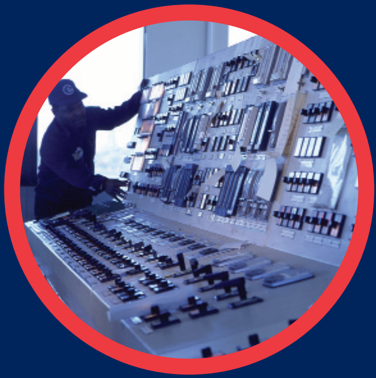
# District of Columbia Water and Sewer Authority

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

Serving the Public • Protecting the Environment



2000

Comprehensive Annual Financial Report 2000

Fiscal Year: October 1, 1999 to September 30, 2000

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

# 2000

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, 1999 to September 30, 2000

Prepared by:
Department of Finance and Budget

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

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# 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, 1999

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.

Anne Spray Kinney
President

Jeffrey L. Esser
Executive Director

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# BOARD OF DIRECTORS

AS OF SEPTEMBER 30, 2000

| PRINCIPAL MEMBERS | JURISDICTION |
|---|---|
| Ron M. Linton | District of Columbia |
| Howard W. Stone, Jr. | Prince George's County, MD |
| Thomas Nides | District of Columbia |
| Charles C. Johnson, Jr. | District of Columbia |
| Dr. Abdusalam Omer. | District of Columbia |
| Vacant | Montgomery County, MD |
| Kenneth Glover. | Prince George's County, MD |
| Lucy Murray | District of Columbia |
| Anthony H. Griffin. | Fairfax County, VA |
| Bruce F. Romer | Montgomery County, MD |
| Vacant | District of Columbia |

| ALTERNATE MEMBERS | JURISDICTION |
|---|---|
| Vacant | Montgomery County, MD |
| Alexander McPhail | District of Columbia |
| Rodney L. Newman | District of Columbia |
| Wesley Brown | District of Columbia |
| James Caldwell | Montgomery County, MD |
| Loretta S. Caldwell | District of Columbia |
| Sherry Conway Appel | Prince George's County, MD |
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| Brenda Richardson | District of Columbia |
| Samuel E. Wynkoop, Jr. | Prince George's County, MD |

Linda R. Manley ........ Secretary to the Board

# PRINCIPAL STAFF MEMBERS

**GENERAL MANAGER'S STAFF**

**Jerry N. Johnson ............ General Manager**

Henderson Brown ............ General Counsel

Michael Hunter ............ Internal Auditor

Libby Lawson ............ Public Affairs

**OFFICE OF THE CHIEF FINANCIAL OFFICER**

Paul L. Bender ............ Deputy General Manager/Chief Financial Officer

Michelle Cowan ............ Budget and Finance

Olu Adebo ............ Acting Controller

Rhoberta Piper ............ Customer Service

Mujib Lodhi ............ Chief Information Officer

Edward Hamilton ............ Procurement

Karen Cole ............ 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**

Betty L. Cheatham............ Assistant General Manager

Barbara Grier ............ Human Resources

O.Z. Fuller ............ Fleet Management

Vacant ............ Facilities

Everett Lallis ............ Health and Safety

David Cornelius ............ Security

February 5, 2001

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

Dear Members of the Board and Mr. Johnson:

This transmittal letter signifies the completion of the Comprehensive Annual Financial Report for the District of Columbia Water and Sewer Authority (the Authority), for its fourth fiscal year ended September 30, 2000. The Authority has made remarkable progress in the four years since its creation, greatly exceeding the expectations of our retail and wholesale customers, the Board of Directors, the metropolitan Washington, D.C. community and the financial community. In particular, the Authority's financial performance has been extremely strong, compared to industry and financial benchmarks. The Authority's progress is due in large part to the commitment and leadership of the Board of Directors, in particular their insistence on the development of sound, conservative financial policies and their perseverance in ensuring each policy's consistent implementation. Building on the foundation of the Board's leadership and policy and planning focus, the Authority's strong financial performance should continue well into the future.

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 Sections. 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 Authority's audited FY 1999 and FY 2000 financial statements. Finally, the Statistical Section presents selected financial and operating indicators of the Authority and statistics regarding the economic condition of the metropolitan Washington area. Management is responsible both for the accuracy of the data and the completeness and fairness of the presentation, including all disclosures.

## RECENT ACCOMPLISHMENTS

The end of FY 2000 marks the Authority's fourth year of operations as an independent regional authority. Using the framework of policies and goals the Board of Directors established in FY 1997, the Authority and its management continued to build on the successes of its first three years of operations. Major accomplishments of FY 2000 include:

- Development of Internal Improvement Plans for Blue Plains and for the Customer Service Department that will result in operational savings of $24 million annually, and reduce the number of full time positions at Blue Plains and in Customer Service by approximately 260 positions when fully implemented in seven to eight years;
- Bond rating upgrades from the three major rating agencies (Moody's Investor Service, Inc., Standard & Poor's, and Fitch IBCA) to A1 / A / A+ respectively, based on substantial progress made by the Authority over the past three years, and the strong planning and policies that have been put into place by the Board and management;
- Successful implementation of the grants closeout program, resulting in the closeout of 26 old grants, some dating back to the 1970's, and allowing reallocation and new EPA grant awards in the amount of $74 million for projects beginning in FY 2001;
- Submission of the Authority's first single audit of federal grants to the Office of the Inspector General on schedule and with an unqualified opinion;
- Continued strong meter reading performance, with a current performance rate of 97 percent actual meter reads and an accuracy of 99.9 percent, among the best in the industry;
- Meeting all EPA drinking water quality requirements for the $52^{nd}$ consecutive month as of January 2001;
- Release from EPA consent decree and stipulated agreement for our wastewater treatment operation, imposed in 1995;
- Receiving either a gold or silver award in the past three years from the Association of Metropolitan Sewerage Agencies for permit compliance at Blue Plains;
- Initiation of our large meter testing and repair program;

- Development of a comprehensive performance management program that links employee pay increases to overall performance ratings, and implementation of a comprehensive benefit and retirement program for non-union employees; and

- Implementation of our new payroll system in four months without any pay disruptions, and successfully addressing Y2K issues without any operational disruptions.

Since the close of the fiscal year on September 30, 2000, the Board and management have also accomplished another key goal: the successful implementation of the new financial management system on October 1, 2000.

## 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 2000 and 1999.

## 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.

### Budgetary Control

Budgetary control begins with the preparation of the annual operating and capital budgets, which are developed on an expenditure basis. After three to four months of extensive and detailed review by the Budget and Finance 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 consistently 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 its review and comment; however, neither has power to change the annual budgets of the Authority. Under the current legislation, the District of Columbia Financial Responsibility and Management Assistance Authority (the Control Board) must approve the Authority's budgets as part of its approval of the District's budget. The District then includes the Authority's budgets as an enterprise fund in the fiscal year budget 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 will continue to be developed 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 recent rating upgrades. 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.

In FY 1999, the Authority met the financial goals set out by Board policy and the ten-year financial plan ahead of schedule, and continued to meet these goals in FY 2000. In conjunction with the adoption of the revised FY 2001 and FY 2002 budget, the Board will consider an updated ten-year plan that calls for annual average rate increases of five to seven percent.

## 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 practical 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 approximately 180 days of operating and maintenance expenses. In addition, after it establishes adequate cash reserves required by its bond indenture and required for other activities, the Authority will use any excess 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. The FY 2000 and 2001 retail rate increases are based on a comprehensive cost of service study commissioned by the Authority in spring 1999.

- 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, to be used in FY 2003 and FY 2004 according to the FY 2000 – 2009 financial plan.

In January 2000, based on the latest ten-year financial plan, the Board approved retail rate increases of 4.8 percent and 4.9 percent effective April 1, 2000 and April 1, 2001 respectively. In conjunction with the adoption of the revised FY 2001 and FY 2002 budget, the Board will consider an updated ten-year plan that calls for annual average rate increases of five to seven percent. In particular, over the next 12 months, the Board will be considering five percent rate increases for 2002 and 2003.

### 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.

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’ Budget and Finance Committee enables 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 $500,000 and for auto and equipment, the limit is $5,000.

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 which would exceed the self-funded limit. Directors and Officers/Public Officials liability insurance is maintained up to $10,000,000 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. This insurance program also enables the Authority to reduce and contain medical and compensation cost resulting from on the job injuries.

## FY 2000 FINANCIAL RESULTS

### Net Income

The Authority's net income totaled $15.3 million for FY 2000, a decrease of $14.1 million compared to FY 1999 net income of $29.4 million. This decrease is primarily attributable to a decrease in residential and commercial revenue of $6.9 million due to decreased water consumption in FY 2000 and a revenue adjustment recorded in FY 1999.

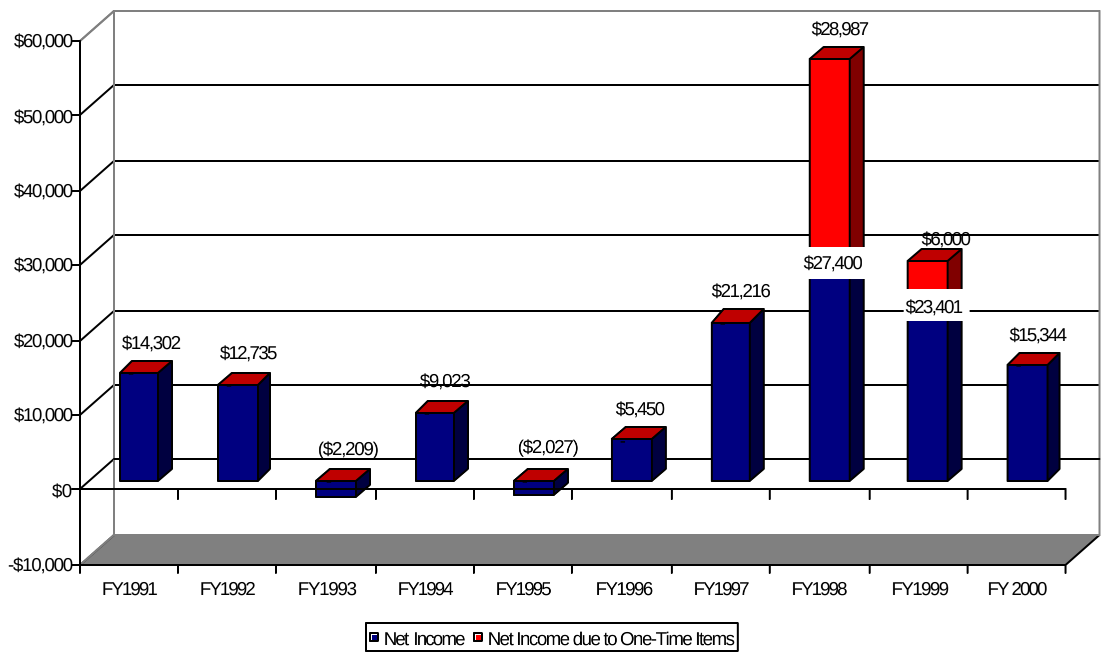
- In FY 1999, a downward revision was made to wholesale wastewater treatment deferred revenue (advance) from jurisdictions, which produced a one-time increase in revenues of $6 million, as indicated in the chart below.

Excluding this revenue increase, net income in FY 2000 is approximately $8 million less than FY 1999. As shown in the chart below, FY 2000 net income is in line with prior year net income before one-time adjustments. FY 1998 net income is substantially higher than other years due to the following two one-time revenue adjustments.

- 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.

- In FY 1998, 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.

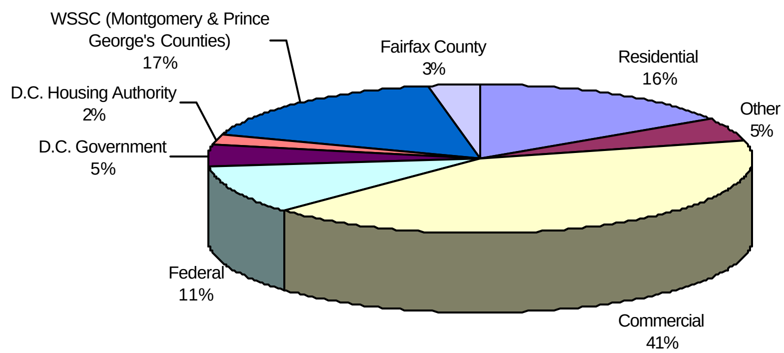
**NET INCOME**
**FY 1991 – 2000**
**(In $000's)**




## Operating Revenue

Fiscal year 2000 operating revenue of $228 million represents a decrease of $14.7 million, or six percent compared to FY 1999. This decrease is attributable to decreased water consumption associated with an unusually rainy summer and to conservation that was anticipated and is in line with historical trends.

