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Letter Report: Auditor's Concerns Regarding Matters that May Adversely Affect the Financial Operations of the District of Columbia Water and Sewer Authority

May 1, 2007

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The Honorable Vincent C. Gray, Chairman
and Members of the Council of the District of Columbia
The John A. Wilson Building
1350 Pennsylvania Ave., N.W., Suite 504
Washington, D.C. 20004

Letter Report: Auditor's Concerns Regarding Matters that May Adversely Affect the Financial Operations of the District of Columbia Water and Sewer Authority

Dear Chairman Gray and Members of the Council of the District of Columbia:

Pursuant to D.C. Code, Section 34-2202.09(h),[1] the District of Columbia Auditor (Auditor) certified the sufficiency of the Water and Sewer Authority's (WASA) fiscal year (FY) 2007 revenue estimate of $305,010,000 in support of a proposed issuance of $50,000,000 in commercial paper[2] and $300,000,000 in Public Utility Subordinated Lien Revenue Bonds (Series 2007).[3] As part of the sufficiency analysis, the Auditor identified and assessed potential risks that could affect the stability and success of WASA's future operations. The purpose of this letter report is to bring to the Council's attention the Auditor's concerns regarding matters that may, in the future, adversely affect WASA's financial operations.

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[1]*See* D.C. Code, Section 34-2202.09(h) which states: "During each fiscal year in which debt service on the proposed bonds and outstanding revenue bonds issued by the Authority, and the transfer provided in Section 34-2202.07(f) becomes due and payable, the Authority may not issue bonds, notes, or other obligations or borrow money unless the Authority first certifies, to the reasonable satisfaction of the District of Columbia Auditor, that the revenues of the Authority are sufficient to pay its costs, the principal of and interest on and other requirements pertaining to the proposed bonds and outstanding revenue bonds issued by the Authority, and amounts equal to the debt service payments on District general obligation bonds issued by the District prior to October 1, 1996, which financed Department of Public Works, Water and Sewer Utility Administration capital projects, as such bonds and transfers become due and payable. The Authority's certification shall be supported by expert study and analysis."

[2]*See* Auditor's Report entitled "Letter Report: Sufficiency Review of the Water and Sewer Authority's Fiscal Year 2007 Revenue Estimate in Support of $50,000,000 in Commercial Paper Notes," dated April 3, 2007.

[3]*See* Auditor's Report entitled "Letter Report: Sufficiency Review of the Water and Sewer Authority's Fiscal Year 2007 Revenue Estimate in Support of $300,000,000 in Public Utility Subordinated Lien Revenue Bonds (Series 2007)," dated April 20, 2007.

The concerns expressed in this letter report are based on discussions with WASA staff and representatives of PB Consult;[4] the Auditor's review of WASA's Comprehensive Annual Financial Reports (CAFRs) for FY 2004 through FY 2006 and WASA's FY 2007 internal unaudited financial statements as of January 31, 2007; review of WASA's Revised FY 2007 and Proposed FY 2008 Operating Budgets and Ten-Year Capital Improvement Plan; detailed analyses of WASA's historical and projected revenues and expenses; and the results of other procedures performed by the Auditor as deemed necessary and appropriate under the circumstances.

Background in Brief

The Water and Sewer Authority (WASA) was established pursuant to D.C. Law 11-111, effective April 18, 1996. Prior to WASA's establishment, the Water and Sewer Utility Administration (WASUA), which was under the organizational umbrella of the District's Department of Public Works (DPW), managed the water and sewer utility operations. In accordance with D.C. Law 11-111, WASUA was abolished and its functions were transferred from DPW to WASA. D.C. Law 11-111 was amended by D.C. Law 11-184 to clarify WASA's relationship with the District government and provided for the Auditor's analysis of revenues certified by WASA.

WASA's Sources of Funding/Revenue

WASA receives its funding from operating revenue and interest income on invested funds. Between FY 2004 and FY 2006, WASA's total operating revenues increased by $29,199,000, or 11%. The most significant increase was in user charges paid by WASA's residential, commercial, and multi-family customers, which increased from $159,165,000 in FY 2004 to $174,159,000 in FY 2006. This increase was due to rate increases of 5.0 % and 5.5% in FY 2005 and FY 2006, respectively. Appendix I presents a history of WASA's retail water and sewer rates.

