

MASSACHUSETTS WATER RESOURCES AUTHORITY



Proposed Fiscal Year 2006 CURRENT EXPENSE BUDGET

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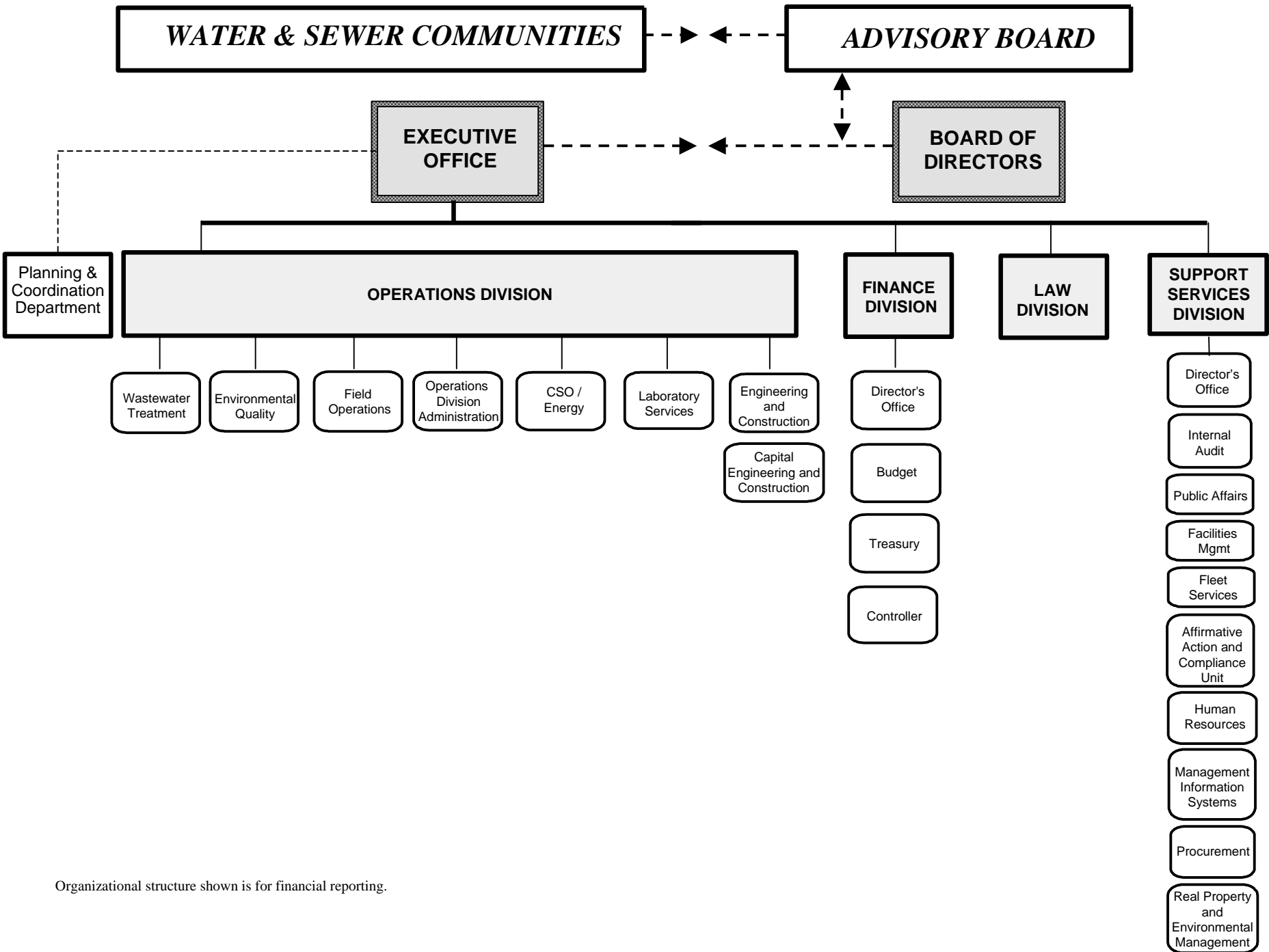
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together with the participation of MWRA staff.



Organizational structure shown is for financial reporting.



MASSACHUSETTS WATER RESOURCES AUTHORITY

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Frederick A. Laskey
Executive Director

March 16, 2005

Katherine Haynes Dunphy, Chairwoman
MWRA Advisory Board
11 Beacon Street
Boston, MA 02108

Dear Chairwoman Dunphy:

This letter transmits to the Advisory Board MWRA's Proposed Current Expense Budget (CEB) for fiscal year 2006. The MWRA Board of Directors approved the transmittal at its February 9, 2005 meeting.

The proposed rate revenue requirement for FY06 is \$479.5 million and includes the use of \$27 million from MWRA reserves to reduce the rate revenue requirement needed to be raised from member communities (\$15.7 million in Rate Stabilization funds to enhance revenue and \$11.3 million in Bond Redemption funds to reduce debt service costs). By comparison, the proposed FY06 rate requirement is \$3.9 million less than planning estimates presented when the FY05 CEB was approved.

Total expenses increase by \$42.9 million over FY05 expenses; \$33.1 million or 75% is attributable to debt service and \$9.8 million for direct and indirect operating expenses. Nearly 60%, or \$329 million of proposed expenses before offsets is for debt service. MWRA recognizes that its capital financing or debt service costs are a significant burden to our member communities. With the significant loss of debt service assistance from the Commonwealth, the burden to communities has grown. Actions by MWRA in response to the loss of debt service assistance in FY03, while difficult for MWRA and the communities, has not gone unnoticed. As part of its Series 2005A refunding transaction completed in March 2005, Moody's Investor Service and Fitch Ratings upgraded MWRA's senior bond ratings. In the reports, both rating agencies cited positive operating results, successful completion of several major treatment and transmission facilities, and maintaining strong reserve levels as primary factors underlying the rationale for the upgrade. The agencies also commented on the strong ratings of the municipalities served by MWRA, noting that more than 65% of the assessments come from communities with 'Aa' or 'Aaa' ratings. Standard and Poor's reaffirmed its rating of 'AA' with a stable outlook.

