:</b>			
Residential and commercial user charges	\$ 148,117	\$ 148,134	\$ 17
Federal government	31,368	28,501	(2,867)
District government	14,754	16,496	1,742
Charges for wholesale waste water treatment	45,955	53,211	7,256
Other	4,199	2,387	(1,812)
Total operating revenues	244,393	248,729	4,336
<b>Operating Expenses:</b>			
Personnel services	71,914	62,162	9,752
Contractual Services	60,657	59,166	1,491
Chemicals, supplies and small equipment	15,914	13,683	2,231
Utilities and rent	18,390	20,071	(1,681)
Water purchases	18,365	16,904	1,461
Total operating expenses	185,240	171,986	13,254
Operating revenues over expenses	59,153	76,743	17,590
<b>Nonoperating revenues:</b>			
Interest income	6,900	6,806	(94)
Total nonoperating revenues	6,900	6,806	(94)
<b>Nonoperating expenses:</b>			
Interest and fiscal charges (debt service)	44,244	32,592	11,652
Payment in lieu of tax & right of way fee	15,494	15,247	247
Total nonoperating revenue (expenses)	59,738	47,839	11,899
Revenues over (under) expenses	\$ 6,315	\$ 35,710	\$ 29,395
Increase (decrease) to reconcile budgetary to GAAP			
Depreciation Expense		(37,099)	
Federal grants contributions		18,848	
Long-term debt principal payments		16,253	
Other non operating income		19	
Changes in Net Assets		\$ 33,731	

## DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

### REQUIRED SUPPLEMENTARY INFORMATION

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#### NOTE TO SUPPLEMENTARY INFORMATION ON BUDGETARY ACCOUNTING AND CONTROL For the Year Ended September 30, 2002

### BUDGETARY ACCOUNTING AND CONTROL

#### **Budget Law**

The Authority prepares its annual operating budget under the provisions of its enabling legislation. In accordance with those provisions, the following process is used to adopt the annual budget.

- Development of the 10-year financial plan
- Development of individual departmental operating budgets, based on the financial framework in the 10-year financial plan
- Review and development of proposed budget by the General Manager
- Presentation of proposed budget to the Board of Directors
- Review and development of proposed budget by the Board of Directors
- Adoption of proposed budget by the Board of Directors
- Submission of proposed budget to the District of Columbia for inclusion in its budget
- District of Columbia budget submission to U.S. Congress

#### **Budget Accounting**

The Authority is a single enterprise fund and maintains accounting records using the accrual basis of accounting, in accordance with Generally Accepted Accounting Principles (GAAP). Under this basis of accounting, revenues are recorded when earned, and expenses are recorded when goods and services are received. The Authority's expenditure budget is prepared on a comparable basis to GAAP, with the exception of debt service, which is budgeted in full when due, including principal and interest. Depreciation is not budgeted; depreciation and interest expense are recorded as expenses for financial statement purposes.

#### **Budget Requirements**

After the U.S. Congress approves the budget, the operating and capital budgets are loaded into the Authority's financial management system, which prevents overspending without appropriate approvals. The Department of Finance and Budget prepares daily and monthly management reports for each operating unit, management staff, the Board of Directors, and its various committees. The reports are consistently reviewed each month to ensure the Authority complies with its authorized budget levels



**Statistical  
Section**

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**EXHIBIT 1: OPERATING REVENUE BY SOURCE**  
**FY 1993 - 2002**  
**(\$000)**

<b>REVENUE SOURCE</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>
Residential/Commercial	\$ 101,477	\$ 104,407	\$ 101,696	\$ 101,078	\$ 115,294	\$ 138,697	\$ 138,328	\$ 131,399	\$ 139,429	\$ 148,134
Governmental										
Federal	27,610	23,192	22,966	21,946	24,024	25,068	26,859	24,092	26,199	28,501
DC Government (1)	-	-	-	-	12,268	21,883	11,168	10,883	9,543	10,293
DC Housing Authority	6,003	6,518	6,338	6,623	7,035	7,770	5,720	5,194	6,284	6,203
Subtotal Governmental	33,613	29,710	29,304	28,569	43,327	54,721	43,747	40,169	42,026	44,997
<b>TOTAL RETAIL REVENUES</b>	<b>\$ 135,090</b>	<b>\$ 134,117</b>	<b>\$ 131,000</b>	<b>\$ 129,647</b>	<b>\$ 158,621</b>	<b>\$ 193,418</b>	<b>\$ 182,075</b>	<b>\$ 171,568</b>	<b>\$ 181,455</b>	<b>\$ 193,131</b>
Charges for Sewer Treatment	45,559	51,526	40,080	35,989	52,333	50,566	56,107	50,284	52,542	53,211
Other Revenues	3,784	4,190	3,977	5,854	6,230	14,459	4,450	6,078	3,483	2,387
Wholesale Water Revenues (2)	6,739	7,770	2,522	9,546	4,310	-	-	-	-	-
Refunds to Customers	(246)	(269)	(259)	-	-	-	-	-	-	-
<b>TOTAL REVENUES</b>	<b>\$ 190,926</b>	<b>\$ 197,334</b>	<b>\$ 177,320</b>	<b>\$ 181,036</b>	<b>\$ 221,494</b>	<b>\$ 258,443</b>	<b>\$ 242,632</b>	<b>\$ 227,930</b>	<b>\$ 237,480</b>	<b>\$ 248,729</b>

(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.