Over the three-year period, WASA's non-operating revenue (interest income) increased by $12,619,000. More specifically, interest income increased from $3,472,000 in FY 2004 to $16,091,000 in FY 2006. This increase is due to higher interest rates resulting in increased investment balances.

WASA's Expenses and Other Uses of Funding

Between FY 2004 and FY 2006, WASA's total operating expenses increased by $13,969,000, or 6.1%. The most significant increases in operating expenses were in the areas of: chemicals, supplies, and small equipment, which increased from $17,384,000 in FY 2004 to $23,482,000 in FY

[4] PB Consult was engaged by WASA to complete the expert study and analysis of WASA's proposed FY 2007 and FY 2008 revenues, required by D.C. Code, Section 34-2202.09(h).

2006; and utilities and rent, which increased from $22,217,000 in FY 2004 to $31,151,000 in FY 2006. Over the same three-year period, WASA's non-operating expenses (payment in lieu of taxes and right of way fee, and interest and fiscal charges) decreased $4,034,000, or 9.6% from $41,838,000 in FY 2004 to $37,804,000 in FY 2006.

WASA's revenues exceeded expenses by $28,735,000 and $54,090,000 in FY 2004 and FY 2006, respectively. Appendix II presents WASA's annual revenues and expenses from FY 2004 through FY 2006.

AUDITOR'S CONCERNS REGARDING WASA'S FUTURE FINANCIAL OPERATIONS

WASA's extended business relationship with PB Consult may compromise this firm's objectivity in assessing WASA's operations and performance. Prior to issuing bonds or other debt instruments, WASA must certify to the reasonable satisfaction of the Auditor that its revenues are sufficient to meet its costs, debt service requirements, and other obligations.[5] WASA's certification is to be supported by an expert analysis prior to the Auditor's review and certification.[6] WASA engaged PB Consult to meet this legally mandated expert analysis requirement.[7]

In addition, since FY 2001, PB Consult has provided other types of services to WASA, including bond feasibility studies, a retail cost of service and alternative rate structure study, and reviews of proposed annual revenues. WASA recently engaged PB Consult to complete a study of a proposed Contribution in Aid of Construction initiative.[8]

While there are benefits to working with a consultant that is familiar with WASA's operations, the Auditor is concerned that WASA's extended business relationship with PB Consult will compromise PB Consult's ability to objectively review and analyze WASA's operations and planned initiatives. PB Consult has provided services to WASA for approximately seven years.

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[5] *See* D.C. Code, Section 34-2202.09(h).

[6] Ibid.

[7] PB Consult is a subsidiary of Parsons Brinckerhoff, a planning, engineering, and program and construction management organization. PB Consult was established in November 2000 and provides advisory and management consulting services in the areas of rate analysis, management, investment, and development. In addition, PB Consult helps government agencies, private firms, and financial institutions determine how best to develop infrastructure assets, to cost-effectively deliver services, and to compete more efficiently.

[8] According to WASA personnel and PB Consult representatives, Contribution in Aid of Construction, should be thought of as an "impact fee." If this initiative is implemented, WASA will charge developers a fee when construction projects require expansion of the existing infrastructure (pipes and water lines). Collection of Contributions in Aid of Construction is not uncommon in the utilities industry.

Undoubtedly, WASA's managers rely heavily on the opinions of this firm in making critical business decisions and PB Consult derives significant income from the services it provides to WASA. PB Consult's analyses and opinions must be unbiased, objective, and soundly based. As with auditors, consultants and specialists should maintain independence so that their opinions, findings, conclusions, and recommendations are viewed as impartial, independent, and thus, reliable.

To maximize objectivity, WASA officials should limit the number of years a consultant may provide the legally mandated expert analysis. Thus, WASA should, on a competitive basis, periodically award a new contract for these services. It may be feasible to rotate to a new team of consultants every three to five years to maintain impartiality and freshness of ideas.

Annual rate increases are driven by anticipated increases in WASA's expanding capital improvement plan. Between 1996 and 2006, WASA's retail water and sewer rates increased by 68.8%.[9] In 1996, the water and sewer rate was $2.868 per one hundred cubic feet (1Ccf) consumption. By 2006, the rate had increased to $4.84. Table I presents WASA's water and sewer rate increases between 1996 and 2006.