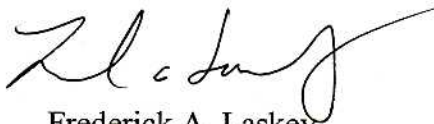
Proposed direct expenses, which total \$182.5 million, are less than actual spending for FY00. The direct expense budget proposed for FY06 reflects significant cuts of more than \$5 million as part of the internal review and development to limit the rate increase. Indirect expenses total \$37.9 million, an increase of \$3.3 million or 10% over the FY05 budget. The increase includes \$2.8 million for watershed protection and a \$350,000 addition to MWRA's operating reserve to meet bond requirements.

Looking ahead, MWRA is working to minimize rate increases through adjustments to its capital program, as presented in the proposed capital budget. By FY2010, MWRA's total indebtedness will begin to decline, as the amount of principal being paid on outstanding debt will exceed new capital spending. MWRA, together with the Advisory Board, is working to seek additional outside funding to offset costs. With prudent use of reserves, rate projections through FY09 are relatively smooth.

We look forward to working with the Advisory Board members and staff during your review of the proposed current expense budget.

Questions or comments on this document or information available on the Internet should be directed to the MWRA Budget Department.

Sincerely,



Frederick A. Laskey
Executive Director

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Executive Summary

The Budget-in-Brief

MWRA Mission

The Massachusetts Water Resources Authority (MWRA) is an independent authority that provides wholesale water and sewer services to its customer communities and funds its operations primarily through user assessments and charges. MWRA's mission is to provide reliable, cost-effective, high-quality water and sewer services that protect public health, promote environmental stewardship, maintain customer confidence, and support a prosperous economy. MWRA's long-term plan emphasizes improvements in service and systems and includes aggressive performance targets for operating the water and wastewater systems and maintaining new and existing facilities.

Parallel to MWRA's goal of carrying out its capital projects and operating programs is its goal of limiting rate increases to customer communities. The need to achieve and maintain a balance between these two goals continues to be the critical issue facing MWRA.

MWRA measures its performance compared to prior years and current year targets in a variety of areas. Progress in achieving performance targets is reported monthly in the Yellow Notebook and quarterly in the Orange Notebook. Quarterly reports are now available on MWRA's website.

A brief history and organizational summary of MWRA is included at the end of the Executive Summary.

Overview

Each year MWRA prepares a proposed budget that reflects the best available information about anticipated expenditures and revenues. MWRA transmits its proposed budget to its Advisory Board in March. The Advisory Board has sixty days to review and comment on MWRA's

proposed budget. In June, MWRA's Board of Directors holds hearings on the budget to review recommendations by the Advisory Board and new information available since the proposed budget was developed. Staff incorporates the Board's decisions from the hearings and presents a final budget for approval in June.

MWRA's proposed budget for fiscal year 2006 includes \$549.9 million in total expenses before debt service offsets of \$14.3 million, for a net expense total of \$535.6 million. The \$14.3 million in debt service offsets are projected interest savings on variable rate debt of \$3 million and the use of \$11.3 million of bond redemption funds to defease debt due in FY06.

Total expenses include \$329.4 million or 60% for capital financing costs and \$220.4 million or 40% for operating expenses, of which \$182.5 million is for direct expenses and \$37.9 million is for indirect expenses. Total expenses increase by \$42.9 million over FY05 expenses, \$33.1 million or 75% for capital financing and \$9.8 million for operating expenses.

The \$9.8 million increase in operating expenses includes \$6.4 million for direct expenses and \$3.4 million for indirect expenses. The increase in direct expenses includes an incremental \$3 million for new facilities (Braintree-Weymouth IPS, Walnut Hill, Union Park) starting up in FY05 or FY06, \$1.6 million for escalating utility prices, \$700,000 for maintenance and \$1.2 million for wages and salaries. The increase in indirect expenses includes additional funding for the insurance reserve fund, watershed protection and MWRA's retirement fund.

The \$33.1 million increase in capital financing expenses reflects \$5.2 million to support a \$150 million variable rate issue and \$42 million to be borrowed from the state revolving fund (SRF).

The proposed rate revenue requirement for FY06 is \$479 million, an increase of 5.7% over the FY05

budget¹. The proposed budget uses a combined \$27 million of reserves (\$15.7 million in rate stabilization and \$11.3 million of bond redemption). MWRA utilized a portion of the FY04 surplus to defease outstanding debt due in fiscal years 2005 and 2006. This action, approved by the Board at its June 23, 2004 meeting, reduced the FY05 and FY06 rate revenue requirements by \$17.3 and \$6.5 million respectively.

more detail in the division sections of this document.

FY06 non-rate revenue totals \$56.5 million, an increase of \$17 million over the FY05 budget. The change, as indicated above, primarily results from using \$15.7 million in rate stabilization funds. The proposed FY06 non-rate revenue budget includes \$28.7 million for investment income, of which \$2.1 million is from swap receipts, and \$12.1 million in other user charges and other revenue, including \$500,000 from the sale of renewable energy portfolio credits.

Consistent with the Governor's FY06 budget submission, MWRA's proposed FY06 budget includes no debt service assistance (DSA) from the Commonwealth. If DSA is restored by the legislature - partially or in full - in the Commonwealth's final budget, MWRA will reduce its rate revenue requirement by the amount of DSA received.

Table I-1 shows MWRA's proposed FY06 budget for revenue and expenses by line item and includes a comparison with FY04 actual spending and the FY05 approved budget. Line item changes from FY05 to FY06 are described in the Revenue and Expense section of the Executive Summary and in

¹ Subsequent to the Board of Directors approval, staff identified a \$535,000 adjustment to the revenue anticipated from the Chicopee Valley communities. Consequently, less Other User Charge revenue is anticipated and revised preliminary rate revenue requirements were issued to member communities. This adjustment had no change in the sewer rate revenue, but resulted in a 0.4% increase to the water rate revenue and a 0.12% change in the combined increase (from 5.74% to 5.86%). It is staff's intention to identify alternatives to offset this adjustment before final rates are adopted in June.