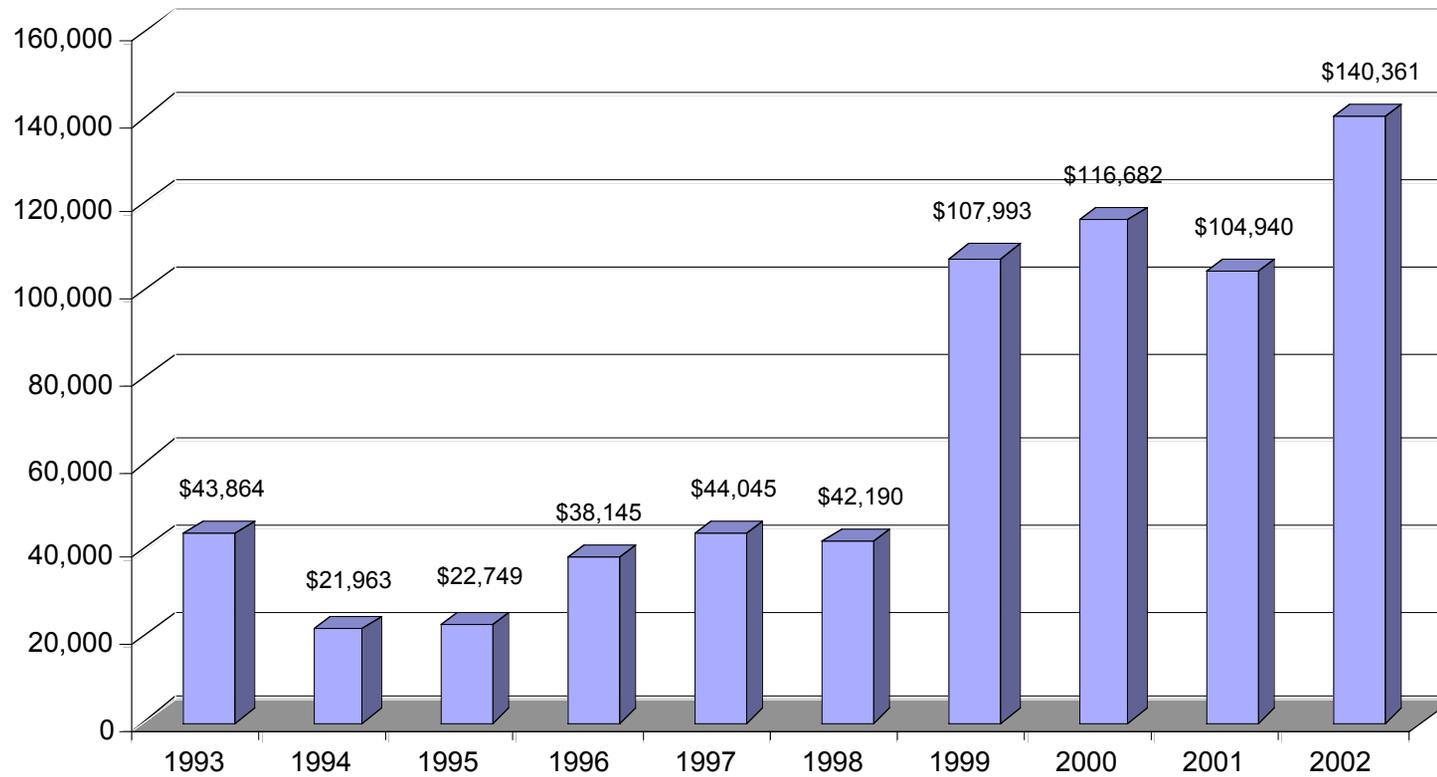
Source: FY 1993 - 2002 Audited Statements of Revenue, Expenses and Changes in Net Assets