Table I
Retail Water and Sewer Rates (FY 1996 to FY 2006)

Fiscal Year	Water and Sewer Rate	Rate Increase (%) Increase/(Decrease)	Average Monthly Retail Customer Bill	Retail Customer Bill Increase (%)
1996	$2.868		$23.890	
1997	$4.090	42.61%	$34.070	42.61%
1998	$4.090	0.00%	$34.070	0.00%
1999	$4.090	0.00%	$34.070	0.00%
2000	$4.286	4.79%	$35.702	4.79%
2001	$4.496	4.90%	$37.452	4.90%
2002	$4.496	0.00%	$37.452	0.00%
2003	$4.260	(5.25%)	$40.490	8.11%
2004	$4.370	2.58%	$41.410	2.27%
2005	$4.590	5.03%	$43.240	4.42%
2006	$4.840	5.45%	$45.830	5.99%

Source: WASA's Comprehensive Annual Financial Report for Fiscal Year Ended September 30, 2006, Exhibit 9, page 83.

[9]Retail water and sewer rates include those charged to WASA's residential, commercial, and multi-family customers in addition to the federal government, District government, and the D.C. Housing Authority.

According to WASA's rate setting policy, rate increases are to be predictable and gradual, to minimize the financial impact to WASA customers.[10] The Auditor found that between 1996 and 2006, the average monthly customer bill increased by $21.94, or 91.8%. The Auditor further found that WASA officials implemented rate increases to help fund costs associated with WASA's expanding capital improvement program. Currently, some of the more significant capital projects include:

- Combined Sewer Overflow Long Term Control Plan, to be completed over a 20-year period with an estimated cost of $2.2 billion;

- Digester Project/Biosolids Management Program, with an estimated cost of $600 million as of September 30, 2006[11]; and

- Lead Service Line Replacement Program, initiated in FY 2004, to be completed by FY 2010, with a lifetime budget of $438 million.

The primary source of funding for WASA's capital improvements has been debt, in the form of bonds and notes. WASA has historically increased rates to fund increasing debt service costs. The Auditor is concerned that as WASA expands its capital improvements, debt service costs will increase, and WASA will continue to increase water and sewer rates. At the start of FY 2007, a 5% retail water and sewer rate increase became effective. In addition, WASA plans to increase these rates as presented in Table II over the next five fiscal years:

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[10] *See* WASA's Comprehensive Annual Financial Report, Fiscal Year: October 1, 1999 to September 30, 2000, pp. 11 - 12. According to this policy, the Authority [WASA] 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. WASA will apply this rate-setting philosophy in a practical and prudent manner based on the following tenets: (a) WASA must achieve a positive net income and cash flow each year; (b) current rates must cover current costs and provide cash flow adequate to meet all bond covenants; (c) rates and fees must be based on the actual cost to deliver each service; (d) 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;" and (e) a rate stabilization fund was established to ensure gradual and predictable rate increases.

[11] WASA's Board is reevaluating the Digester Project and has postponed construction due to anticipated increases in project costs. WASA officials will monitor market conditions and reassess the biosolids program over the next three years.