## REVENUE BY SOURCE
## FY 2000




### 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 41 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 41 percent of the Authority's total operating revenues. Commercial revenues are especially strong due to the tourism industry and the presence of many national associations, government consulting firms and colleges and universities in the District. Over the next few years, commercial revenue is projected to increase due to the Authority's comprehensive meter testing and change-out program that began in FY 2000.

- The Authority provides wastewater conveyance and treatment services to Montgomery and Prince George's Counties in Maryland through WSSC (Washington Suburban Sanitary Commission) 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 16 percent of total revenues. Over the next two years, the Authority will begin its comprehensive automated meter reading and change-out program for residential accounts that will greatly improve the Authority's service to these customers.

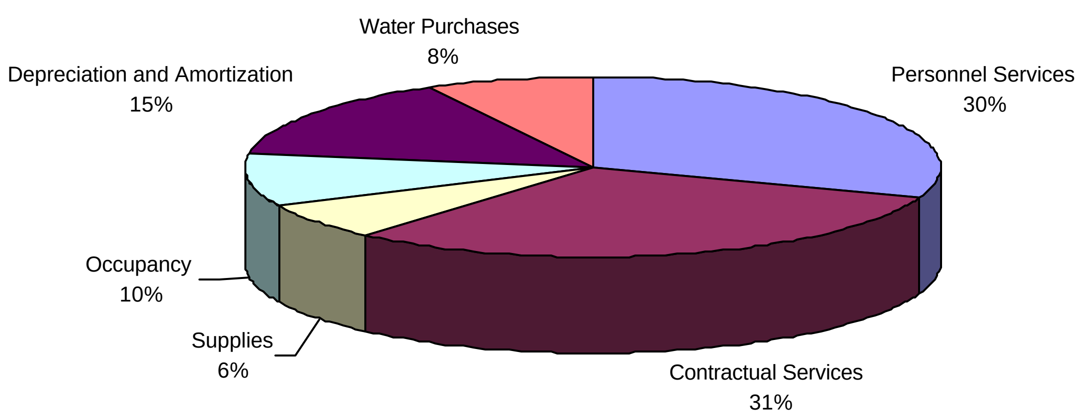
- Payments from the federal government comprise approximately 11 percent of the Authority's total operating revenues and include customers such as the U.S. Congress, the Smithsonian Institution, and other federal agencies. Under a federal law passed in 1990, federal customers pay for water and sewer services based on an estimated billing prepared by the Authority 18 months prior to the beginning of the fiscal year. These estimated billings are then reconciled with actual billings and adjusted in future years. This process has produced significant billing, administrative, and customer service issues. The Authority is negotiating a comprehensive settlement of all billing issues and a change in the billing process to conform to modern utility billing practices. In response to these historical issues, the Authority has been reading all federal accounts on a monthly basis since January 1999 and has established a large accounts group to specifically deal with the concerns of large customers, including federal agencies.

- Revenue from the District of Columbia government and the District of Columbia Housing Authority makes up 7 percent of total operating revenue.

### Operating Expenses

Total operating expenses in FY 2000 were $206.7 million, an increase of $10.2 million, or 5.2 percent compared to FY 1999.

**OPERATING & MAINTENANCE EXPENSES**
**FY 2000**




- **Personal Services:** Personal services expenses increased from $60.7 million in FY 1999 to $63.1 million in FY 2000, due primarily to salary increases ranging from three to four percent.

As called for in the Authority's Internal Improvement Plans for FY 2001 and 2002, staffing will decline from 1,344 to 1,289 full time positions and continue to be reduced in future years.

- **Contractual Services:** Contractual services expenses, totaling $63.7 million for FY 2000, was $7.7 million, or 13.8 percent, more than last year. This increase is primarily attributable to an increases in engineering contractual services, litigation costs, and workers compensation and related claims.
- **Supplies:** Expenses for supplies totaled $13.1 million in FY 2000, an increase of $1.7 million compared to FY 1999, due primarily to increased chemical costs.
- **Occupancy (Energy, Rent and Communications):** Occupancy expenses remained relatively stable, in line with the Authority's budget and expectations.
- **Depreciation:** Non-cash depreciation charges, totaling $30.3 million, increased by $2.1 million compared to FY 1999, in line with the $50.8 million increase in total utility plant in service.
- **Water Purchases:** Water purchase expenses for FY 2000 totaled $16.4 million, a reduction of $2.6 million from the FY 1999 level. This decrease is largely attributable to a prior year adjustment of $1.4 million in FY 1999 and a drop in consumption in FY 2000 (water purchased from the Aqueduct).

Looking forward, operating and maintenance expenses for current activities are expected to gradually decline as the Authority implements the $1.6 billion capital improvement program, which will result in operational efficiencies and cost savings outlined in the FY 2000 Blue Plains Internal Improvement Plan. Development of internal improvement plans and reengineering processes will also continue in each Authority department.

## Cash Position

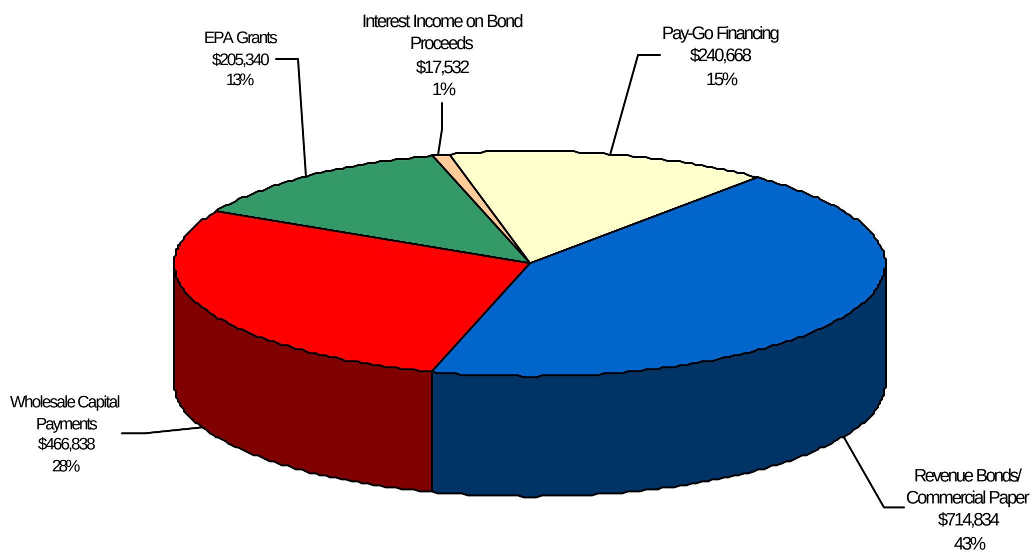
Unrestricted cash totaled $156.7 million as of September 30, 2000, an increase of approximately $9 million. This increase is primarily due to continued repayment of reserves borrowed by the District from the Authority's predecessor agency ($18.2 million in FY 2000), and strong revenue and expenditure performance. According to the Board adopted financing policies, excess reserves over $90 million will 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, grants from the U.S. Environmental Protection Agency (EPA), contributions from wholesale customers, a tax exempt commercial paper program, and pay-go financing. The first draw on commercial paper is projected to occur in late 2001, and this interim financing is expected to be periodically converted to long-term financing through the issuance of fixed rate bonds. As shown on the following chart, just over 40 percent of capital financing will come from debt issuance, a relatively low share given the size of the Authority's capital program.

**FY 2000 – 2009 CAPITAL IMPROVEMENT PROGRAM**

**Sources of Funds**



In FY 1999, the Authority developed a detailed capital financing plan, which continued into FY 2000. The financing plan's goals are securing the lowest cost of capital possible and maximizing administrative and operating flexibility. The plan includes:

- Establishing an interim financing program (i.e., commercial paper) for construction financing. Based on current capital spending projections, the first borrowing under this program would be required in late 2001.
- Issue fixed rate bonds approximately annually to take out interim financing.
- 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. To date, the Authority has prepaid $34 million in U.S. Treasury notes. Pay-go financing represents any available cash after funding the Authority's 180-day operating and maintenance reserve.
- Explore financing alternatives for capital equipment purchases (such as lease purchase, variable rate financing, etc.) that better match the useful lives of these assets and result in a lower cost of capital to the Authority.

As of September 30, 2000, the Authority had approximately $393 million in debt outstanding, as shown on the following table. Based on the Authority's current capital program, total debt is projected to grow to approximately $1 billion by FY 2009, and debt service is projected to grow from approximately 15 percent of the Authority's operating budget in FY 1999 to 27 percent in FY 2008.

## LONG-TERM DEBT OUTSTANDING
## AS OF SEPTEMBER 30, 2000
## (In $000's)

| SENIOR DEBT | INTEREST RATES | FINAL MATURITY | AMOUNT OUTSTANDING |
|---|---|---|---|
| Notes payable to the federal government for Washington Aqueduct | Variable | 2018 | $ 8,031 |
| 1998 public utility revenue bonds | 5.50 - 6.00 | 2028 | 266,120 |
| **SUBTOTAL SENIOR DEBT** | | | 274,151 |
| | | | |
| **SUBORDINATE DEBT** | | | |
| Notes payable to the federal government for Bloomington Dam | 3.25 | 2041 | 17,615 |
| Notes payable to WSSC for Little Seneca Reservoir | 8.73 - 11.57 | 2014 | 1,465 |
| 1988 District of Columbia general obligation bonds | 7.25 | 2001 | 75 |
| 1990 District of Columbia general obligation bonds | 7.20 - 7.25 | 2001 | 10 |
| 1991 District of Columbia general obligation bonds | 6.30 - 6.75 | 2008 | 580 |
| 1992 District of Columbia general obligation bonds | 6.02 | 2007 | 12,813 |
| 1993 District of Columbia general obligation bonds | 4.90 - 6.00 | 2012 | 67,228 |
| 1994 District of Columbia general obligation bonds | 4.55 - 6.50 | 2011 | 19,440 |
| **TOTAL SUBORDINATE DEBT** | | | 119,226 |
| | | | |
| **TOTAL DEBT OUTSTANDING** | | | 393,377 |
| | | | |
| **CURRENT PORTION OF DEBT OUTSTANDING** | | | 17,691 |
| | | | |
| **DEBT OUTSTANDING, LESS CURRENT PORTION** | | | $ 375,686 |

Long term debt outstanding as presented on the accompanying balance sheets includes net unamortized bond premiums of $6,531 on September 30, 2000.

During the spring of 2000, the three major rating agencies (Moody's Investor Service, Inc., Standard & Poor's, and Fitch IBCA) upgraded WASA's bond ratings. All three agencies cited the substantial progress the Authority has made over the past three years, as well as the strong planning and policies that have been put into place by the Board and management. The Authority's current bond ratings are as follows:

| Rating Agency | Old Rating | New Rating |
|---|---|---|
| Moody's | "A2" with positive outlook | "A1" with stable outlook |
| Standard & Poor's | "A-" with stable outlook | "A" with positive outlook |
| Fitch IBCA | "A" with stable outlook | "A+" with stable outlook |

## MAJOR INITIATIVES

### Technology Initiatives

A key element of the Authority's transformation efforts is technology. Over the next 10 years, the Authority will invest $70 million in technology, with a primary focus of fully integrating technology into the delivery of water and wastewater services. Systems planned for FY 2001 and FY 2002 include a state of the art Customer Information System, a process computer control system for operation of the wastewater treatment plant, a maintenance management/inventory control system, and addition of a time and attendance component to the payroll system that was implemented in FY 2000.

### Technology Infrastructure

Since FY 1997, the Authority has deployed more than 700 personal computers across the organization, installed multiple LANs at remote sites and connected all facilities through a wide area network (WAN), and achieved its goal of Y2K compliance, entering the new millenium without a single significant problem. The Authority's World Wide Web site was launched during FY 1999 and was continually updated in FY 2000. As the Authority's technology initiatives are implemented, the website will interface to all of WASA's financial and customer information systems.

### New Systems and Applications

The Authority's efforts to reengineer and improve service delivery will be supported and complemented by the simultaneous development and/or replacement of all major information systems. Key systems that will be focused on over the next one to three years include:

- **Financial Management** – The Authority successfully implemented its own independent financial management system on October 1, 2000. Services provided immediately by the system included general ledger, payables, receivables, fixed assets, procurement and budget functions.