**EXHIBIT 2: OPERATING EXPENSES BY CATEGORY**  
**FY 1993 - 2002**  
**(\$000)**

<b>EXPENSE CATEGORY</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>
Personnel	\$ 46,530	\$ 53,473	\$ 49,669	\$ 50,758	\$ 51,197	\$ 53,956	\$ 60,674	\$ 63,078	\$ 62,055	\$ 62,162
Contractual	40,402	40,693	43,808	40,539	55,904	66,340	56,017	54,552	58,976	59,166
Supplies	16,516	21,899	15,855	14,686	14,057	17,722	11,431	13,129	15,488	13,683
Occupancy	20,623	15,839	15,337	15,392	16,668	21,173	21,225	20,091	21,219	20,071
Depreciation & Amortization	14,107	17,528	18,830	18,660	25,695	26,278	28,227	30,329	32,971	37,099
Water Purchases	17,348	15,807	18,077	16,760	21,620	23,313	18,922	16,358	17,085	16,904
PILOT/Right of Way Fee	-	-	-	-	-	-	-	9,177	15,026	15,247
Bad Debt	1,395	-	-	-	-	-	-	-	-	-
Miscellaneous	171	243	244	387	1,407	-	-	-	-	-
<b>TOTAL OPERATING EXPENSES</b>	<b>\$ 157,092</b>	<b>\$ 165,482</b>	<b>\$ 161,820</b>	<b>\$ 157,182</b>	<b>\$ 186,548</b>	<b>\$ 208,782</b>	<b>\$ 196,496</b>	<b>\$ 206,714</b>	<b>\$ 222,820</b>	<b>\$ 224,332</b>

Source: FY 1993 - 2002 Audited Statements of Revenue, Expenses and Changes in Net Assets

**EXHIBIT 3: CAPITAL DISBURSEMENTS**  
**FY 1993 - 2002**  
**(\$000)**



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 1993 – 2002 Audited Statements of Cash Flows

**EXHIBIT 4: DEBT SERVICE COVERAGE (1)**  
**FY 2002**  
**(\$000)**

Prepared in accordance with the Authority's Master Trust Indenture, which corresponds closely to cash basis accounting

Retail Receipts	\$	181,630
Wholesale Receipts		<u>48,474</u>
<b>Total Operating Receipts</b>	\$	230,104
Non-Operating Receipts		<u>15,944</u>
<b>Total Receipts</b>	\$	246,048
<b>Total Operating Disbursements</b>	\$	173,908
<b>Net Revenues Available for Debt Service</b>	\$	<u><u>72,140</u></u>
Senior Debt Service	\$	14,892
Subordinate Debt Service	\$	19,941
<b>Net Revenues Available for Senior Debt Service (1)</b>	\$	52,199
<b>SENIOR DEBT SERVICE COVERAGE</b>		3.51x
<b>Net Revenues Available for Subordinate Debt Service (2)</b>	\$	57,248
<b>SUBORDINATE DEBT SERVICE COVERAGE</b>		2.87x
<b>COMBINED DEBT SERVICE COVERAGE</b>		2.07x

(1) Net revenues less subordinate debt service.

(2) Net revenues less senior debt service.

Source: Authority Department of Finance and Budget

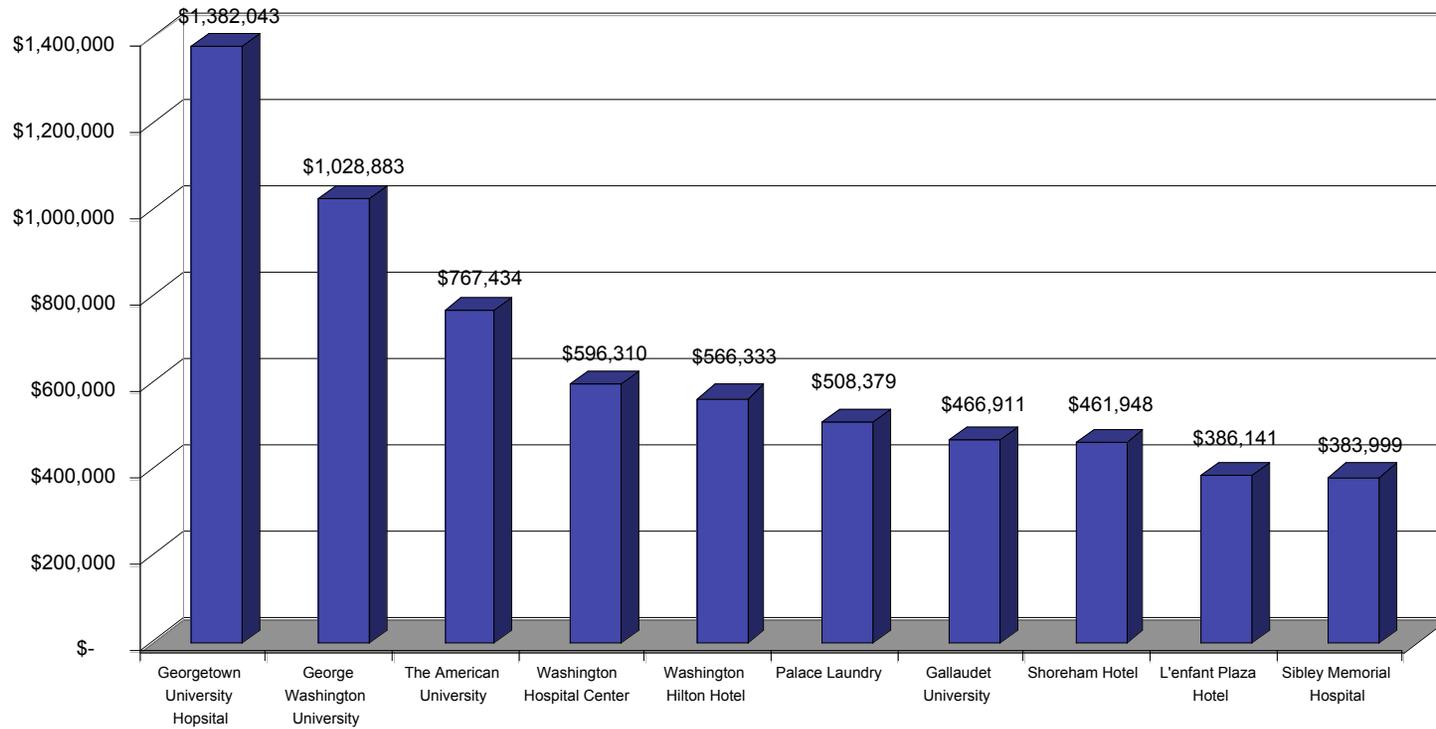
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**EXHIBIT 5: NUMBER AND TYPE OF CUSTOMER ACCOUNTS  
AS OF SEPTEMBER 30, 2002**