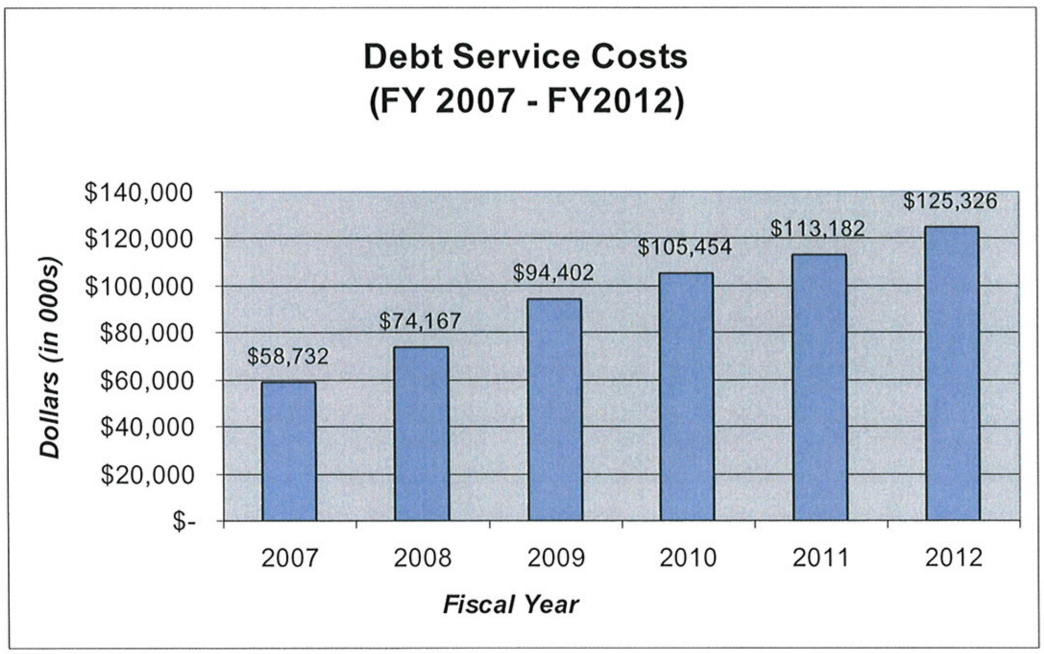
Table II
Planned Rate Increases

Fiscal Year	Planned Rate Increase
2008	7.5%
2009	8.5%
2010	9.5%
2011	9.5%
2012	9.0%

Source: WASA's Ten Year Financial Plan (Statement of Cash Flows-2006 to 2015)

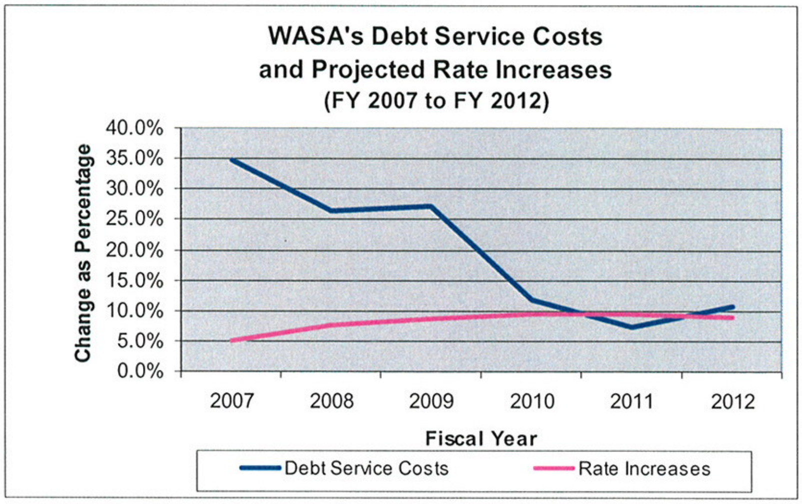
At some point in the future, increases in debt service costs may outpace the rate at which WASA can reasonably increase retail water and sewer rates. Chart I presents the anticipated debt service costs for FY 2007 to FY 2012. Graph I presents WASA's proposed retail water and sewer rate increases and the anticipated changes in debt service costs for FY 2007 through FY 2012.

Chart I



Source: WASA's Ten Year Financial Plan (Statement of Cash Flows-2006 to 2015)

Graph I



Source: WASA's Revised FY 2007 and Proposed FY 2008 Operating Budgets, Section V-FY 2006 - FY 2015 Capital Program, page V-11.

WASA officials must carefully consider the ultimate financial impact increased debt service costs will have on its customers. To the extent deemed necessary, WASA officials should investigate and pursue other alternatives for funding its capital improvement program, such as direct federal financial assistance.

WASA is vulnerable to changes in regulatory requirements that may require significant capital outlays and adversely impact WASA's ability to operate efficiently within budgetary constraints. The U.S. Environmental Protection Agency (EPA) regulates WASA's water and sewer treatment activities. Therefore, WASA is subject to unanticipated regulatory changes that may require funding outlays not contemplated in WASA's annual budget. For instance, in December 2006, the EPA proposed changes to WASA's National Pollutant Discharge Elimination System (NPDES) permit whereby WASA's nitrogen discharge limit would be modified.[12] It is anticipated that this modification will require a capital investment of $860 million to $1.6 billion, which is not included in WASA's 10-year capital improvement plan. The Auditor recognizes that it is difficult to predict the timing of regulatory changes and estimate their potential financial impact. For that reason, the Auditor is concerned that such regulatory changes could adversely impact WASA's future financial stability.