- **Customer Information** – The Authority plans to implement a customer information system in FY 2001 that will facilitate "one stop shopping" for all Authority customers. This system will include basic operating requirements such as meter reading, service requests, and billing, and will be fully integrated with other areas of the Authority, to allow ad hoc financial reporting and work order monitoring and processing. Billing, account inquiries, and bill paying will all be available over the Internet when the new system is implemented.

- **Human Resources and Payroll** – The Authority implemented its own Human Resources and Payroll system in December 1999. This new system supports all human resource management functions, including recruitment, position control, and payroll. The second phase of this project will be to implement the time and attendance component in FY 2001, greatly reducing the time and costs required to prepare payroll.

- **Maintenance Management** – This new system will provide plant and asset management, including maintenance histories, development of future maintenance strategies, and work order management. This system will be implemented in 2001.

- **Work Management and Dispatching** – This is a work-order management and personnel dispatch system that will support orderly data flow from the customer service organization to all of WASA's field operations and maintenance organizations. The system will be implemented in FY 2003, and will allow customer calls to be routed to the nearest available service unit for diagnosis of water leaks or meter investigations.

- **Automatic Meter Reading (AMR) –** This is a telecommunications-based advanced meter reading system that will permit faster and more accurate meter reads, and end-to-end integration of meter reading, billing, and customer service. It will be substantially implemented over four years beginning in FY 2001.

- **Process Computer Control System** – This system will allow for automation of a significant number of plant processes at Blue Plains, resulting 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 the three phases of project implementation are scheduled to be completed over the next six years.

### Internal Improvement Plans

A primary focus of the Authority over the next few years will be to improve service to our customers through implementation of internal improvement plans. At the direction of the Board, plans have already been developed for Blue Plains and Customer Service that will result in operating cost savings of $24 million annually when fully implemented over the next seven to eight years. The plans will result in position reductions at Blue Plains of 228, and the Customer Service Department will cut an additional 30 to 40 positions after implementation of its automated meter reading system and its customer information system. Along with WASA staffing cuts, the plan calls for a decreased reliance on contractual services, reducing the number of contractors at the plant from 166 to 36.

Plans will continue to be developed for every department in WASA's organization. In addition to implementing changes in operations, achievement of the cost reduction goals is dependent on completion of the Authority's capital improvement program.

## Customer Service

The Customer Service Internal Improvement Plan was unveiled in April 2000, and was marked by changing the name of the department from Water Measurement and Billing to Customer Service to more closely reflect the mission of the department. The most immediate goal of making the customer the focus of the department has been accomplished. Customer requests and needs are now pursued to resolution, meter reading accuracy has improved to a consistent 99.9 percent, and action is systematically taken on all delinquent accounts. Service to our customers continues to be the driving force behind implementing improved customer information systems and metering programs as the Authority moves forward, including the following activities:

**Large Meter Testing/Repair/Rightsizing** – Beginning in FY 2000, WASA started a program aimed at ensuring accurate meter operation, with a goal of attaining a level of meter operating accuracy of at least 98 percent. In years past, many of the large meters were improperly sized and did not register at all, as the usage they were installed to measure changed over the years. The comprehensive program will assure that right-sized meters are installed, and that meters that are running slow will be repaired. Through December 2000, more than 2,000 large meters were tested, and were running, on average, five to 15 percent slow.

**Meter Replacement and Automated Meter Reading System** – In FY 2001, the Authority is undertaking the complete replacement and automation of WASA's entire metering system. A comprehensive replacement and automation program will ensure our customers and employees the most accurate, timely, and reliable meter readings. The program will be substantially completed within four years.

**New Customer Information System** – WASA has signed a contract and work is underway to implement the new customer information system in the summer of 2001. The new system will assist customer service staff to focus on the customer, rather than on the property or account number, the basis of our current system. WASA's business processes are being coordinated with the new system and staff is undergoing intensive training in order to facilitate transition to the new system. Once fully implemented, customers will be able to obtain billing information and make payments over the Internet. The new system will accommodate real time updates of cashiering, metering, and inventory information.

- **Customer Assistance Programs**– The Board adopted customer assistance programs in FY 2000:

  *Voluntary Customer Assistance Program* – Similar to programs offered by other area utilities, this program provides assistance to the Authority's low-income residential customers in paying their water bills. The customer assistance program is to be funded solely by voluntary contributions from customers and the community, and the administration of the program will be outsourced to a non-profit organization. Implementation of this program began in FY 2000 and continues into FY 2001.

  *Water Bill Credit Program:* In addition to the voluntary assistance program, the Authority kicked off its program that offers reductions in billings to low income homeowners in October 2000.

### 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 actually sold to customers. In FY 2000, the Authority's sold/pumped ratio remained at approximately 70 percent, relatively low when compared to other utilities. This ratio is unadjusted and includes water used for normal utility operations, such as system maintenance, fire fighting, unaccounted water usage etc. The Authority is committed to improving this ratio over the next few years by taking the following actions:

- **Metering improvements** – Under-registration of meters is one of the largest sources of unaccounted for water. The Authority's comprehensive meter change-out and large meter testing programs should result in much more accurate billing to customers, thus reducing the sold/pumped ratio.

- **Valve replacement program** – The Authority has accelerated its $23.0 million valve replacement program, which will allow for replacing approximately 200 old defective valves in the system resulting in reduced disruption to the customers.

- **Consolidation of water leak response team** – Leakage from the system is one factor in the Authority's sold/pumped ratio but not the most significant. In an effort to improve the Authority's response time to water leaks, the Authority consolidated its water leak repair crews and functions in one department and added contractual support. In FY 2001, the Authority expects to meet its response time target of 48 hours to diagnose and repair significant water leaks.

### Combined Sewer Overflow Management

Like most older systems, approximately one-third of the sewer collection system is a combined sewer system where both sanitary waste and stormwater 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). The Authority's current EPA permit allows for CSOs at 60 locations throughout the system. As part of its current permit, the Authority is required to develop a long-term CSO control plan that will result in compliance with the requirements of the federal Clean Water Act. In 1998, the Authority initiated this major planning effort, which will culminate with WASA's presentation of its Long Term Control Plan to the EPA in FY 2001. The implementation of the plan ultimately adopted by the Authority and approved by EPA is expected to occur over the next 10 to 20 years, depending on the requirements of the Authority's future EPA permits.

### Stormwater

In April 2000, the District of Columbia government received its Municipal Separate Storm Sewer System permit from the Environmental Protection Agency, which governs how the District will control stormwater runoff into the Anacostia and Potomac Rivers, Rock Creek, and related tributaries. The permit requires a number of stormwater management activities, including development of various management plans, catch basin cleaning, street sweeping, litter control, and reporting. The responsibility for these activities will be shared among the District's Department of Health, Department of Public Works, and WASA.

For the past few years, WASA has been working with the District to address the requirements of the permit and to identify an interim funding source to pay for permit-required activities until the permit expires in 2003. Legislation is currently pending that would establish a separate stormwater administration within WASA to coordinate permit activities and to establish an interim fee that would appear on WASA's water and sewer bill to pay for these activities. Passage of this legislation is anticipated in spring 2001.

### Capital Improvement Program

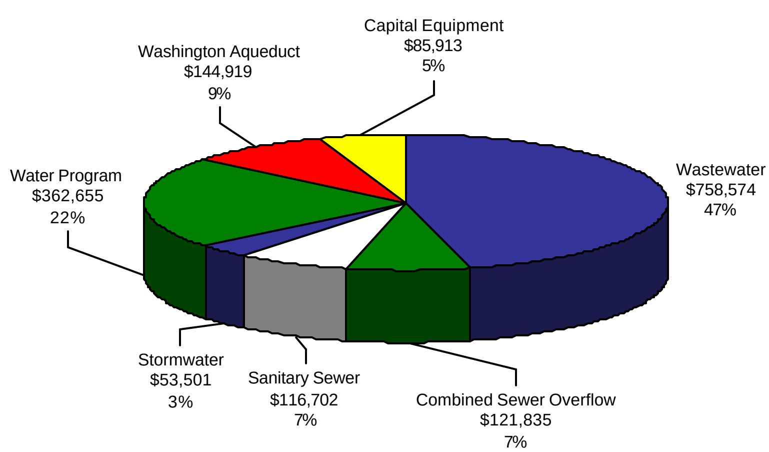
The Ten Year Capital Improvement Program is projected at $1.6 billion, the same projected cost for the FY 1999 – 2008 plan. The essence of the program remains unchanged, with the only significant new expenditures included in the FY 2000 – 2009 plan for new roadway repair and restoration requirements.

Over the next 10 years, the Authority plans to repair and upgrade its aging distribution system, rehabilitate wastewater treatment and sewer facilities, and meet its regulatory commitments. The ten-year Capital Improvement Program (CIP) includes major wastewater, water distribution and stormwater projects, the Authority's share of the Washington Aqueduct capital projects and capital equipment additions/replacements to meet these requirements. Approximately 26 percent of the program is mandated In FY 2000, $114 million was expended on the CIP.

Representing the largest portion of the capital program is $759 million in expenditures at Blue Plains over the next 10 years, including implementing the plan for biosolids processing and disposal, and liquid processing projects that will upgrade and rehabilitate facilities that handle flows from both sanitary and combined sewer systems. These projects are critical to achieving the cost savings goals outlined in the Internal Improvement Plans. Two additional significant capital projects address chemical handling and feed systems that have presented operating and safety concerns to WASA for a number of years. The first will provide sodium hydroxide storage and feed facilities to replace the outdated lime feed facilities, and the second project is a transition to sodium hypochlorite for disinfection and sodium bisulfite for dechloriination from the current products (chlorine and sulfur dioxide) that are delivered by rail car.

A breakdown of projects by major category for FY 2000 – 2009 appears in the table below.

**FY 2000- FY2009 Capital Improvement Program**
**(000's)**



## HISTORY OF THE AUTHORITY

### Legislative History and Relationship to the District of Columbia

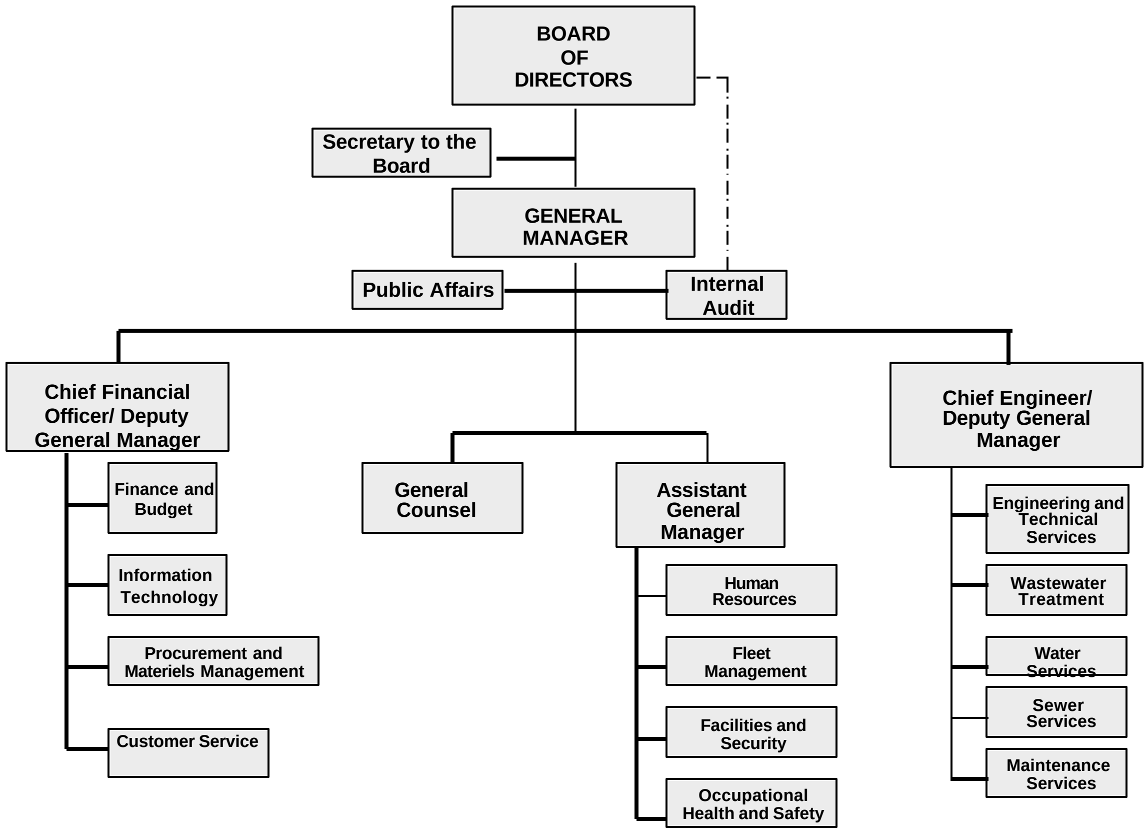
In 1996, the regional participants in the Authority's service area, including the District of Columbia, Montgomery and Prince George's Counties in Maryland, and Fairfax County in Virginia and the United States Congress, agreed to create an independent, multi-jurisdictional water and wastewater authority from its predecessor agency, the District of Columbia Water and Sewer Utility Administration of the Department of Public Works (WASUA). 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 WASUA water and wastewater projects. 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 WASUA. Pursuant to a schedule agreed to between the District and the Authority, the District has made three payments of $18.2 million to the Authority in FY 1997, 1998 and 1999, reducing the amount due to the Authority to approximately $28.6 million. The payment of $18.2 million due in FY 2000 was received in October 1999 and a final payment of approximately $10.4 million was received in October 2000.