Table I-1

**Proposed FY06 Current Expense Budget
EXPENSES and REVENUE**

TOTAL MWRA	FY04 Actual	FY05 Approved	FY06 Proposed	Change	
				FY05 Approved to FY06 Proposed	
				\$	%
EXPENSES					
WAGES AND SALARIES	\$ 78,357,086	\$ 80,103,715	\$ 81,341,319	\$ 1,237,604	1.5%
OVERTIME	3,682,536	3,404,171	3,415,736	11,565	0.3%
FRINGE BENEFITS	10,855,867	12,364,551	13,459,590	1,095,039	8.9%
WORKERS' COMPENSATION	1,687,057	1,600,000	1,300,000	(300,000)	-18.8%
CHEMICALS	6,190,167	6,913,154	7,021,658	108,504	1.6%
ENERGY AND UTILITIES	18,377,346	19,151,034	23,055,515	3,904,481	20.4%
MAINTENANCE	18,611,486	19,750,181	20,755,627	1,005,446	5.1%
TRAINING AND MEETINGS	197,897	286,537	253,690	(32,847)	-11.5%
PROFESSIONAL SERVICES	6,330,626	6,777,586	7,005,097	227,511	3.4%
OTHER MATERIALS	4,871,254	4,167,307	3,488,620	(678,687)	-16.3%
OTHER SERVICES	22,347,683	21,532,570	21,400,912	(131,658)	-0.6%
TOTAL DIRECT EXPENSES	\$171,509,005	\$176,050,806	\$182,497,764	\$ 6,446,958	3.7%
INSURANCE	\$ 4,110,306	\$ 2,300,000	\$ 2,400,000	\$ 100,000	4.3%
WATERSHED/PILOT	17,678,358	21,811,900	24,572,577	2,760,677	12.7%
BEC _o PAYMENT	4,916,143	4,818,200	4,723,435	(94,765)	-2.0%
MITIGATION	1,223,152	1,237,000	1,300,000	63,000	5.1%
ADDITION TO RESERVES	-	1,000,000	1,350,000	350,000	35.0%
RETIREMENT FUND	3,881,637	3,407,532	3,578,000	170,468	5.0%
TOTAL INDIRECT EXPENSES	\$ 31,809,596	\$ 34,574,632	\$ 37,924,012	\$ 3,349,380	9.7%
CAPITAL FINANCING	\$297,264,243	\$298,406,228	\$329,425,181	\$ 31,018,953	10.4%
Offsets:					
Bond Redemption	-	(7,572,024)	(11,280,000)	(3,707,976)	100.0%
Prior Variable Rate Savings	(5,988,996)	(1,538,424)	-	1,538,424	-100.0%
Current Year Variable Rate Savings	(15,685,593)	(7,314,515)	(3,015,117)	4,299,398	-58.8%
Debt Service Assistance	(4,063,296)	-	-	-	0.0%
TOTAL CAPITAL FINANCING	\$271,526,358	\$281,981,265	\$315,130,064	\$ 33,148,799	11.8%
TOTAL EXPENSES	\$474,844,959	\$492,606,703	\$535,551,840	\$ 42,945,137	8.7%
REVENUE & INCOME					
RATE REVENUE	\$431,765,082	\$453,000,013	\$479,539,069	\$ 26,539,056	(a)
OTHER USER CHARGES	7,149,756	6,323,536	6,906,771	583,235	9.2%
OTHER REVENUE	7,962,318	4,556,154	4,705,000	148,846	3.3%
RATE STABILIZATION	-	-	15,684,000	15,684,000	100.0%
INVESTMENT INCOME	29,420,655	28,727,000	28,717,000	(10,000)	0.0%
TOTAL REVENUE & INCOME	\$476,297,811	\$492,606,703	\$535,551,840	\$ 42,945,137	8.7%

^a Subsequent to the Board of Directors approval of the preliminary rate revenue requirement, staff identified a \$535,000 adjustment to the revenue anticipated from the Chicopee Valley communities. Consequently, less Other User Charge revenue is anticipated and revised preliminary rate revenue requirements were issued to member communities. This adjustment had no change in the sewer rate revenue, but resulted in a 0.4% increase to the water rate revenue and a 0.12% change in the combined increase from 5.74% to 5.86%. It is staff's intention to identify alternatives to offset this adjustment before final rates are adopted in June.

FY06 Initiatives and Highlights

- Year-end FY06 staffing target of 1,270 filled positions, equal to the overall Black and Veatch target for FY06. A staffing level of 1,270 in effect represents no net increase in the number of filled positions as of December 2004. New hires and backfills of vacant positions will be managed in the aggregate and addressed on a case-by-case basis by senior management at MWRA. The proposed staffing level of 1,270 represents a decrease of more than 500 filled positions (or 28%) from peak staffing in 1997, an average annual reduction of nearly 60 positions.
- First full year of operation for major new facilities: Walnut Hill Treatment Plant, (May 2005) Braintree Weymouth Intermediate Pump Station, (December 2004) and Braintree Weymouth Inter-Island Tunnel (April 2005).
- Finalize construction and commence testing of the new Braintree Weymouth Replacement Pump Station (April 2007).
- Partial year operation of Union Park CSO facility, (April 2006) based on agreement with Boston Water and Sewer Commission (BWSC).
- Complete the relocation of the Somerville laboratory to the Chelsea facility.
- Support competitive procurement of electricity for MWRA facilities, including the Deer Island Treatment Plant and Walnut Hill Treatment Plant.
- Negotiate a new Deer Island Treatment Plant discharge permit. The current permit expires August 2005

SOURCES AND USES OF FUNDS

MWRA funds its operations primarily through member community assessments. No funds supporting the current expense budget are subject to appropriation, except debt service assistance from the Commonwealth of Massachusetts and minor reimbursements from the Commonwealth.

MWRA has only one operating fund. All operating fund expenses and revenues are allocated to water and sewer customers.

Table I-2 shows MWRA's sources and uses of funds for the FY06 proposed budget.

Table I-2

SOURCES & USES of Funds		
\$ Millions		
Sources		
Other User Charges	6.9	1.3%
Other Revenue	4.7	0.9%
Investment Income	28.7	5.4%
Rate Revenue	479.5	89.5%
Rate Stabilization	15.7	2.9%
TOTAL REVENUE	\$ 535.6	100.0%
Uses		
Total Expenses		
before Debt Service Offsets	\$ 549.8	
Less:		
Debt Service Assistance	0	
Bond Redemption	(11.3)	
Current Year Variable Savings	(3.0)	
Sub-Total Net Expenses	\$ 535.6	
Capital Financing	315.1	58.8%
Direct Expenses	182.5	34.1%
Indirect Expenses	37.9	7.1%
TOTAL EXPENSES	\$ 535.6	100.0%

REVENUE

MWRA is required by its Enabling Act to balance its budget each year by establishing user assessments for water and sewer services that

provide funds sufficient to recover the cost of operations (excluding depreciation), maintenance and improvements, debt service, and reserves.