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[12]*See* PB Consult's Review of Projected FY 2007 and FY 2008 Revenues for D.C. Water and Sewer Authority, dated February 15, 2007, page 13. The EPA plans to modify the January 2003 permit issued to WASA that addresses the discharge limits [amounts of certain chemicals which may be released] on treated municipal wastewater from WASA's Blue Plains Wastewater Treatment Plant and treated and untreated stormwater through the District's combined sewer system. WASA is evaluating options to fund expenses related to this modification within WASA's capital and operating budgets, through federal government assistance and customer rate increases.

WASA personnel must communicate regularly with EPA representatives and stay abreast of industry trends to gauge potential regulatory changes that may have a significant fiscal impact. This will allow WASA to more proactively develop contingency plans to address possible regulatory changes and reduce the risk of or plan for significant, unanticipated expenses.

Current legislation only requires the D.C. Auditor to certify WASA's revenue sufficiency in the year that WASA issues bonds or incurs other debt obligations and does not contemplate the need for review in the outyears.

D.C. Code Section 34-2202.09(h) states:

> During each fiscal year in which debt service on the proposed bonds and outstanding revenue bonds issued by the Authority, and the transfer provided in Section 34-2202.07(f) becomes due and payable, the Authority may not issue bonds, notes, or other obligations or borrow money unless the Authority first certifies, to the reasonable satisfaction of the District of Columbia Auditor, that the revenues of the Authority are sufficient to pay its costs, the principal of and interest on and other requirements pertaining to the proposed bonds and outstanding revenue bonds issued by the Authority, and amounts equal to the debt service payments on District general obligation bonds issued by the District prior to October 1, 1996, which financed Department of Public Works, Water and Sewer Utility Administration capital projects, as such bonds and transfers become due and payable. The Authority's certification shall be supported by expert study and analysis.

Thus, as legally mandated, the Auditor is to certify the sufficiency of WASA's revenues in the fiscal year that WASA proposes a bond issuance or plans to execute other types of debt instruments. The Auditor is concerned that current legislation does not provide for the Auditor's subsequent review and analysis of the financial impact of bond issuances and other debt in future years. WASA's financial picture may be sufficiently stable in the year of a proposed bond issuance; however, circumstances such as regulatory requirements may change significantly in future periods. Although WASA's financial statements are audited each year by external independent auditors, these audits occur after fiscal year-end. It would be beneficial to both WASA and District officials to have the Auditor conduct mid-year assessments of WASA's revenues and expenses, prior to WASA's annual financial statement audits. WASA and District officials would be alerted to potential financial problems before year-end, with ample time to take the necessary corrective actions.

CONCLUSION

As previously reported by the Auditor,[13] WASA's projected FY 2007 revenues should be sufficient to meet its costs, debt service requirements, and other obligations in that year. Nonetheless, WASA officials must put into place the necessary controls and procedures to ensure WASA's continued successful financial operations in future years.

WASA officials should periodically engage a new team of consultants to complete the legally mandated expert study and analysis in order to maintain maximum independence, objectivity, and impartiality. Further, WASA officials should closely monitor current and planned capital projects, the funding of capital projects, and the financial impact of any associated debt service costs on retail water and sewer rates. Moreover, WASA personnel must stay abreast of planned or potential regulatory changes by communicating regularly with EPA, reviewing industry information, and maintaining partnerships with water and wastewater treatment facilities in other jurisdictions. Thus, WASA will be better positioned to proactively develop contingency plans to address potential regulatory changes. Finally, a legislative change may be needed to provide for the Auditor's periodic review of WASA's financial operations and its ability to pay its costs, debt service requirements, and other obligations in outlying years.

Should you have any questions or need additional information regarding this matter, please do not hesitate to contact me at (202) 727-3600.