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 which 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 stormwater 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. In 1999, the Washington Suburban Sanitary Commission ceased operations at the Montgomery County Regional Composting Facility. As a result, the Authority wrote off its $11.6 million remaining investment in this facility. 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 Water System

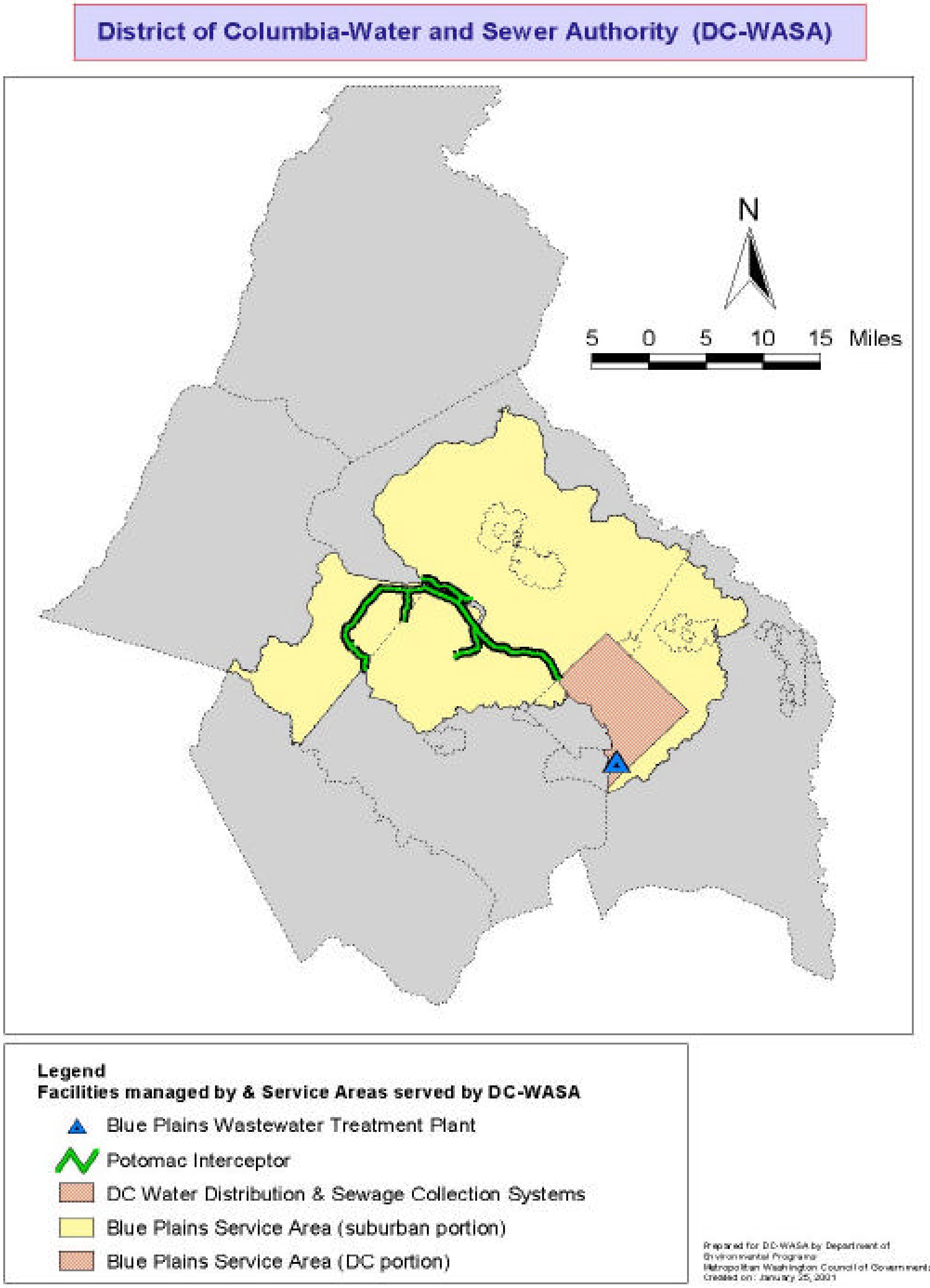
### History and Service Area

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 1,200 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.




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 cultural climate. It is also the nucleus of the fifth largest metropolitan area in the United States. In 1999, the District's estimated resident population was 519,000, while the 1999 estimate of the metropolitan area population was 4.8 million and encompassed 24 additional jurisdictions in Maryland and Virginia. In 1999, the District had the 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 workforce in the District averaged 183,600 employees in 1999, while an additional 148,000 federal employees worked elsewhere in the metropolitan area. The District is host to 137 foreign embassies and 36 other recognized diplomatic missions, with more than 7,500 employees. 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 1999, an estimated 20.9 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. In 1997, 19.8 million visitors provided $5.91 billion in revenue to the travel and tourism industry in the Washington Metropolitan Area, and an additional $3.8 billion in indirect economic activity. The District captured $4.23 billion, or 44 percent, of the direct and indirect economic activity, which generated 74,850 jobs in the city during FY 1997.

Per capita personal income in the District was $39,858 in 1999 compared to $28,542 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 2.32 persons), a large percentage of college graduates and a substantial concentration of employed residents in highly-skilled occupations.

## CERTIFICATE OF ACHIEVEMENT

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, 1999 (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.

## 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. For FY 1998, 1999, and 2000, KPMG LLP (KPMG) audited the Authority financial statements. KPMG's opinion is included in the Financial Section.

## ACKNOWLEDGEMENTS

I gratefully acknowledge the hard work and dedication of the Authority's budget, financial planning, accounting and finance staff for their assistance in preparing this report. Many operations and the General Manager's staff also contributed significantly to this effort. I also thank Michelle Cowan, Director of Finance and Budget, Olu Adebo, Acting Controller, and Jean Wilson, Senior Financial Analyst, for their outstanding financial leadership in FY 2000 and in completing this report.

## CONCLUSION

As demonstrated in this report, the Authority, in its fourth year, has achieved an enviable record of accomplishment. Operations continue to improve while costs continue to decline; targeted reserve levels are fully funded; and old delinquent accounts inherited by the Authority have been substantially reduced. These exceptional results did not occur by accident; they occurred because the Board developed a prudent long-term financial plan grounded in strong financial policies, and then executed the plan. This performance was rewarded in FY 2000 by bond rating upgrades from all three rating agencies, placing us in the high "A" categories. We expect to continue this record in FY 2001 and beyond.

Respectfully submitted,

Paul L. Bender

Chief Financial Officer

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# Financial Section

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KPMG

2001 M Street, N.W.
Washington, D.C. 20036

**Independent Auditors' Report**

Board of Directors
District of Columbia Water and Sewer Authority:

We have audited the accompanying balance sheets of the District of Columbia Water and Sewer Authority (WASA) (a component unit of the District of Columbia) as of September 30, 2000 and 1999, and the related statements of revenue, expenses and changes in retained earnings, 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 audit 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 reasonable basis for our opinion.

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, 2000 and 1999, 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.

KPMG LLP

December 29, 2000

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

Balance Sheets

September 30, 2000 and 1999

(In thousands)

| Assets | 2000 | 1999 |
|---|---|---|
| Current assets: | | |
| Cash and cash equivalents (notes 2 and 3) | $ 156,687 | 147,670 |
| Customer receivables, net of allowance for doubtful accounts of $6,671 in 2000 and 1999 (note 7) | 50,668 | 60,749 |
| Due from federal government (note 6) | 20,461 | 25,386 |
| Due from District of Columbia (notes 5 and 13) | 20,463 | 30,340 |
| Due from other jurisdictions (note 8) | 6,766 | 7,273 |
| Inventory (note 2) | 10,104 | 11,079 |
| Total current assets | 265,149 | 282,497 |
| Restricted assets (notes 2, 3 and 11): | | |
| Revenue Bond-Construction Fund | — | 12,183 |
| Revenue Bond Debt Service Reserve Fund | 24,393 | 23,945 |
| Revenue Bond Fund - Interest Account | 7,591 | 7,433 |
| Total restricted assets | 31,984 | 43,561 |
| Utility plant (note 4): | | |
| In-service | 1,518,612 | 1,475,877 |
| Less accumulated depreciation | (512,975) | (485,079) |
| Net utility plant in service | 1,005,637 | 990,798 |
| Construction in progress | 151,930 | 83,659 |
| Net utility plant | 1,157,567 | 1,074,457 |
| Other noncurrent assets: | | |
| Due from District of Columbia (note 5) | — | 10,434 |
| Due from other jurisdictions (note 8) | 33,282 | 36,674 |
| Purchased capacity (less accumulated amortization of $23,750 in 2000 and $21,568 in 1999) (notes 2 and 9) | 111,216 | 105,360 |
| Total other noncurrent assets | 144,498 | 152,468 |
| | $ 1,599,198 | 1,552,983 |

| **Liabilities and Equity** | | |
|---|---|---|
| Current liabilities: | | |
| Accounts payable and accrued expenses | $ 47,993 | 41,042 |
| Compensation payable (note 2) | 7,864 | 7,587 |
| Accrued interest | 9,039 | 9,127 |
| Deferred revenue (note 2) | 51,403 | 43,804 |
| Current installments of long-term debt (note 11) | 17,691 | 8,643 |
| Total current liabilities | 133,990 | 110,203 |
| Noncurrent liabilities: | | |
| Deferred revenue (note 2) | 371,912 | 344,735 |
| Other liabilities | 11,080 | 12,066 |
| Long-term debt excluding current installments (note 11) | 382,217 | 407,243 |
| Total noncurrent liabilities | 765,209 | 764,044 |
| Total liabilities | 899,199 | 874,247 |
| Equity: | | |
| Contributed capital (note 10) | 399,183 | 397,753 |
| Retained earnings | 300,816 | 280,983 |
| Total equity | 699,999 | 678,736 |
| Commitments and contingencies (note 12) | | |
| | $ 1,599,198 | 1,552,983 |

See accompanying notes to financial statements.

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

Statements of Revenue, Expenses and Changes in Retained Earnings
Years ended September 30, 2000 and 1999
(In thousands)

| | 2000 | 1999 |
|---|---|---|
| Operating revenue: | | |
| Water and waste water user charges: | | |
| Residential and commercial customers | $ 131,399 | 138,328 |
| Federal government | 24,092 | 26,859 |
| District government | 16,077 | 16,888 |
| Charges for wholesale waste water treatment | 50,284 | 56,107 |
| Other | 6,078 | 4,450 |
| Total operating revenue | 227,930 | 242,632 |
| Operating expenses: | | |
| Personnel services | 63,078 | 60,674 |
| Contractual services | 63,729 | 56,017 |
| Supplies | 13,129 | 11,431 |
| Occupancy | 20,091 | 21,225 |
| Depreciation and amortization | 30,329 | 28,227 |
| Water purchases | 16,358 | 18,922 |
| Total operating expenses | 206,714 | 196,496 |
| Operating income | 21,216 | 46,136 |
| Nonoperating income (expense): | | |
| Interest income | 12,744 | 13,676 |
| Write-off of purchased capacity | — | (11,644) |
| Interest and fiscal charges | (18,616) | (18,767) |
| Net income | 15,344 | 29,401 |
| Add back of depreciation expense related to contributed capital | 4,489 | 4,235 |
| Increase in retained earnings | 19,833 | 33,636 |
| Retained earnings at beginning of year | 280,983 | 247,347 |
| Retained earnings at end of year | $ 300,816 | 280,983 |

See accompanying notes to financial statements.