<u>TYPE OF ACCOUNT</u>	<u>NUMBER OF ACCOUNTS</u>
<b>Residential</b>	101,219
<b>Commercial</b>	17,770
<b>Governmental</b>	
Federal	537
District of Columbia	574
Howard University/Soldiers' Home	47
DC Housing Authority	<u>1,503</u>
<b>Total Governmental</b>	2,661
<b>WASA</b>	29
<b>Wholesale</b>	<u>7</u>
<b>TOTAL NUMBER OF ACCOUNTS</b>	<u><u>121,686</u></u>

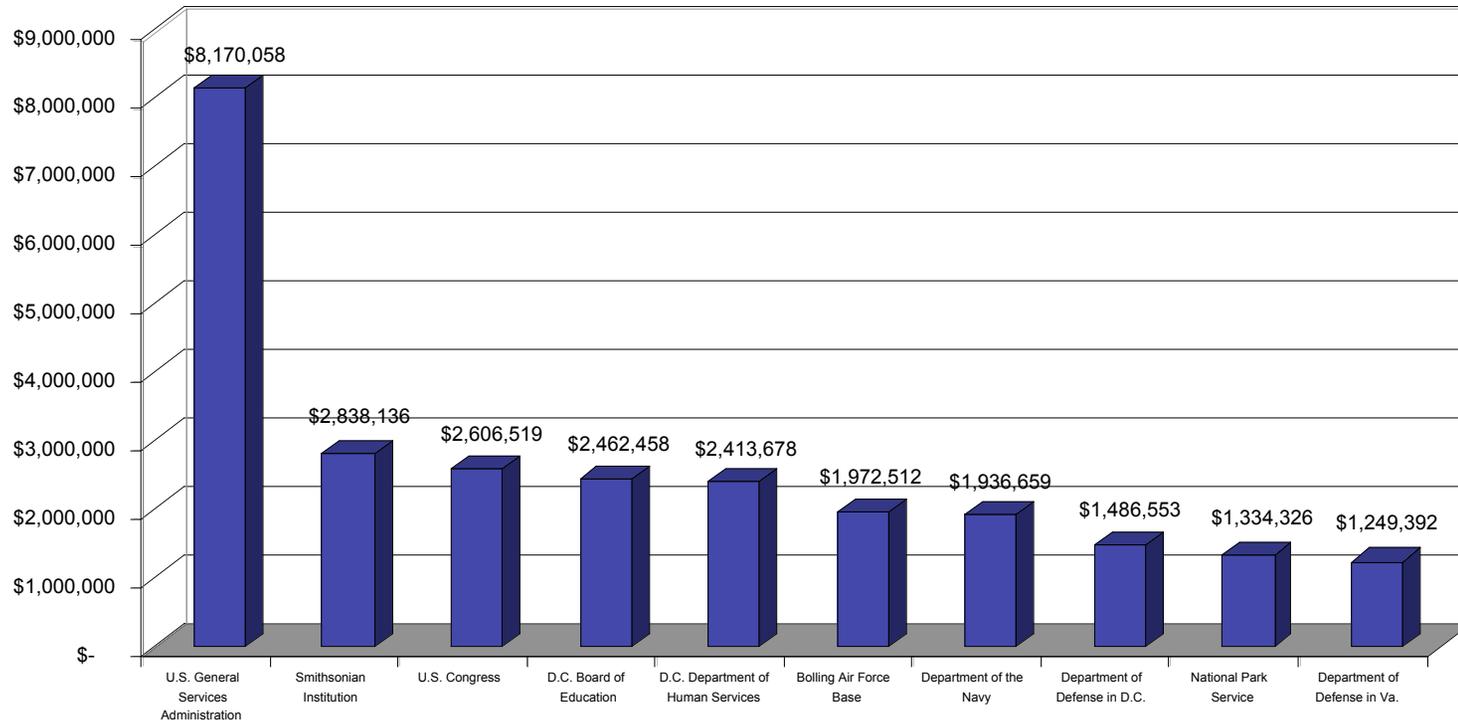
Source: D.C. Water and Sewer Authority Department of Customer Service