In the proposed FY06 budget, 93% of the revenue (including rate stabilization) is derived from rate revenue. The remaining 7% of revenue comes from interest on investments, charges to other water and sewer customers, non-recurring revenue, annual charges to sewer system users with permits issued by MWRA's Toxic Reduction and Control Department, reimbursements from the Commonwealth, penalties assessed to holders of sewer use permits, and other miscellaneous sources.

Rate Revenue

In the proposed FY06 budget MWRA will raise \$479.5 million of its total revenue requirements from water and sewer assessments to member communities. Of the \$479.5 million, \$320 million will fund the sewerage system, an increase of 0.5% as compared to the FY05 budget; and \$159.5 million will fund the water system, an increase of 18.6% as compared to the FY05 budget. The significant increase in the water rate revenue requirement reflects increased debt service to support drinking water system improvements in treatment, transmission, and storage.

Non-Rate Revenue

Other User Charges

Other User Charges primarily include revenues derived from the provision of water services to communities under special agreements. The proposed FY06 budget includes approximately \$3.8 million for such revenues. Other User Charges also includes about \$1.8 million in water revenue collected from sewer ratepayers to offset the cost of water used for operation of the Deer Island Treatment Plant. The proposed budget also reflects a \$500,000 appropriation by the Commonwealth for the Town of Clinton to enable

the town to pay MWRA for part of the cost of operating and maintaining the Clinton Wastewater Treatment Plant.

Permit Fees

The FY06 proposed budget includes \$1.9 million in fees charged to industries that discharge toxic materials into the MWRA sewer system. These permit fees partially offset the annual costs of permitting, inspecting, and monitoring these industries.

Penalties

MWRA assesses fines as necessary to enforce its sewer use regulations. MWRA encourages violators to bring sewer discharges into compliance with their permits, and considers penalties and the lengthy adjudication process that follows as a last resort. The estimated income from penalties in the proposed budget is \$250,000, the average for the past few years.

Reimbursements from the Commonwealth of Massachusetts

The proposed budget includes \$867,000 from the Commonwealth that MWRA is entitled to receive by statute as reimbursement for the cost of chemicals used in the wastewater treatment process.

Miscellaneous Revenue

The FY06 proposed budget includes about \$1.7 million in miscellaneous revenue: \$638,000 from hydropower generation at MWRA's Cosgrove facility; \$500,000 from the sale of renewable portfolio credits from the use of digester gas to generate power on Deer Island; \$432,000 for an entrance fee from the Town of Stoughton, which joined the waterworks system in FY04; \$112,000 from Fore River railroad management fees; and \$430,000 from sale of surplus equipment and other sources.

Investment Income

MWRA earns income by investing reserves and fund balances in a variety of interest-yielding securities. The FY06 proposed budget includes \$28.7 million in investment income. Changes between investment fund balances and short and long-term interest rate assumptions offset each other for no net change in investment income as compared to the FY05 budget.

Non-Recurring Revenue

Non-Recurring Revenue is one-time revenue used in a given fiscal year to reduce assessments to member communities. In any fiscal year when annual revenues exceed expenses, MWRA transfers the unexpended amount to the rate stabilization reserve. Within certain limits, MWRA may use this money to reduce the rate revenue requirement in any subsequent year. Consistent with the requirements of its Enabling Act and its general bond resolution, MWRA treats transfers from rate stabilization as revenue in that fiscal year. The proposed FY06 budget includes a withdrawal of \$15.7 million from MWRA's rate stabilization fund.

EXPENSES

MWRA's annual Current Expense Budget includes direct program expenses, indirect or non-program costs, and debt service. Direct expenses cover all costs that MWRA divisions incur, including personnel expenses, facility operating costs, and support functions. Proposed FY06 direct expenses of \$182.5 million are less than actual spending for FY00. More importantly, during this same period, projected spending for maintenance has increased by \$5 million or 30% and health insurance costs have increased by \$3.5 million or 35%. It is significant to note that reductions in wages, overtime and worker's compensation costs have more than offset continued increases in the cost of health insurance. Total combined chemical and

utility expenses have increased only slightly (3%) even with additional facilities on-line.

Comparison of FY00 to Proposed FY06			
Direct Expenses			
\$ in Millions			
Line Item	Actual FY00	Proposed FY06	Change
Wages & Salaries	\$ 89.1	\$ 81.3	\$ (7.7)
Overtime	3.4	3.4	(0.0)
Fringe Benefits	10.0	13.5	3.5
Worker's Compensation	1.6	1.3	(0.3)
Chemicals	8.5	7.0	(1.5)
Utilities	20.6	23.0	2.4
Maintenance	16.2	20.8	4.6
Training & Meetings	0.5	0.3	(0.2)
Professional Services	5.5	7.0	1.5
Other Materials	5.3	3.5	(1.7)
Other Services	22.8	21.4	(1.4)
Total Direct Expenses	\$ 183.3	\$ 182.5	\$ (0.8)

Indirect expenses include payments to the Commonwealth for expenses of the Department of Conservation and Recreation's Water Supply Protection Division and to support watershed land purchases; additions to MWRA's retirement fund; insurance; mitigation costs; and any additions to reserves. The capital financing budget includes current debt service payments, debt service for planned borrowing, and contributions from current revenues to fund capital expenditures.

As noted earlier, 60% of the total FY06 proposed budget is for capital financing expenses and 40% is for operating expenses. Between FY90 and FY06, the capital financing share has grown from 36% to 60% of the total budget, while the share of operating expense has declined from 64% to 40% of the total budget (Figure I-1). Based on MWRA's most recent planning estimates, by FY10 the capital financing expenses share is expected to grow to about 65% of the total budget.

Capital Financing Expenses

Capital financing expenses (before debt service offsets) increase by \$31.0 million to \$329.4 million, 10% more than the FY05 budget, primarily for payments on existing debt. Capital

financing costs for FY06 include \$309.9 million in principal and interest payments on outstanding MWRA debt and SRF loans and \$5.2 million in debt service to support new variable rate and SRF debt issues. Also included in FY06 capital financing costs are \$7.0 million to fund capital expenditures from current revenues, \$3.2 million for the lease on the Chelsea Facility, and \$4.1 million for interest on tax-exempt commercial paper issued to support the Local Water Pipeline Assistance Program.