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

Statements of Cash Flows

Years ended September 30, 2000 and 1999

(In thousands)

| | | 2000 | 1999 |
|---|---|---|---|
| Cash flows from operating activities: | | | |
| Cash received from customers | $ | 238,288 | 243,469 |
| Cash paid to suppliers for goods and services | | (101,341) | (92,962) |
| Cash paid to employees for services | | (62,794) | (59,681) |
| Net cash provided by operating activities | | 74,153 | 90,826 |
| Cash flows from capital and related financing activities: | | | |
| Proceeds from notes payable to federal government | | 8,031 | 15,667 |
| Proceeds from other jurisdictions | | 38,350 | 37,108 |
| Repayments of bond principal and notes payable to federal and district government | | (25,334) | (30,655) |
| Acquisition of utility plant and purchased capacity | | (116,682) | (107,993) |
| Payments of interest and fiscal charges | | (21,404) | (21,874) |
| Contributions of capital from federal government | | 9,562 | 3,091 |
| Net cash used in capital and related financing activities | | (107,477) | (104,656) |
| Cash flows from non-capital financing activities - cash repayments of loan from District | | 18,200 | 18,200 |
| Cash flows from investing activities: | | | |
| Cash received for interest | | 12,565 | 32,340 |
| Net purchases of investments | | (448) | (811) |
| Net cash provided by investing activities | | 12,117 | 31,529 |
| Net increase (decrease) in cash and cash equivalents | | (3,007) | 35,899 |
| Cash and cash equivalents at beginning of year | | 167,285 | 131,386 |
| Cash and cash equivalents at end of year | $ | 164,278 | 167,285 |
| Operating income | $ | 21,216 | 46,136 |
| Adjustments to reconcile operating income to net cash provided by operating activities: | | | |
| Depreciation and amortization | | 30,329 | 28,227 |
| Change in operating assets and liabilities: | | | |
| (Increase) decrease in customer and other receivables | | 14,485 | (3,545) |
| Decrease in inventory | | 975 | 1,180 |
| Increase in payables and accrued liabilities | | 7,266 | 15,910 |
| Increase (decrease) in deferred revenue | | (118) | 2,918 |
| Net cash provided by operating activities | $ | 74,153 | 90,826 |

See accompanying notes to financial statements.

**(1) The Water and Sewer Authority**

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. On April 18, 1996, Congress passed the enabling legislation that established the District of Columbia Water and Sewer Authority (WASA or Authority) as a legally separate District entity effective October 1, 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 which carries wastewater primarily from Loudoun County and Dulles Airport to the Plant.

WASA’s wastewater service territory includes approximately 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 Dulles Airport Authority.

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% 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.

**(2) Summary of Significant Accounting Policies**

The financial statements of WASA have been prepared in conformity with accounting principles generally accepted in the Unites 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) Basis of Accounting***

These financial statements are prepared using the accrual basis of accounting, as required for a proprietary fund type activity.

WASA has elected not to apply the option 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*. Therefore, WASA does not apply Financial Accounting Standards Board Statements and Interpretations issued after November 30, 1989.

As allowed by GASB 20, WASA accounts for its regulatory assets and liabilities in accordance with 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 certain 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 would be capitalized and reduced as the related revenues were provided. If the current recovery is for costs that will be incurred in future periods, regulatory liabilities would be accrued, and reduced as those costs are incurred. As of September 30, 2000 and 1999, no regulatory assets or liabilities were required to be reported in accordance with SFAS 71.

***(b) Revenue Recognition***

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.

***(c) Water and Sewer User Charges***

Retail customer water and sewer rates are as approved by the WASA Board of Directors. Charges to the District and the federal government are the same as those charged to other 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.

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

### *(d) 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.

### *(e) 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 and 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 approximately 60 years, except for the furniture and equipment portion which is depreciated over estimated useful lives ranging from 5 to 8 years. Construction in progress is reclassified to in-service upon substantial completion or when placed in service, with related depreciation commencing at that time.

### *(f) 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 generally 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.

### *(g) Investments*

Investments consist of certain money market investments that mature in one year or less from the date of purchase and which are recorded at amortized cost, and certain nonparticipating contracts that are recorded at cost. Recorded amounts approximate fair value.

**(2) Summary of Significant Accounting Policies - Continued**

***(h) Restricted Assets***

Restricted assets consist of invested unexpended revenue bond 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.

***(i) 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 a 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% 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% of all capital and operating costs.

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

***(j) Inventory***

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

**(2) Summary of Significant Accounting Policies - Continued**

***(k) 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.

***(l) Federal Grants***

Grants received from the federal government for utility plant construction are recorded as contributed capital. The depreciation related to the utility plant assets financed by federal government grants is charged to operations and subsequently deducted from contributed capital.

***(m) 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; accordingly, it is recorded when used.

***(n) 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, 2000 and 1999, the carrying amounts of WASA's unrestricted bank deposits plus petty cash were $2,470 and $2,999 respectively. These bank deposits are entirely insured or collateralized with securities held by WASA's agent in its name.

**(In thousands)**

**(3) Cash Deposits and Investments - Continued**

***(b) 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% 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.

A schedule of cash equivalents and investments as of September 30, 2000 follows:

| Description | | |
|---|---|---|
| Unrestricted: | | |
| Repurchase agreements | $ | 75,735 |
| U. S. government notes and agency securities | | 29,342 |
| Commercial paper | | 49,140 |
| Total | $ | 154,217 |
| Restricted: | | |
| Money market mutual fund | $ | 7,591 |
| U. S. government notes and agency securities | | 24,393 |
| Total | | 31,984 |
| Total cash equivalents and investments | $ | 186,201 |

**(In thousands)**

**(3) Cash Deposits and Investments - Continued**

A schedule of cash equivalents and investments as of September 30, 1999 follows:

| Description | | | |
|---|---|---|---|
| Unrestricted: | | | |
| | Repurchase agreements | $ | 55,577 |
| | U. S. government notes and agency securities | | 49,346 |
| | Commercial paper | | 39,748 |
| | Total | $ | 144,671 |
| Restricted: | | | |
| | Money market mutual fund | $ | 19,616 |
| | U. S. government notes and agency securities | | 23,945 |
| | Total | | 43,561 |
| Total cash equivalents and investments | | $ | 188,232 |

All of the above investments, except for the money market mutual funds are insured, registered, or the related securities are held by WASA or its agent in WASA's name (Category 1 investments). The mutual funds are not subject to risk categorization.

Following is a summary of cash, cash equivalents and investments:

| Description | | 2000 | 1999 |
|---|---|---|---|
| Cash | $ | 2,470 | 2,999 |
| Cash equivalents: | | | |
| Unrestricted assets | | 154,217 | 144,670 |
| Restricted assets | | 7,591 | 19,616 |
| Total cash and cash equivalents | | 164,278 | 167,285 |
| Other restricted investments | | 24,393 | 23,945 |
| Total cash, cash equivalents and investments | $ | 188,671 | 191,230 |

**(In thousands)**

## (3) Cash Deposits and Investments - Continued

The above are reconciled to the balance sheet as follows:

| Description | | 2000 | 1999 |
|---|---|---|---|
| Cash and cash equivalents | $ | 156,687 | 147,670 |
| Restricted assets | | 31,984 | 43,561 |
| Total cash, cash equivalents and investments | $ | 188,671 | 191,231 |

## (4) Utility Plant

The net utility plant, including capitalized interest of $2,970 and $3,039 for the years ended September 30, 2000 and 1999, respectively, consists of the following as of September 30:

| | | 2000 | 1999 |
|---|---|---|---|
| Real property: | | | |
| Blue Plains Regional Waste Water Treatment Plant | $ | 902,681 | 897,819 |
| Waste water collection facilities | | 295,617 | 289,458 |
| Water distribution system | | 258,574 | 240,250 |
| Total real property | | 1,456,872 | 1,427,527 |
| Personal property | | 61,740 | 48,350 |
| Total utility plant | | 1,518,612 | 1,475,877 |
| Less accumulated depreciation | | (512,975) | (485,079) |
| Net utility plant in service | | 1,005,637 | 990,798 |
| Construction in progress | | 151,930 | 83,659 |
| Net utility plant | $ | 1,157,567 | 1,074,457 |

**(In thousands)**

### (5) Due from the District of Columbia, net

WASA's cash and cash equivalents balances were pooled with those of the District for fiscal years prior to 1997. WASA now maintains its own cash accounts, and is entitled to all cash amounts reported as its share of the District's pooled cash, but not transferred to WASA, at September 30, 1996. The legislation creating WASA required that this cash, in the original amount of $83,234, be transferred to WASA over five years beginning in fiscal year 1997 in four payments of $18,200 and a final payment of $10,434. As of September 30, 2000, the $10,434 amount due, which is reported as a current receivable, was received in October 2000.

Also included in the short term due from the District as of September 30, 2000 and 1999 is an advance payment of $14,438 and $13,385 for WASA's share of fiscal year 2001 and 2000 debt service, respectively, on general obligation bonds originally issued to finance WASA capital improvements.

### (6) Due from Federal Government

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

| | 2000 | 1999 |
|---|---|---|
| Federal grants receivable | $ 14,398 | 19,930 |
| Washington Aqueduct advances | 6,063 | 5,456 |
| | $ 20,461 | 25,386 |

### (7) Customer Receivables

Customer receivables include unbilled revenues of $16,700 and $18,559 at September 30, 2000 and 1999, respectively.

(In thousands)

## (8) Due From Other Jurisdictions

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

| | 2000 | 1999 |
|---|---|---|
| Current: | | |
| Loudoun County Sanitation Authority | $ 276 | 360 |
| Northern Virginia (a) | 1,417 | 1,220 |
| Fairfax | 620 | 1,052 |
| WSSC | 4,075 | 4,641 |
| Potomac Interceptor | 378 | — |
| Subtotal | 6,766 | 7,273 |
| Noncurrent: | | |
| Wholesale wastewater users | 20,956 | 22,931 |
| Northern Virginia (a) | 12,326 | 13,743 |
| Subtotal | 33,282 | 36,674 |
| Total due from other jurisdictions | $ 40,048 | 43,947 |

### *(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.

## (9) Purchased Capacity

Purchased capacity consists of the following as of September 30:

| | 2000 | 1999 |
|---|---|---|
| Jennings Randolph Reservoir (Bloomington Dam) | $ 19,863 | 19,863 |
| Little Senca Lake | 12,327 | 12,327 |
| Washington Aqueduct | 102,776 | 94,738 |
| | 134,966 | 126,928 |
| Less accumulated amortization | (23,750) | (21,568) |
| Net purchased capacity | $ 111,216 | 105,360 |

## (In thousands)

### (10) Contributed Capital

Contributed capital originates from two sources. Federal government contributed capital represents the undepreciated balances of the utility plant that were constructed with the proceeds from federal funding sources. District of Columbia contributed capital represents its original equity on September 30, 1979, the date the Enterprise Fund was organized, plus donated property and assets transferred from the District's General Fixed Assets Group of Accounts during subsequent years.