**EXHIBIT 6: LARGEST COMMERCIAL CUSTOMER ACCOUNTS  
FY 2002**



Source: Authority Department of Customer Service

**EXHIBIT 7: LARGEST RETAIL CUSTOMER ACCOUNTS  
FY 2002**



Source: Authority Department of Customer Service

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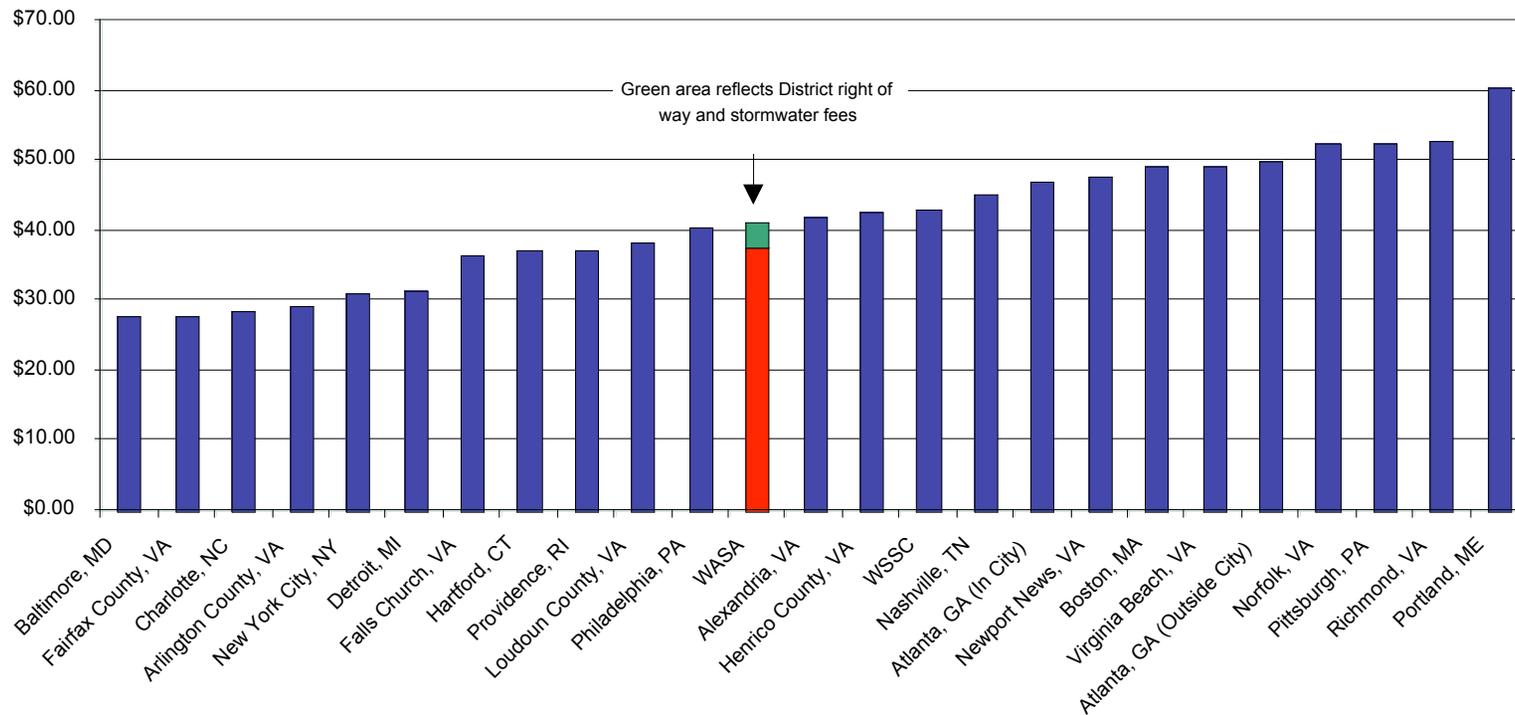
**EXHIBIT 8: HISTORY OF RETAIL WATER & SEWER RATES  
PER Ccf  
FY 1980 – 2002**

<b>FISCAL YEARS</b>	<b>WATER CONSUMPTION RATE</b>	<b>SEWER CONSUMPTION RATE</b>	<b>COMBINED RATE</b>
1980	\$ 0.394	\$ 0.448	\$ 0.842
1981-1983	0.460	0.677	1.137
1984	0.537	0.998	1.535
1985	0.698	1.297	1.995
1986	0.873	1.621	2.494
1987-1996	1.004	1.864	2.868
1997	1.380	2.710	4.090
1998	1.380	2.710	4.090
1999	1.380	2.710	4.090
2000	1.576	2.710	4.286
2001	1.786	2.710	4.496
2002	1.786	2.710	4.496

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

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

**EXHIBIT 9: RESIDENTIAL WATER & WASTEWATER BILL COMPARISONS  
MONTHLY BASIS  
AS OF SUMMER 2002 (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