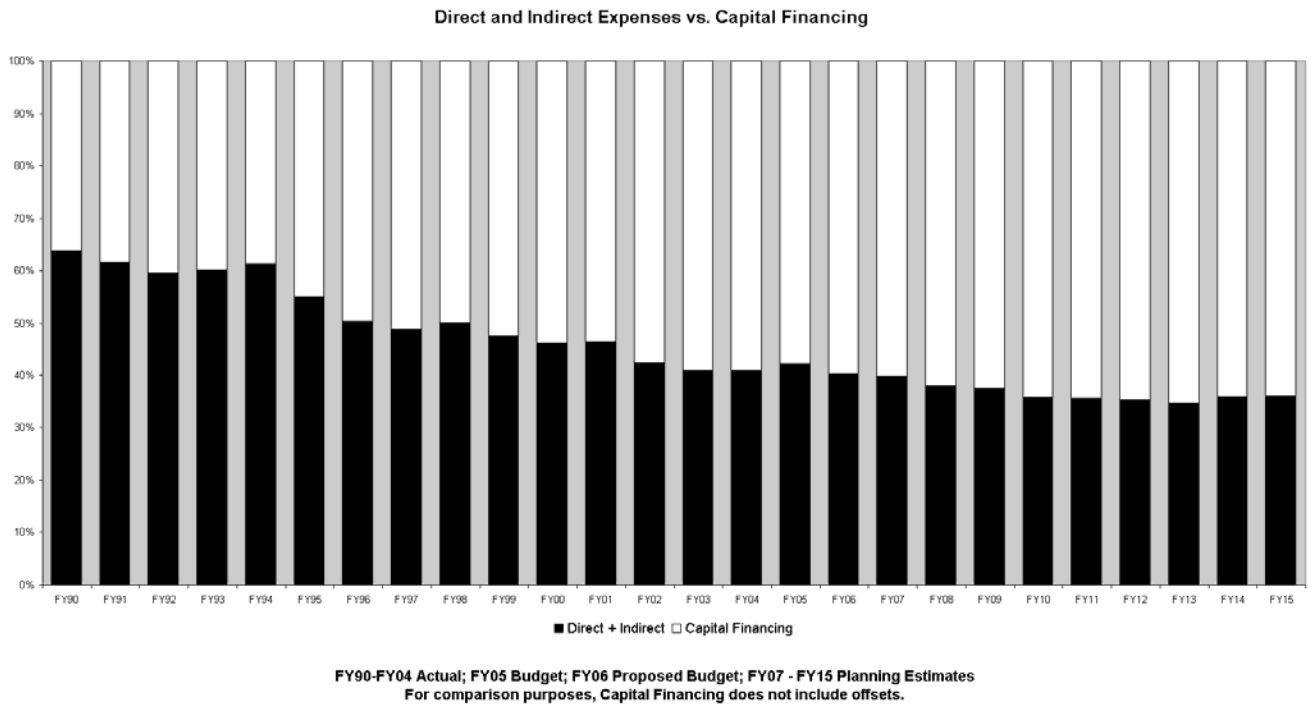
Operating and Maintenance Expenses

Annual operating and maintenance expenses account for 33% of the proposed FY06 budget, increasing by \$6.5 million to \$182.5 million, 3.7% more than the FY05 budget. Of the \$6.5 million increase, \$3.0 million or 46% is related to new facilities. The increase is largely due to increases for maintenance (\$1.0 million) and utilities (\$3.9 million). Maintenance expenses increase by \$1.0 million reflecting MWRA's commitment to maintain its facilities. Of the \$3.9 million increase for utilities, \$2.2 million is for anticipated increased use of electricity and diesel fuel to support the startup of the Walnut Hill Water Treatment Plant and Braintree-Weymouth Intermediate Pump Station; and the remaining \$1.7 million is for anticipated price increases. The direct expenses budget is described further in the Direct Expenses section of the Executive Summary and in the division sections.

Indirect Expenses

Indirect expenses account for 6.9% of the proposed budget. Indirect expenses increase by \$3.4 million to \$37.9 million, 9.7% more than the FY05 budget. The increase in indirect expenses includes \$2.8 million for watershed protection, \$350,000 addition to the operating reserve to meet funding requirements and \$170,000 increase in contribution to the retirement fund. The indirect expense budget is described further in the Indirect Expenses section of the Executive Summary.

Figure I - 1



Direct Program Expenses

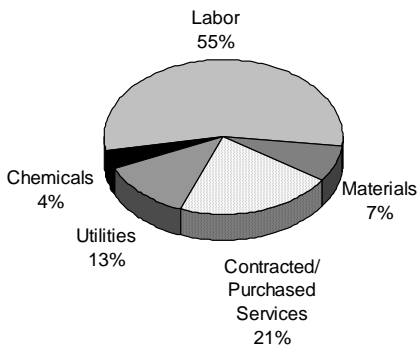
The proposed FY06 direct program expense budget is \$182.5 million, an increase of \$6.5 million or 3.7% over the FY05 budget. The increase includes higher costs for health insurance and maintenance. Increases in utilities and chemicals are mostly to support startup of the Walnut Hill Water Treatment Plant and Braintree-Weymouth Intermediate Pump Station. Generally, the budget presents expenses by line item and program. The division sections of this document discuss program budget changes in greater detail.

Line Item Budget Summary

Figure I-2 combines related direct expense line items into general cost categories and shows that labor costs (Wages and Salaries, Overtime, Fringe

filled positions. A staffing level of 1,270 in effect represents no net increase in the number of filled positions as of December 2004, and it also represents a decrease of more than 500 filled positions (28%) from peak staffing in 1997, an average reduction of nearly 60 positions annually.

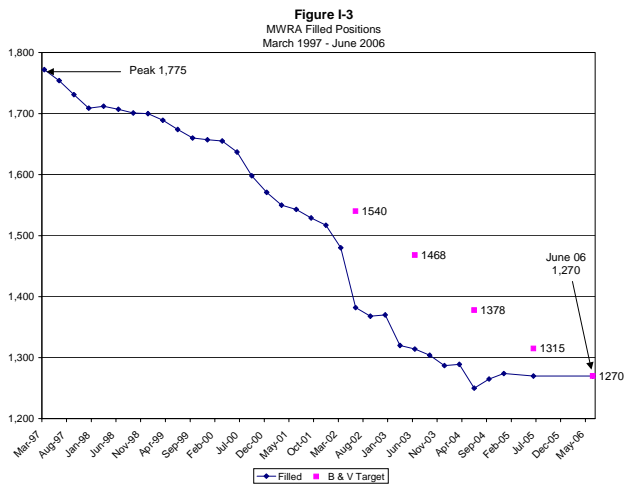
FIGURE I-2
Direct Expenses by Category - \$182 Million



Benefits, Workers' Compensation and Training and Meetings) are the largest component of the direct expense budget (56%). The second largest cost category is contracted and purchased services (21%), followed by chemicals and utilities (17%), and materials (7%).