Changes in contributed capital for the years ended September 30, 2000 and 1999 are shown below:

| | 2000 | 1999 |
|---|---|---|
| Federal government contributed capital: | | |
| Balance, beginning of year | $ 224,160 | 224,848 |
| Grant awards, net | 5,919 | 3,547 |
| Depreciation of assets financed with federal grant awards | (4,489) | (4,235) |
| Balance, end of year | 225,590 | 224,160 |
| District of Columbia contributed capital | 173,593 | 173,593 |
| Total contributed capital | $ 399,183 | 397,753 |

**(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 consist of the following at September 30, 2000 and 1999, respectively:

| | Final maturity | 2000 | 1999 |
|---|---|---|---|
| Notes payable to the federal government for Washington Aqueduct; interest is variable based on a three month taxable municipal index which, for 2000, was between 5.88% and 7.19% | 2018 | $ 8,031 | 15,667 |
| Notes payable to the federal government for Jennings Randolph Reservoir (Bloomington Dam): interest at 3.25% | 2041 | 17,615 | 17,840 |
| Notes payable to WSSC for Little Seneca; interest ranges from 8.73% to 11.57% | 2014 | 1,465 | 1,943 |
| 1998 public utility revenue bonds; interest ranges from 5.50% to 6.00% | 2028 | 266,120 | 266,120 |
| District of Columbia general obligation bonds: | | | |
| 1988; interest at 7.25% | 2001 | 75 | 150 |
| 1990; interest ranges from 7.2% to 7.25% | 2001 | 10 | 20 |
| 1991; interest ranges from 6.3% to 6.75% | 2008 | 580 | 635 |
| 1992; interest at 6.02% | 2007 | 12,813 | 15,111 |
| 1993; interest ranges from 4.9% to 6.0% | 2012 | 67,228 | 70,275 |
| 1994; interest ranges from 4.55% to 6.50% | 2011 | 19,440 | 21,470 |
| | | 393,377 | 409,231 |
| Less current installments | | (17,691) | (8,643) |
| | | $ 375,686 | 400,588 |

Long term debt outstanding as presented on the accompanying balance sheets include net unamortized bond premiums of $6,531 and $6,655 at September 30, 2000 and 1999, respectively.

**(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 were 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, 2000 and 1999, the highest rate on these notes was 7.19% and 5.89% and the lowest rate was 5.88% and 4.75%, 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% (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 were used to purchase securities that were placed in an irrevocable trust, which will provide 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 $90,530 and $113,060 at September 30, 2000 and 1999, respectively.

**(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% 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 shall annually establish rates sufficient to provide at least 100% debt service coverage of WASA's share of District general obligation bonds, in accordance with the Master Indenture. As of September 30, 2000 and 1999, WASA had reserved $1.465 million and $2.587 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, 2000 and 1999. The primary requirements of the Master Indenture are summarized below:

(In thousands)

**(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, annual debt service on senior and subordinate debt, fund certain required reserves, fund any payment in lieu of taxes and produce net revenues sufficient at least equal to the sum of: (1) 120% of annual debt service on senior debt and (2) 100% 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 that insufficient funds are available. The Series 1998 Bonds debt service reserve fund balance as of September 30, 2000 and 1999 was $24,393 and $23,945, respectively, and is required to be maintained at 125% of current and future average annual Series 1998 debt service.

***(d) Debt Service to Maturity***

The future debt-servicing obligations at September 30, 2000 are as follows:

| Fiscal year | Principal | Interest | Total |
|---|---|---|---|
| 2001 | $ 17,691 | 20,982 | 38,673 |
| 2002 | 12,810 | 20,465 | 33,275 |
| 2003 | 13,943 | 19,783 | 33,726 |
| 2004 | 14,726 | 19,019 | 33,745 |
| 2005 - 2009 | 74,343 | 83,038 | 157,381 |
| 2010 - 2014 | 62,625 | 64,042 | 126,667 |
| 2015 and thereafter | 197,239 | 73,876 | 271,115 |
| | $ 393,377 | 301,205 | 694,582 |

**(12) 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.

***(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 three most recent years, settlement of claims has not exceeded insurance coverages.

WASA has purchased property coverage to protect its owned or leased facilities, buildings, fleet vehicles and equipment. The deductible for each claim for buildings and contents is $500 and for auto and equipment is $5.

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 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. The claims liability is included in accrued expenses on the accompanying balance sheets.

**(In thousands)**

## (12) Commitments and Contingencies - Continued

Changes in the balances of workers' compensation claims liabilities during the years ended September 30, 2000 and 1999 were as follows:

| | 2000 | 1999 |
|---|---|---|
| Balance, beginning of year | $ 2,028 | 2,303 |
| Current year claims and changes in estimates | 1,485 | 359 |
| Claim payments | (821) | (634) |
| Balance, end of year | $ 2,692 | 2,028 |

## (13) 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 $16,077 and $16,888 from the District for these services for years 2000 and 1999, respectively, which are included in water and wastewater user charges in the accompanying statements of revenues, expenses and changes in retained earnings.

WASA recorded expenses of $9,177 and $8,962, 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, 2000 and 1999, respectively. WASA also recorded an expense of $1,110 for a new Right of Way fee charged by the District beginning in April 2000.

## (14) 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 2000, 1999 and 1998, WASA's contributions to the plans were $1,914, $2,353, and $2,334, respectively. Each of 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 for the employees were 7.40 percent for 2000, 7.25 percent for 1999 and 7.00 percent for 1998. The required percent of salaries to be contributed by WASA was 8.51 percent for the three fiscal years ending 2000.

**(14) Employee Benefits - Continued**

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

Employees hired subsequent to September 30, 1987, participate in the U.S. Social Security system and a defined contribution plan sponsored by the District. The District of Columbia Defined Contribution Plan (D.C. Code 1-627) is a qualified trust under Internal Revenue Code Section 401. WASA contributes 5% of base pay each quarter. Employees do not contribute to the plan and are eligible to participate after one year of service. Contributions and earnings fully vest after four years of service following a one-year waiting period. During fiscal years 2000 and 1999, WASA's contributions to this plan were $600 and $665, respectively. Contributions are reduced if separation occurs before five years of credited service.

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

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

# Statistical Section

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## EXHIBIT 1: OPERATING REVENUE BY SOURCE
## FY 1991 - 2000
## ($000)

| REVENUE SOURCE | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Residential/Commercial | $ 112,549 | $ 106,201 | $ 101,477 | $ 104,407 | $ 101,696 | $ 101,078 | $ 115,294 | $ 138,697 | $ 138,328 | $ 131,399 |
| Governmental | | | | | | | | | | |
| Federal | 29,363 | 29,696 | 27,610 | 23,192 | 22,966 | 21,946 | 24,024 | 25,068 | 26,859 | 24,092 |
| DC Government (1) | - | - | - | - | - | - | 12,268 | 21,883 | 11,168 | 10,883 |
| DC Housing Authority | 6,667 | 6,277 | 6,003 | 6,518 | 6,338 | 6,623 | 7,035 | 7,770 | 5,720 | 5,194 |
| Subtotal Governmental | 36,030 | 35,973 | 33,613 | 29,710 | 29,304 | 28,569 | 43,327 | 54,721 | 43,747 | 40,169 |
| **TOTAL RETAIL REVENUES** | **$ 148,579** | **$ 142,174** | **$ 135,090** | **$ 134,117** | **$ 131,000** | **$ 129,647** | **$ 158,621** | **$ 193,418** | **$ 182,075** | **$ 171,568** |
| Charges for Sewer Treatment | 41,574 | 45,196 | 45,559 | 51,526 | 40,080 | 35,989 | 52,333 | 50,566 | 56,107 | 50,284 |
| Wholesale Water Revenues (2) | 5,953 | 5,939 | 6,739 | 7,770 | 2,522 | 9,546 | 4,310 | - | - | - |
| Other Revenues | 4,133 | 3,140 | 3,784 | 4,190 | 3,977 | 5,854 | 6,230 | 14,459 | 4,450 | 6,078 |
| Refunds to Customers | (354) | (743) | (246) | (269) | (259) | - | - | - | - | - |
| **TOTAL REVENUES** | **$ 199,885** | **$ 195,706** | **$ 190,926** | **$ 197,334** | **$ 177,320** | **$ 181,036** | **$ 221,494** | **$ 258,443** | **$ 242,632** | **$ 227,930** |

(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.

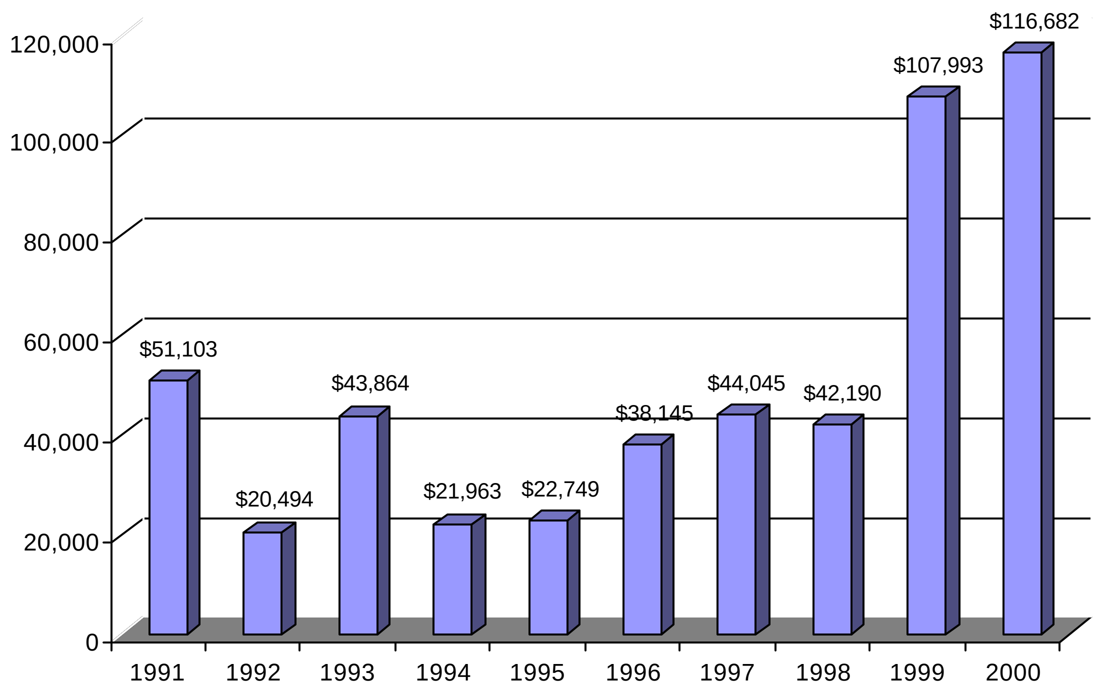
Source: FY 1991 - 2000 Audited Statements of Revenue, Expenses and Changes in Retained

## EXHIBIT 2: OPERATING EXPENSES BY CATEGORY FY 1991 - 2000 ($000)

| EXPENSE CATEGORY | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Personnel | $ 48,857 | $ 48,264 | $ 46,530 | $ 53,473 | $ 49,669 | $ 50,758 | $ 51,197 | $ 53,956 | $ 60,674 | $ 63,078 |
| Contractual | 47,975 | 43,404 | 40,402 | 40,693 | 43,808 | 40,539 | 55,904 | 66,340 | 56,017 | 63,729 |
| Supplies | 15,289 | 19,902 | 16,516 | 21,899 | 15,855 | 14,686 | 14,057 | 17,722 | 11,431 | 13,129 |
| Occupancy | 12,455 | 13,632 | 20,623 | 15,839 | 15,337 | 15,392 | 16,668 | 21,173 | 21,225 | 20,091 |
| Depreciation & Amortization | 16,999 | 17,177 | 14,107 | 17,528 | 18,830 | 18,660 | 25,695 | 26,278 | 28,227 | 30,329 |
| Water Purchases | 15,197 | 16,164 | 17,348 | 15,807 | 18,077 | 16,760 | 21,620 | 23,313 | 18,922 | 16,358 |
| Bad Debt | 7,139 | 1,000 | 1,395 | - | - | - | - | - | - | - |
| Miscellaneous | - | 468 | 171 | 243 | 244 | 387 | 1,407 | - | - | - |
| **TOTAL OPERATING EXPENSES** | **$ 163,911** | **$ 160,011** | **$ 157,092** | **$ 165,482** | **$ 161,820** | **$ 157,182** | **$ 186,548** | **$ 208,782** | **$ 196,496** | **$ 206,714** |

Source: FY 1991 - 2000 Audited Statements of Revenue, Expenses and Changes in Retained Earnings

**EXHIBIT 3: CAPITAL DISBURSEMENTS**
**FY 1991 - 2000**
**($000)**




Note: These disbursements include the Authority's share of Washington Aqueduct's capital disbursements, which in FY 1997 – 2000 have been financed primarily by U.S. Treasury notes.