**EXHIBIT 10: SCHEDULE OF INSURANCE  
AS OF SEPTEMBER 30, 2002**

<b>TYPE OF COVERAGE</b>	<b>COMPANY</b>	<b>POLICY PERIOD</b>	<b>COVERAGE LIMITS</b>
Blanket Property	Factory Mutual Insurance Company	April 7, 2002 – October 1, 2003	\$500,000,000 Blanket Buildings and Contents \$100,000,000 Earth Movement \$100,000,000 Flood, except \$10,000,000 Blue Plains Flood \$1,000,000 Terrorism \$10,000,000 Extra Expense and Expediting Costs \$10,000,000 Transit Any One Shipment Increased Cost of Construction Deductibles \$250,000 Any Loss, except \$500,000 Flood, except \$1,000,000 Blue Plains Flood
Equipment	Lexington Insurance Company	April 7, 2002 – April 7, 2003	\$6,000,000 Per Occurrence \$2,500,000 Flood & Quake Deductibles\$ \$10,000 Per Occurrence \$25,000 for Skimmer Boats
Fidelity & Crime	Factory Mutual Insurance Company	April 7, 2002 – October 1, 2002	\$5,000,000 Blanket Employee Dishonesty Deductible: \$100,000 Per Occurrence
Commercial General Liability	Self-Funded		\$1,000,000 each occurrence
Commercial Automobile	Self-Funded		\$1,000,000 Self-Funded liability any one accident 100% Self-Funded Physical Dam.
Worker's Compensation	Self-Funded		Statutory Benefits Employer's Liability - \$1,000,000 Each Accident; \$1,000,000 Disease/ Employee
Excess Worker's Compensation	Midwest Employers Casualty Company	April 7, 2002-April 7, 2003	Statutory - WC Benefits \$1,000,000 - Employer's Liability Retention: \$1,000,000/accident; \$1,000,000 Disease/ Employee
Excess General Liability / Automotive Liability /Employers Liability	AEGIS Insurance	April 7, 2002- April 7, 2003	\$35,000,000 in excess of \$1,000,000
Excess Liability	Energy Insurance Mutual	April 7, 2002 – April 7, 2003	\$65,000,000 in excess of \$35,000,000
Public Official Liability	AEGIS Insurance	April 7, 2002 – April 7, 2003	\$20,000,000 Each Loss / Aggregate Retention \$50,000/ wrongful act

**EXHIBIT 11: WATER DEMAND  
FY 1996 - 2002**

<b>FISCAL YEAR</b>	<b>ANNUAL DELIVERIES TO SYSTEM (MG)</b>	<b>AVERAGE DAY (MG)</b>	<b>MAXIMUM MONTH AVERAGE (MGD)</b>	<b>MAXIMUM DAY (MGD)</b>	<b>TOTAL ANNUAL WATER SOLD (MGD)</b>	<b>AVERAGE DAY (MG)</b>
1996	51,553	141.2	161.3	192.4	39,416	108.0
1997	49,172	134.7	158.3	207.2	37,405	102.5
1998	47,671	130.6	159.2	178.7	37,323	102.3
1999	50,140	137.4	167.0	201.3	34,428	94.3
2000	48,051	131.6	153.0	209.7	31,987	87.6
2001	48,144	131.9	148.3	180.4	32,008	87.7
2002	48,634	133.2	152.1	170.3	32,147	88.1

Source: Authority Department of Water Services and Washington Aqueduct

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**EXHIBIT 12: WATER DELIVERED (PUMPED) AND BILLED (SOLD) IN Ccf**  
**FY 1996 – 2002**

<b>FISCAL YEAR</b>	<b>TREATED WATER DELIVERED</b>	<b>WATER BILLED</b>	<b>SOLD/PUMPED RATIO</b>
1996	68,921,591	52,695,847	76.46%
1997	65,737,500	50,007,037	76.07%
1998	63,730,922	49,896,545	78.29%
1999	67,032,821	46,026,213	68.66%
2000	64,239,492	42,763,218	66.57%
2001	64,363,369	42,791,940	66.48%
2002	65,019,144	42,977,802	66.10%

Source: Ccf Delivered, Washington Aqueduct; Ccf Billed, Authority Department of Customer Service