- Within the labor cost category, wages and salaries account for \$81.3 million, 1.5% higher than the FY05 budget. Of the \$81.3 million, \$80.3 million is for regular pay. MWRA estimates that the regular pay budget of \$80.3 million will support the FY06 target of 1,270

Figure I-3 shows how filled positions at MWRA has declined from a peak of 1,775 in March 1997 to the estimated staffing level of 1,270 for FY06. As shown in the figure below, the number of filled positions achieves the target levels recommended in the Black & Veatch study.



Contracted and purchased services, the second largest direct expense cost category, includes professional, maintenance, and other services. The proposed FY06 budget for contracted and purchased services is \$39.1 million, only slightly (1.2%) higher than the FY05 budget.

Major components of this cost category include \$10.7 million for MWRA’s residuals processing contract, \$4.3 million for lease payments, \$10.7 million for maintenance services, \$3.3 million for harbor and outfall monitoring, \$1.3 million for telephone and lease line services, \$2.0 million for security, and \$1.2 million for grit and screenings removal.

The \$10.7 million proposed budget for residuals processing represents a net decrease of \$97,000 as compared to the FY05 budget. This net reduction results from decreased barging expenses due to startup of the Braintree-Weymouth tunnel in late FY05 offset by inflationary increases for gas and electric expenses. The maintenance services

proposed budget of \$10.7 million is \$375,000 more than the FY05 budget primarily as a result of increased electrical services. The \$4.3 million for lease payments and the \$3.3 million for harbor and outfall monitoring do not represent material changes from the FY05 budget.

The proposed FY06 budget for utilities is \$23.1 million, \$3.9 million more than the FY05 budget. The increase is primarily for electricity and diesel fuel to support the startup of the Walnut Hill Water Treatment Plant and Braintree-Weymouth Intermediate Pump Station.

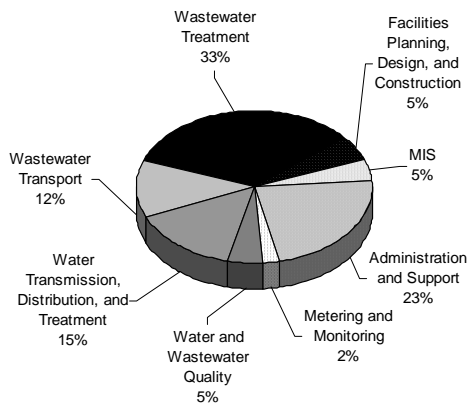
The proposed FY06 budget for chemicals is \$7.0 million, \$100,000 more than the FY05 budget. Approximately 44% of the chemical budget is for the treatment of wastewater and 56% is for water treatment. Compared to the FY05 budget, chemicals for water treatment comprise a greater percentage of the total chemical budget primarily due to the additional chemicals required to support the first full year of operation of the new Walnut Hill Treatment Plant, including liquid oxygen for the new ozone generation process and soda ash for alkalinity control. These additional chemical costs are partially offset by reductions in polymer use at Deer Island reflecting the startup of the Braintree-Weymouth tunnel, lower usage of ferrous chlorite for struvite control at Deer Island, and lower usage of sodium hypochlorite at both Deer Island and Field Operations based on current trends.

The proposed FY06 budget for materials, which includes maintenance materials, laboratory equipment, vehicles, and computer hardware items is \$13.6 million, \$53,000 less than the FY05 budget. While the overall budget for this cost component does not change materially from FY05, noteworthy and offsetting changes in the FY06 proposed budget include increases for materials to maintain Authority facilities and pipelines, offset by decreases for vehicle and computer replacement.

Functional Area Budget Summary

For a broader perspective on MWRA's direct expense budget, Figure I-4 presents direct expenses by MWRA functional area and shows that 45% of the proposed FY06 direct expense budget is for Wastewater Transport and Treatment costs, compared to 15% for Water Transmission, Treatment, and Distribution. Appendix A describes each MWRA functional area.

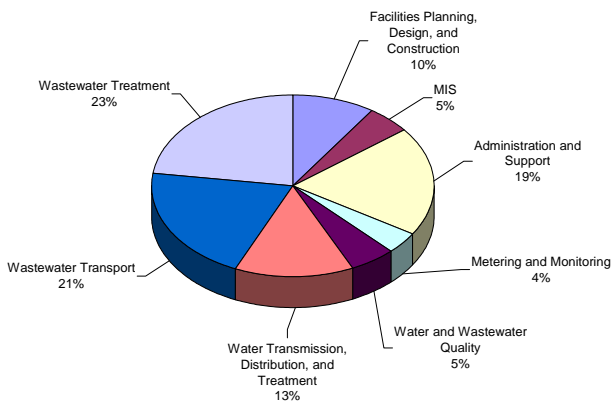
FIGURE I-4
Direct Expenses by Functional Area - \$182 Million



water and wastewater treatment and transport systems; 24% to administration and support and MIS functions, and 10% to facilities planning, design, and construction. Water and Wastewater Quality functions, particularly Boston Harbor and Massachusetts Bay monitoring activities and industrial discharge and enforcement programs, account for 9% of all staff.

Figure I-5, Staffing by Functional Area as of December 2004 shows that of 1,274 filled positions, 57% are devoted to operating and maintaining the

FIGURE I-5
Staffing by Functional Area



Capital Financing

The proposed FY06 capital financing budget, before debt service offsets, is \$329.4 million or 60% of the total \$549.9 million budget. FY06 debt service offsets of \$14.3 million result in a net capital financing budget of \$535.6 million. Debt service offsets include \$3.0 million in variable rate savings for FY06 and \$11.3 million in bond redemption savings. The proposed budget assumes approximately a 3.5% interest rate for variable rate debt. If interest rates are less than budgeted in FY06, MWRA will use the savings to reduce rate revenue requirements in future years.