Source: FY 1991 – 2000 Audited Statements of Cash Flows

## EXHIBIT 4: DEBT SERVICE COVERAGE (1)
## FY 2000
## ($000)

| | | |
|---|---|---|
| **Retail Revenues** | $ | 181,286 |
| **Wholesale Revenues** | | 39,401 |
| **Total Operating Revenue** | | 220,687 |
| **Non-Operating Revenue** | | 14,856 |
| **TOTAL REVENUE** | | 235,543 |
| Personnel Services | $ | 59,929 |
| Contractual Services | | 48,313 |
| Water Purchases | | 18,068 |
| Supplies | | 11,757 |
| Occupancy | | 18,852 |
| Operating Equipment | | 592 |
| **OPERATING EXPENSES** | | 157,511 |
| **NET REVENUES** | $ | 78,032 |
| | | |
| **Senior Debt Service** | $ | 15,132 |
| **Subordinate Debt Service (2)** | $ | 15,900 |
| **Net Revenues Available for Senior Debt Service (3)** | $ | 62,132 |
| **SENIOR DEBT SERVICE COVERAGE (4)** | | 4.11x |
| **Net Revenues Available for Subordinate Debt Service (5)** | $ | 59,874 |
| **SUBORDINATE DEBT SERVICE COVERAGE** | | 3.77x |
| **COMBINED DEBT SERVICE COVERAGE** | | 2.51x |

(1) Prepared in accordance with the Authority's Master Trust Indenture, which corresponds closely to cash basis accounting. The Authority's rate covenant contains two independent requirements: 1) Total revenues must be sufficient to pay actual operating expenses, senior and subordinate debt service, payments in lieu of taxes, and any required deposits to any reserve funds; and 2) Net revenues must be sufficient to pay the sum of (a) 120 percent of senior debt service and (b) 100 percent of subordinate debt service.

(2) Excluding PILOT (approximately $9 million in) FY 2000.

(3) Net revenues less subordinate debt service.

(4) While the Authority's indenture requires senior debt service coverage of 120 percent, the Authority's Board has adopted financial policies that require coverage of 140 percent.

(5) Net revenues less senior debt service and senior debt service coverage requirement of 120%.

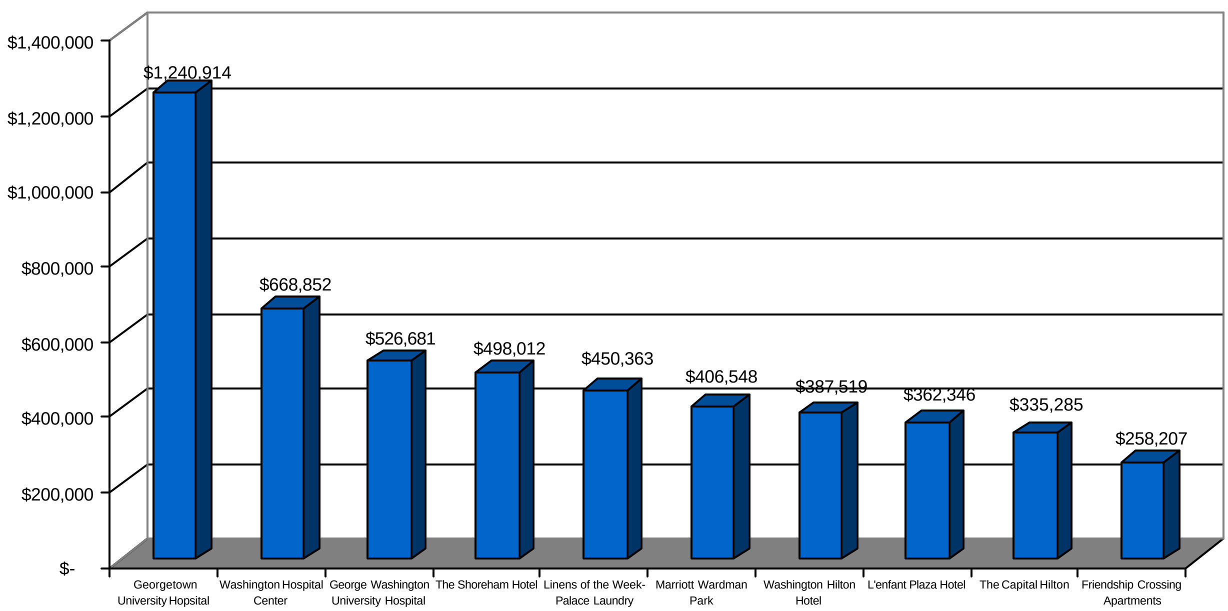
Source: Authority Department of Finance and Budget

## EXHIBIT 5: NUMBER AND TYPE OF CUSTOMER ACCOUNTS AS OF SEPTEMBER 30, 2000

| TYPE OF ACCOUNT | | NUMBER OF ACCOUNTS |
|---|---|---|
| **Residential** | | 103,294 |
| **Commercial** | | 20,877 |
| **Governmental** | | |
| Federal | 592 | |
| District of Columbia | 893 | |
| Howard University/Soldiers' Home | 48 | |
| DC Housing Authority | 2,142 | |
| **Total Governmental** | | 3,675 |
| **WASA** | | 29 |
| **Wholesale** | | 7 |
| **TOTAL NUMBER OF ACCOUNTS** | | 127,882 |

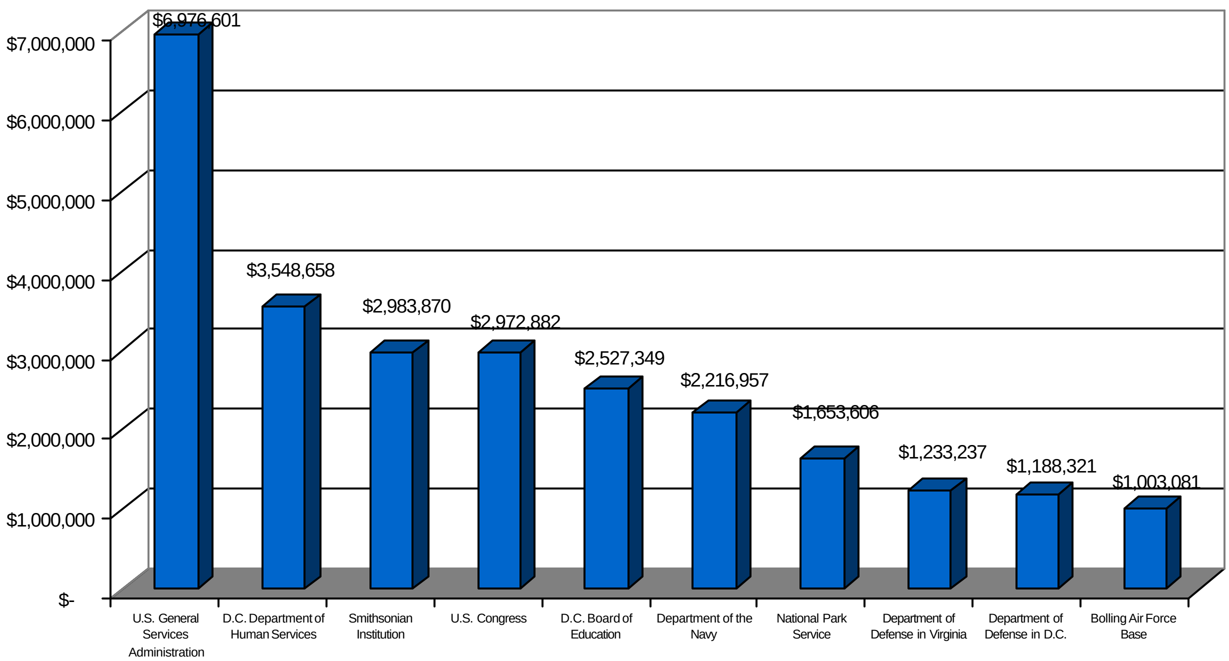
Source: Authority Department of Customer Service

## EXHIBIT 6: LARGEST COMMERCIAL CUSTOMER ACCOUNTS FY 2000




Source: Authority Department of Customer Service

## EXHIBIT 7: LARGEST RETAIL CUSTOMER ACCOUNTS FY 2000



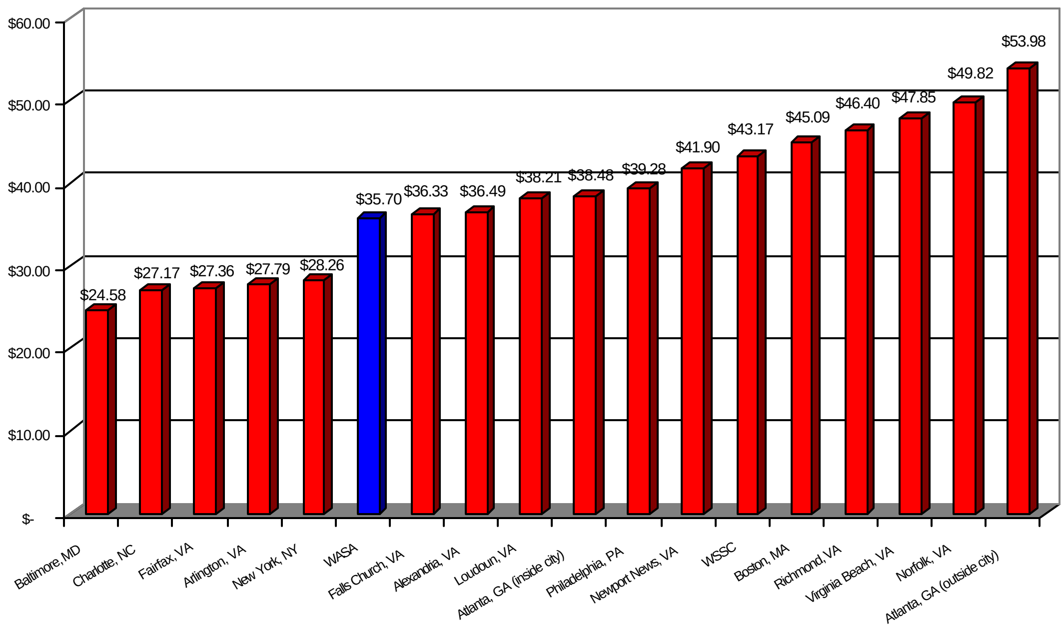

Source: Authority Department of Customer Service

## EXHIBIT 8: HISTORY OF RETAIL WATER & SEWER RATES PER Ccf FY 1980 – 2000

| FISCAL YEAR | WATER | SEWER | TOTAL |
|---|---|---|---|
| 1980 | $ 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 | 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 |

Source: Authority Department of Finance & Budget

## EXHIBIT 9: RESIDENTIAL WATER & WASTEWATER BILL COMPARISONS (MONTHLY BASIS) AS OF SEPTEMBER 2000 (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, 2000

| TYPE OF COVERAGE | COMPANY | POLICY PERIOD | COVERAGE LIMITS |
|---|---|---|---|
| Commercial General Liability | Self-Funded | Present | $1,000,000 each occurrence |
| Excess General Liability / Automotive Liability | AEGIS Insurance | April 7, 2000– April 7, 2001 | $35,000,000 in excess of $1,000,000 |
| Excess General Liability | Energy Insurance Mutual | April 7, 2000 – April 7, 2001 | $65,000,000 in excess of $35,000,000 |
| Blanket Property | Allendale Mutual Insurance Company | April 7, 2000 – April 7, 2001 | $1,420,105,801 Blanket Building and Contents |
| | | | $500,000 Deductible Any Loss |
| | | | $25,000,000 Earth Movement |
| | | | $10,000,000 Flood (Blue Plains) |
| | | | $25,000,000 Extra Expense |
| | | | $25,000,000 Transit Any One Shipment |
| | | | Increased Cost of Construction |
| Crime | | | $5,000,000 Blanket Employee Dishonesty |
| | | | $100,000 Deductible Per Occurrence |
| Equipment | | | $10,000,000 Per Occurrence |
| | | | $10,000 Deductible Per Occurrence |
| Boats | | | $500,000 Per Occurrence |
| | | | $10,000 Deductible Per Occurrence |
| | | | $25,000 Deductible for Skimmer Boats |
| Commercial Automobile | Liberty Mutual Insurance | April 7, 2000 – April 7, 2001 | $1,000,000 in excess of Self-Funded liability any one accident of $500,000 |
| | | | $5,000 Comprehensive and Collision Deductible |
| Worker's Compensation | Liberty Mutual Group | April 7, 2000 – April 7, 2001 | Statutory Employer's Liability |
| | | | $500,000 Each Accident |
| | | | $500,000 Policy Limit |
| | | | $500,000 Disease Each Employee |
| Public Official Liability | AEGIS Insurance Organization | April 7, 2000 – April 7, 2001 | $10,000,000 Each Loss / Aggregate |
| | | | $50,000 Retention |