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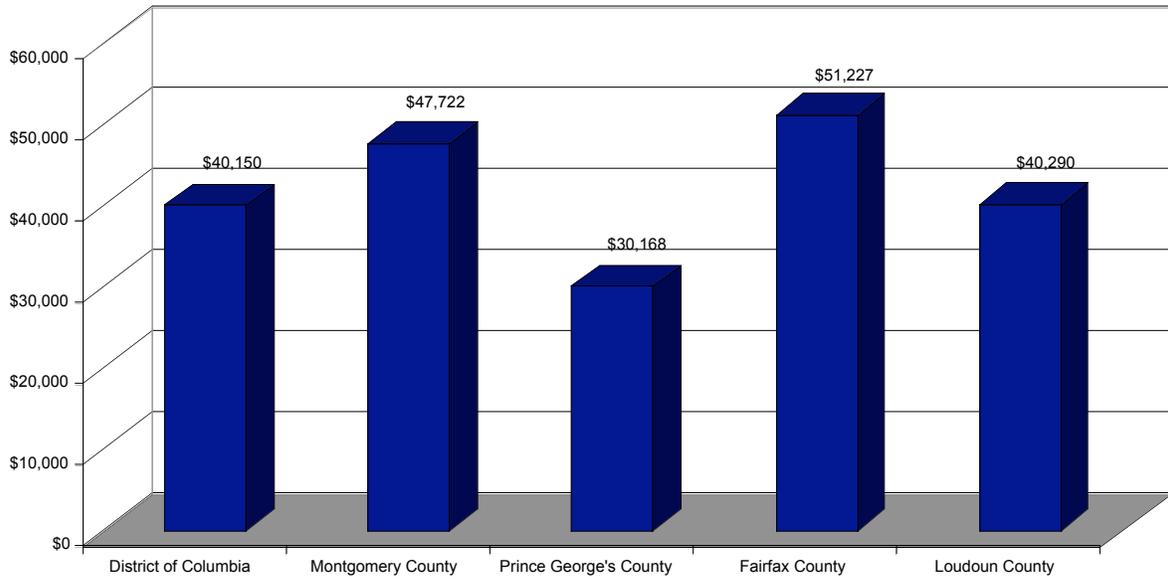
**EXHIBIT 13: POPULATION OF SERVICE AREA JURISDICTIONS (2000)**  
**(D.C. POPULATION IS FOR 2001)**

<b>JURISDICTION</b>	<b>POPULATION</b>
District of Columbia	571,822
Montgomery County	877,491
Prince George's County	803,612
Fairfax County	1,006,788
Loudoun County	173,805

Source: D.C. Office of Planning  
United States Department of Commerce, Economics and Statistics Administration,  
Bureau of Economic Analysis

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**EXHIBIT 14: PER CAPITA PERSONAL INCOME (2000)**  
**(D.C. INCOME IS FOR 2001)**



Source: U.S. Department of Commerce, Bureau of Economic Analysis (Jurisdictions data), D.C. Office of Planning (D.C. data)

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**EXHIBIT 15: UNEMPLOYMENT RATES (2001)**

<u>JURISDICTIONS</u>	<u>UNEMPLOYMENT RATE</u>
District of Columbia	6.5%
Montgomery County	2.3%
Prince George's County	4.1%
Fairfax County	2.3%
Loudoun County	2.9%

Source: U.S. Department of Labor, Bureau of Labor Statistics

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**EXHIBIT 16: EMPLOYMENT BY SECTOR (2000)**

	DISTRICT OF COLUMBIA	MONTGOMERY COUNTY	PRINCE GEORGE'S COUNTY	FAIRFAX COUNTY	LOUDOUN COUNTY
Agriculture, Forestry, Mining, etc.	(D)	1.19%	0.84%	(D)	2.71%
Construction	1.75%	5.83%	8.72%	5.91%	9.67%
Manufacturing	1.65%	3.62%	3.59%	(D)	4.74%
Transportation & Public Utilities	2.84%	2.95%	5.60%	5.82%	13.32%
Wholesale & Retail Trade	7.42%	16.93%	22.16%	17.23%	19.98%
Finance, Insurance & Real Estate	6.02%	10.31%	6.41%	8.78%	5.27%
Services	46.38%	44.52%	31.09%	46.57%	31.74%
Government (Federal, State & Local)	29.42%	13.49%	19.35%	11.50%	12.02%
Military	3.10%	1.15%	2.24%	0.94%	0.56%
<b>TOTAL</b>	<b>98.58%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>96.75%</b>	<b>100.00%</b>

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Note: Fairfax County data for agriculture, forestry, mining, and manufacturing are not shown to avoid disclosure of confidential information.

**EXHIBIT 17: SUMMARY OF MAJOR PERMITS & ADMINISTRATIVE ORDERS  
FY 2002**

<b>WASTEWATER</b>	<b>DESCRIPTION</b>	<b>EXPIRATION DATE</b>	<b>CURRENT STATUS</b>
<b>National Pollutant Discharge Elimination System</b> Permit # OCPO21199	Authorizes discharge of treated wastewater from Blue Plains into the Anacostia River	July 1, 1999	Permit on administrative extension while being negotiated
<b>1995 Consent Decree</b> Civil Action 90-1643-JGP and 84-2842-JGP	Requires the following actions:  Review procurement practices & maintenance procedures  Undertake Operational Capability Review  Conduct a pilot project for biological nitrogen reduction	N/A	In Compliance  All items completed; awaiting action to terminate decree
1996 Stipulated Agreement & Order Civil Action 96-669-TFH	Requires the following actions:  Rehabilitate and maintain certain facilities and capital equipment in good operating condition  Maintain certain records and data for status reports and prepare monthly reports on status of compliance  Maintain user fees in separate accounts and make timely payment of invoices	N/A	In Compliance  All items completed; awaiting action to terminate agreement and order
<b>WATER</b>			
<b>1996 Administrative Order &amp; Consent Agreement</b> 111-96-001-DS	Requires compliance with the WASA-prepared and EPA-approved remediation plan:  Public notification program  Financial management program  Water quality sampling program  Storage facility rehabilitation program  Cross connection control program  Storage facility maintenance program  Corrosion control treatment program	N/A	In Compliance  All items completed as of 12-31-2002.