MWRA finances its capital improvement program primarily by issuing fixed rate 30- or 40-year revenue bonds. MWRA has also issued variable rate debt through a tax-exempt commercial paper program and a multi-modal (one, seven, and 35-day) borrowing program. MWRA's revenue bonds outstanding are projected to total \$5.4 billion as of June 30, 2005, including \$700 million in variable rate debt. MWRA also borrows from the Commonwealth's Water Pollution Abatement Trust, also known as the State Revolving Loan (SRF) Fund. The gross amount of outstanding SRF debt is projected to be \$839 million as of the end of FY05, with outstanding commercial paper projected to total approximately \$300 million.

MWRA's unenhanced senior bond ratings were upgraded by Moody's Investor Service and Fitch Ratings as part of the Authority's Series 2005A refunding transaction completed in March 2005. Moody's upgraded its rating from "Aa3" to "Aa2" and Fitch upgraded its rating from "AA-" to "AA". In other reports, both rating agencies cited positive operating results, successful completion of several major treatment and transmission facilities, and strong reserve levels as primary factors underlying the rationale for the upgrade. The agencies also commented on the strong ratings of the municipalities served by MWRA, noting that more than 65% of the assessments come from communities with "Aa" or "Aaa" ratings. Standard

and Poor's reaffirmed its rating of "AA" with a stable outlook.

The proposed FY06 capital financing budget, before offsets, increases by \$33.1 million or 12% compared to the FY05 budget. The proposed budget includes:

- \$309.9 million in principal and interest payments on outstanding MWRA debt and SRF loans.
- \$14.3 million to fund ongoing capital projects with current revenue, interest on local water pipeline assistance loans and commercial paper, and Chelsea lease payments.
- \$5.2 million in debt service to support a \$150 million variable rate issue in December 2005 and \$42 million in SRF borrowings.

The proposed FY06 debt service budget does not include savings from future re-financing of debt because no debt refunding or restructuring is currently planned for FY06. If MWRA is able to take advantage of opportunities to refund outstanding debt during FY06, any savings will be used to reduce rate revenue requirements in future years.

Consistent with the Governor's FY06 budget submission, MWRA's proposed FY06 budget includes no debt service assistance (DSA) from the Commonwealth. If DSA is restored by the legislature - partially or in full - in the Commonwealth's final budget, MWRA will reduce its rate revenue requirement by the amount of DSA received.

Table I-3 provides detail on the FY06 capital financing line item. Table I-3 also illustrates how upgrading the sewerage system has dominated the capital program to date. Sixty-nine percent of the FY06 capital financing costs (before debt service offsets) are for wastewater improvements. Current and future borrowing increasingly supports improvements to the water system. Compared to last year, the share of water improvement debt has increased by 3%.

**TABLE I-3
FY06 Current Expense Budget - Capital Financing Detail (as of 6/30/05)**

	Amount Outstanding (\$ millions)	Interest Rate	Total	Water	Sewer
SRF¹					
Unrefunded	\$ 36		\$ 58,692	\$ -	\$ 58,692
1999E Sewer	10	-	394,737	-	394,737
1999E WWater	10	-	583,513	583,513	-
1999F	368	-	15,709,818	-	15,709,818
2000E Sewer	70	-	2,899,465	-	2,899,465
2000E WWater	11	-	572,954	572,954	-
2001C WWater	5	-	250,112	250,112	-
2001D Sewer	7	-	388,181	-	388,181
2001D WWater	1	-	82,433	82,433	-
2002H	122	-	4,676,988	1,549,117	3,127,871
2002I	3	-	102,616	1,455	101,161
2003A	1	-	72,497	72,497	-
2003B	4	-	224,829	224,829	-
2003C	52	-	2,383,065	990,849	1,392,216
2004C	12	-	640,718	91,619	549,099
2004D	78	-	4,510,668	641,626	3,869,042
FY06 New Sewer	35	-	773,932	-	773,932
FY06 New WWater	12	-	652,338	652,338	-
Sub-Total	\$ 839		\$ 34,977,556	\$ 5,713,342	\$ 29,264,214
MWRA Senior Debt					
1990A (fixed)	\$ 22	7.67%	17,203,333	3,242,828	13,960,505
1992A (fixed)	388	6.98%	27,294,925	1,364,746	25,930,179
1993C Refunding/New (fixed)	204	5.66%	19,584,821	2,448,103	17,136,718
1994A (fixed)	-	6.15%	-	-	-
1995B (fixed)	212	5.34%	14,790,579	-	14,790,579
1996A (fixed)	19	5.78%	4,434,545	-	4,434,545
1997D Refunding (fixed)	132	5.40%	7,813,919	468,835	7,345,084
1998A (fixed)	187	5.04%	12,763,700	4,254,524	8,509,176
1998B Refunding (fixed)	104	5.04%	5,331,550	213,262	5,118,288
2000A Refunding/New (fixed)	275	6.11%	17,973,298	11,982,798	5,990,500
2002B (fixed)	174	5.23%	10,943,531	9,849,178	1,094,353
2002J Refunding (fixed)	391	4.71%	20,848,400	2,084,840	18,763,560
2002J New (fixed)	200	4.71%	10,000,000	5,000,000	5,000,000
2003D	163	4.63%	9,580,619	6,387,399	3,193,220
2004A	130	5.00%	7,404,169	7,404,169	-
2004B	65	4.17%	3,262,750	407,844	2,854,906
Sub-Total	\$ 2,666		\$ 189,230,139	\$ 55,108,526	\$ 134,121,613
MWRA Subordinate Debt					
1997A (variable)	\$ 79	-	4,450,619	-	4,450,619
1997B (variable)	79	-	4,450,619	4,450,619	-
1998D Refunding (variable to fixed)	199	-	8,381,435	335,257	8,046,178
1999A (variable to fixed)	90	-	5,118,849	2,047,540	3,071,309
1999B (variable to fixed)	90	-	5,187,732	2,075,093	3,112,639
1999C (variable)	70	-	3,818,720	2,291,232	1,527,488
1999D (variable)	70	-	3,818,720	2,291,232	1,527,488
2000B Refunding (variable to fixed)	134	-	6,238,440	873,382	5,365,058
2000C Refunding (variable to fixed)	134	-	6,238,440	873,382	5,365,058
2000D (fixed to variable)	150	-	8,250,000	4,125,000	4,125,000
2001A (variable)	89	-	5,883,271	3,941,792	1,941,479
2001B (variable)	85	-	3,400,000	3,400,000	-
2002C Refunding (variable)	80	-	6,454,000	4,302,882	2,151,118
2002D-G Refunding (variable to fixed)	350	-	15,395,319	-	15,395,319
FY06 New (Fall \$150 million)	150	-	3,789,262	3,789,262	-
Sub-Total	\$ 1,849		\$ 90,875,426	\$ 34,796,671	\$ 56,078,755
Total SRF & MWRA Debt Service	\$ 5,354		\$315,083,121	\$ 95,618,539	\$219,464,582
Water Pipeline Commercial Paper			\$ 4,125,000	\$ 4,125,000	\$ -
Current Revenue/Capital ²			7,000,000	1,750,000	5,250,000
Capital Lease			3,217,060	1,190,312	2,026,748
Sub-Total			\$ 14,342,060	\$ 7,065,312	\$ 7,276,748
Total Capital Financing (before Debt Service Offsets)			\$329,425,181	\$102,683,851	\$226,741,330
Bond Redemption Savings			\$ (11,280,000)	\$ (4,895,520)	\$ (6,384,480)
Prior Year Variable Rate Savings			-	-	-
Budget Year Variable Rate Savings			(3,015,117)	(1,971,887)	(1,043,230)
Debt Service Assistance			-	-	-
Total Capital Financing			\$315,130,064	\$ 95,816,444	\$219,313,619