## EXHIBIT 11: WATER DEMAND
## FY 1991 - 2000

| FISCAL YEAR | ANNUAL DELIVERIES TO SYSTEM (MG) | AVERAGE DAY (MG) | MAXIMUM MONTH AVERAGE (MGD) | MAXIMUM DAY (MGD) |
|---|---|---|---|---|
| 1991 | 54,447 | 149.2 | 177.0 | 203.8 |
| 1992 | 49,588 | 135.5 | 157.1 | 200.6 |
| 1993 | 53,261 | 145.9 | 201.9 | 240.0 |
| 1994 | 51,920 | 142.2 | 162.5 | 230.1 |
| 1995 | 51,488 | 141.1 | 166.6 | 195.7 |
| 1996 | 51,553 | 143.9 | 161.3 | 192.4 |
| 1997 | 49,172 | 136.9 | 158.3 | 207.2 |
| 1998 | 47,671 | 133.3 | 159.2 | 178.7 |
| 1999 | 50,141 | 139.5 | 167.0 | 201.3 |
| 2000 | 48,051 | 133.8 | 153.0 | 209.7 |

Source: Authority Department of Water Services and Washington Aqueduct

## EXHIBIT 12: WATER DELIVERED (PUMPED) AND BILLED (SOLD) IN Ccf
## FY 1996 – 2000

| FISCAL YEAR | TREATED WATER DELIVERED | WATER BILLED | SOLD/PUMPED RATIO |
|---|---|---|---|
| 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% |

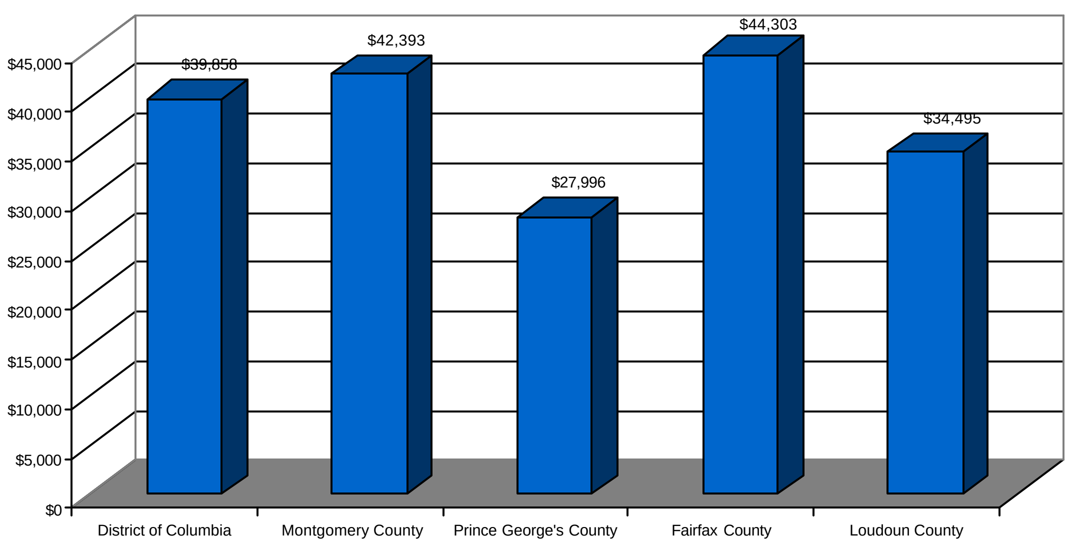
Source: Ccf Delivered, Washington Aqueduct; Ccf Billed, Authority Department of Customer Service

## EXHIBIT 13: POPULATION OF SERVICE AREA JURISDICTIONS (1998) (D.C. POPULATION IS FOR 1999)

| JURISDICTION | POPULATION |
|---|---|
| District of Columbia | 519,000 |
| Montgomery County | 839,158 |
| Prince George's County | 776,907 |
| Fairfax County | 958,432 |
| Loudoun County | 144,514 |

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

## EXHIBIT 14: PER CAPITA PERSONAL INCOME (1998) (D.C. INCOME IS FOR 1999)




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

## EXHIBIT 15: UNEMPLOYMENT RATES (1999)

| JURISDICTIONS | UNEMPLOYMENT RATE |
|---|---|
| District of Columbia | 6.3% |
| Montgomery County | 1.8% |
| Prince George's County | 3.5% |
| Fairfax County | 1.6% |
| Loudoun County | 1.2% |

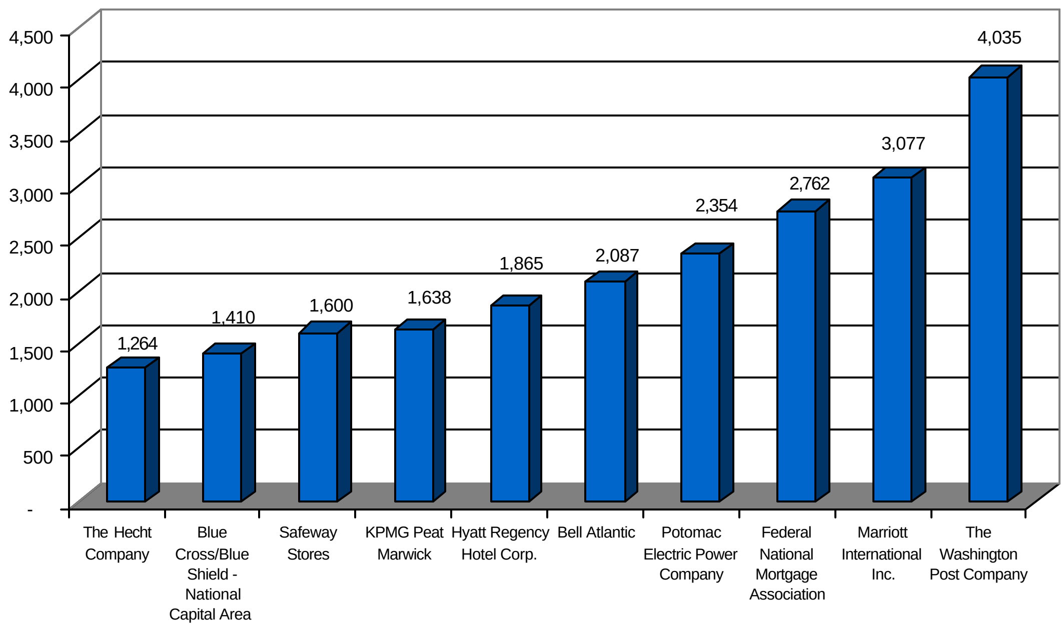
Source: U.S. Department of Labor, Bureau of Labor Statistics

## EXHIBIT 16: EMPLOYMENT BY SECTOR (1998)

| | DISTRICT OF COLUMBIA | MONTGOMERY COUNTY | PRINCE GEORGE'S COUNTY | FAIRFAX COUNTY | LOUDOUN COUNTY |
|---|---|---|---|---|---|
| Agriculture, Forestry, Mining, etc. | 1.50% | 1.12% | 0.77% | 1.08% | 2.79% |
| Construction | 1.51% | 5.34% | 8.27% | 5.38% | 10.02% |
| Manufacturing | 1.94% | 3.61% | 3.30% | 3.05% | 5.22% |
| Transportation & Public Utilities | 2.67% | 2.99% | 5.37% | 5.18% | 13.66% |
| Wholesale & Retail Trade | 7.20% | 17.15% | 23.60% | 18.60% | 18.80% |
| Finance, Insurance & Real Estate | 5.92% | 10.73% | 6.11% | 9.12% | 5.77% |
| Services | 44.68% | 43.93% | 30.66% | 44.19% | 29.85% |
| Government (Federal, State & Local) | 31.35% | 13.86% | 19.53% | 12.37% | 13.22% |
| Military | 3.24% | 1.28% | 2.39% | 1.04% | 0.68% |
| TOTAL | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |

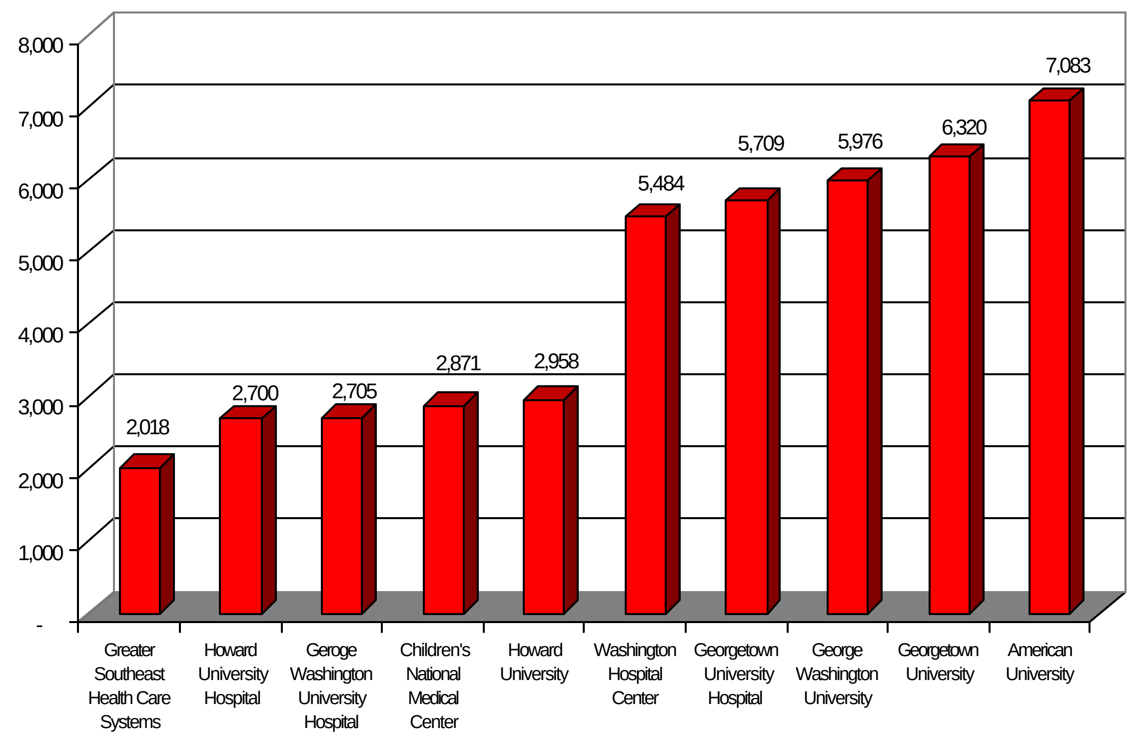
Source: U.S. Department of Commerce, Bureau of Economic Analysis

**EXHIBIT 17: TOP TEN FOR PROFIT EMPLOYERS (1999)**
**NUMBER OF EMPLOYEES**
**DISTRICT OF COLUMBIA**




Source: D.C. Office of Planning

**EXHIBIT 18: TOP TEN NON PROFIT EMPLOYERS (1999)**
**NUMBER OF EMPLOYEES**
**DISTRICT OF COLUMBIA**




Source: D.C. Office of Planning

## EXHIBIT 19: SUMMARY OF MAJOR PERMITS & ADMINISTRATIVE ORDERS FY 2000

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

## EXHIBIT 20: MISCELLANEOUS STATISTICS ABOUT AUTHORITY OPERATIONS

**Utilities & Supplies Per Day**

| | |
|---|---|
| Electrical Power | 690,520 KWH at Blue Plains |
| Natural Gas | 20,000 CF |
| Chlorine | 9.0 tons |
| Sulfur Dioxide | 2.1 tons |
| Polymer Solution | 32,800 lbs. |
| City Water | 700,000 gallons |
| Lime | 55 tons |
| Methanol | 18,000 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 20: MISCELLANEOUS STATISTICS ABOUT AUTHORITY OPERATIONS (Continues)**

## Wastewater Plant Permit Limitations

| PARAMETER | MONTHLY | WEEKLY |
|---|---|---|
| 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 | 6.0 s.u. | |
| Maximum | 8.5 s.u. | |
| Total Chlorine | Non detectable at any time | |
| Fecal Coliform | 200/100 ml | 400/100 ml |
| Chesapeake Bay Voluntary Agreement | | |
| Total Nitrogen (Annual Average) | 7.52 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 clarifers | 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 20: 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 $CaC0_3$ |

**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 s.u. |
| Average SRT | 21 days |
| Average SVI | 80 – 110 ml/g |
| Effluent alkalinity | 110 mg/L as $CaC0_3$ |
| 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 minutes |

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