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**EXHIBIT 18: MISCELLANEOUS STATISTICS ABOUT AUTHORITY OPERATIONS**

**Utilities & Supplies Per Day (at Blue Plains)(FY2002)**

Electrical Power	745,000 KWH		
Natural Gas	20,000 CF		
Sodium Hypochlorite	2,500 gallons	Sodium Bisulfite	5,600 pounds
City Water	525,000 gallons		
Lime	83,500 pounds		
Sodium Hydroxide	49,400 pounds		
Methanol	15,000 gallons		
Ferric Chloride (10% Iron)	10,500 gallons		

**Wastewater Treatment Capacity**

Average Day	370 MGD
Peak 4 Hour Flow, through complete process	740 MGD
Excess Storm Flow, primary treatment only	336 MGD
Peak Flow	1,076 MGD

**EXHIBIT 18: MISCELLANEOUS STATISTICS ABOUT AUTHORITY OPERATIONS  
(Continues)**

**Wastewater Plant Permit Limitations**

<b><u>PARAMETER</u></b>	<b><u>MONTHLY</u></b>	<b><u>WEEKLY</u></b>
Biochemical Oxygen Demand (carbonaceous)	5.0 mg/L (15,429 lbs./day)	7.5 mg/L (23,143 lbs./day)
Total Suspended Solids (TSS)	7.0 mg/L (21,600 lbs./day)	10.5 mg/L (32,400 lbs./day)
Ammonia Nitrogen		
Summer	1.0 mg/L (3,086 lbs./day)	1.5 mg/L (4,629 lbs./day)
Winter	6.5 mg/L (9,106 lbs./day)	9.8 mg/L (13,659 lbs./day)
Total Phosphorus	0.18 mg/L (556 lbs./day)	0.27 mg/L (832 lbs./day)
Dissolved Oxygen		
Minimum daily average	5.0 mg/L	
Not less than at any time	4.0 mg/L	
pH		
Minimum	units	
Maximum	8.5 units	
Total Chlorine	Non detectable at any time	
Fecal Coliform	200/100 ml	400/100 ml
Chesapeake Bay Voluntary Agreement		
Total Nitrogen (Annual Average)	7.5 mg/L	

**Wastewater Plant Processes**

**PRIMARY TREATMENT**

Influent Pumping Capacity	1,300 MGD
Number of bar screens	13
Number of aerated grit chambers	16
Total volume of aerated grit chambers	2.3 MG
Number of primary clarifiers	36
Average detention time (clarifiers)	2.5 hours
Average hydraulic loading (clarifiers)	1008 gallons/square foot/day
Maximum hydraulic loading (clarifiers)	2,929 gallons/square foot/day

**EXHIBIT 18: MISCELLANEOUS STATISTICS ABOUT AUTHORITY OPERATIONS  
(Continues)**

**SECONDARY TREATMENT**

Number of reactors	6
Total reactor volume	27.7 MG
Number of clarifiers	24
Average reactor detention time	1.6 hours
Average clarifier hydraulic loading	763 gal/sq ft/day
Number of centrifugal blowers	6
Total blower capacity	280,000 cu ft/minute
Average MLSS	2,200 mg/L
Average SRT	1.6 days
Average SVI	80-100 ml/g
Effluent dissolved oxygen	2-3 mg/L
Effluent alkalinity	140 mg/L as CaCO <sub>3</sub>

**NITRIFICATION/DENITRIFICATION**

Number of reactors	12
Total reactor volume	55.2 MG
Aerobic Volume	33.1- 44.2MG
Anoxic Volume	11.0- 22.1MG
Number of clarifiers	28
Average reactor detention time	3.3 hours
Average clarifier hydraulic loading	755-gal/sq ft/day
Number of centrifugal blowers	5

Total blower capacity	291,500 cu ft/minute
Number of turbine aerators	120
Average MLSS	1,800 mg/L
Average reactor pH	7.3
Average SRT	21 days
Average SVI	80 – 110 ml/g
Effluent alkalinity	110 mg/L as CaCO <sub>3</sub>
Effluent dissolved oxygen (Post - Aeration)	6.8 – 7.2 mg/L
Dual purpose sedimentation tanks (in either secondary treatment or nitrification)	8
Total Dual Purpose Surface Area	197,160 sq ft

**FILTRATION & DISINFECTION**

Number of filters	40
Total filter area	83,200 sq ft
Average filtration rate	3.4 gal/ minute/sq ft
Average filter run time	55 hours
Depth of anthracite media	24 inches
Depth of sand media	12 inches
Depth of Gravel Support Layer	12 inches
Number of chlorine contact tanks	4
Average contact time	42 minute