Respectfully submitted,

Deborah K. Nichols
District of Columbia Auditor

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[13] *See* Auditor's Report entitled "Letter Report: Sufficiency Review of the Water and Sewer Authority's Fiscal Year 2007 Revenue Estimate in Support of $50,000,000 in Commercial Paper Notes," dated April 3, 2007. *See also* Auditor's Report entitled "Letter Report: Sufficiency Review of the Water and Sewer Authority's Fiscal Year 2007 Revenue Estimate in Support of $300,000,000 in Public Utility Subordinated Lien Revenue Bonds (Series 2007)," dated April 20, 2007.

APPENDICES

HISTORY OF RETAIL WATER & SEWER RATES
PER Ccf
FY 1980 – 2006

FISCAL YEARS	METERING FEE	DISTRICT PUBLIC SPACE OCCUPANCY FEE - PILOT	WATER CONSUMPTION RATE	SEWER CONSUMPTION RATE	COMBINED CONSUMPTION RATE	AVERAGE MONTHLY BILL [2]
1980-1983	$ -	$ -	$ 0.460	$ 0.677	$ 1.137	$ 9.471
1984	-	-	0.537	0.998	1.535	$ 12.787
1985	-	-	0.698	1.297	1.995	$ 16.618
1986	-	-	0.873	1.621	2.494	$ 20.775
1987-1996	-	-	1.004	1.864	2.868	$ 23.890
1997	-	-	1.380	2.710	4.090	$ 34.070
1998	-	-	1.380	2.710	4.090	$ 34.070
1999	-	-	1.380	2.710	4.090	$ 34.070
2000	-	-	1.576	2.710	4.286	$ 35.702
2001-2002	-	-	1.786	2.710	4.496	$ 37.452
2003 (1)	2.010	0.360	1.690	2.570	4.260	$ 40.490
2004 (1)	2.010	0.360	1.740	2.630	4.370	$ 41.410
2005 (1)	2.010	0.360	1.830	2.760	4.590	$ 43.240
2006 (1)	2.010	0.420	1.930	2.910	4.840	$ 45.830

[1] All rates are for one hundred cubic feet (1 Ccf) consumption with the exception of the flat metering fee, which became effective on October 1, 2002.
[2] Average consumption is 8.33 Ccf per month.

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

Note: The Auditor extracted this information from WASA's FY 2006 Comprehensive Annual Financial Report, Fiscal Year Ended September 30, 2006, Exhibit 9, page 83.

District of Columbia Water and Sewer Authority
Statements of Revenues, Expenses, and Changes in Net Assets
Years Ended September 30, 2004, 2005, and 2006
(In Thousands)

	2004	2005	2006
Operating revenues:			
Water and wastewater user charges:			
Residential, commercial and multi-family customers	$ 159,165	$ 166,045	$ 174,159
Federal government	26,444	24,770	31,100
District government and D.C. Housing Authority	15,464	15,436	16,463
Charges for wholesale wastewater treatment	60,834	62,126	67,966
Other	2,427	4,366	3,845
Total operating revenues	264,334	272,743	293,533
Operating expenses:			
Personnel services	62,449	64,038	66,942
Contractual services	61,491	54,156	49,970
Chemicals, supplies, and small equipment	17,384	22,062	23,482
Utilities and rent	22,217	25,562	31,151
Depreciation and amortization	40,500	41,069	44,149
Water purchases	20,692	19,625	22,745
Other	3,955	3,679	4,218
Total operating expenses	228,688	230,191	242,657
Operating income	35,646	42,552	50,876
Nonoperating revenues (expenses):			
Interest income	3,472	12,612	16,091
Payments in lieu of taxes and right of way fee	(15,778)	(16,307)	(16,923)
Interest and fiscal charges	(26,060)	(25,415)	(20,881)
Total nonoperating revenues (expenses)	(38,366)	(29,110)	(21,713)
Income before contributions and transfers	(2,720)	13,442	29,163
Federal grants and contributions	31,455	34,578	24,927
Change in net assets	28,735	48,020	54,090
Total net assets, beginning of year	803,973	832,708	880,728
Total net assets, ending of year	$ 832,708	$ 880,728	$ 934,818

Source: WASA's Comprehensive Annual Financial Reports for FY 2004, FY 2005, and FY 2006