¹ SRF debt service payments reflect net MWRA obligations after state and federal subsidies.

² Current Revenue/Capital is revenue used to fund ongoing capital projects. The amount is partly determined by MWRA's bond covenant requirements.

Indirect Expenses

The proposed FY06 budget includes \$37.9 million for indirect expenses, an increase of \$3.3 million or 10% over the FY05 budget. The increase includes \$2.8 million for watershed protection and a \$350,000 addition to MWRA's operating reserve to meet bond requirements.

Insurance

MWRA purchases property and casualty insurance from external insurance carriers and self-insures for the first \$2.5 million of property and general liability loss per occurrence. The proposed FY06 budget includes \$2.4 million for premiums and fees, an increase of \$100,000 based on estimates to procure an insurance renewal program similar to the existing program. New policies will be procured in FY05 for coverage in FY06. The budget includes \$1.7 million for premiums and \$700,000 for the projected costs of claims made against the self-insured portion of MWRA coverage. MWRA mitigates the budgetary risk of self-insurance by maintaining an Insurance Reserve. The reserve, which was established as part of the Bond Resolution, requires that an independent insurance consultant review the funding level every three years and provide recommendations as to its adequacy. In December 2003, MWRA's consultant reviewed the level of the reserve and recommended that it be increased from \$18 million to \$21 million by FY07. In FY05, the reserve was increased by the first of three consecutive \$1 million additions. The proposed FY06 budget includes the second of three \$1 million additions to the reserve.

Watershed Reimbursement/PILOT

The Enabling Act directs MWRA to pay the Commonwealth of Massachusetts for several statutory obligations: payments in lieu of taxes (PILOT) for Commonwealth-owned land in the watersheds, operating expenses of the Division of

Water Supply Protection³, and debt service costs for purchases of land around the supply reservoirs to protect the watersheds. The proposed FY06 budget includes \$6.9 million, \$12.2 million, and \$5.5 million respectively for these items. Collectively these represent a net increase of \$2.8 million over the FY05 budget. Proposed operating expenses increase by \$2 million based on the draft MWRA/DCR FY06 work plan to support funding of additional positions and maintenance. Projected PILOT payments increase by \$1.7 million based on the anticipated results of the reevaluation of all state-owned property which occurs every five years. FY06 is a reevaluation year. These increases are offset by debt service for new land acquisition which will be funded through MWRA bond proceeds and is now reflected as part of MWRA's total capital financing budget.

Harbor Electric Energy Company (HEECo)

Harbor Electric Energy Company (HEECo), a subsidiary of NStar, installed the cross harbor power cable and built the power substation to supply electric power for construction and operation of the Deer Island Treatment Plant. MWRA is repaying HEECo's capital investment on a 25-year schedule. The proposed budget includes \$4.7 million for the estimated FY06 payment, comprising \$4.3 million for capacity charges and \$440,000 for maintenance expenses.

Mitigation

MWRA disburses mitigation funds to communities affected by MWRA projects pursuant to MWRA's Statement of Mitigation Principles and/or specific agreements with communities. MWRA mitigation may include ameliorating direct construction impacts, meeting environmental/regulatory requirements, long-term operating agreements, or community compensation for impacts over and above those addressed by other mitigation. In rare situations, where the extent and duration of the

³ Formerly the MDC Division of Watershed Management.

impact of a project on a community is such that restoring the area to its pre-project state is insufficient to relieve the stress of MWRA's presence during the project, MWRA funds or contributes to improvements to affected areas.

Mitigation expenses are funded in the capital budget and in the current expense budget. The proposed FY06 CEB includes \$1.3 million for community compensation for impacts, including \$650,000 for the Town of Winthrop, based on a Memorandum of Agreement with the town, and \$650,000 for the City of Quincy. Although many of MWRA's obligations under a 1988 Memorandum of Understanding (MOU) with Quincy have been fulfilled, an agreement on a successive MOU has not been reached and some obligations still remain. MWRA pays Quincy \$250,000 annually, subject to inflation, for fire protection services for the FRSA.

Retirement System Contribution

The proposed FY06 budget includes a \$3.6 million contribution to MWRA's retirement fund commensurate with the goal to maintain a fully funded retirement system for employees, including approved cost-of-living increases. The contribution is based on the most recent (December 2003) actuarial valuation report, which recommends an increase in contribution over the next three years. The report recommends an increase of \$1.1 million for FY05 and \$1.3 and \$1.5 million, respectively for FY06 and FY07, compared to the FY04 contribution. About \$1.2 million was pre-funded in FY04, lessening the contribution amounts by about \$0.4 million each year for FY05, FY06, and FY07.

Community Profile and Assessments

MWRA provides wholesale water and sewer services to 60 communities. Forty-seven communities purchase water supply services, and 45 communities purchase wastewater transport and treatment services. Thirty-one communities purchase both. Approximately 2.5 million people, or 43% of the population of Massachusetts, live and work in the communities that purchase water and/or wastewater services from MWRA.

MWRA's largest single customer is the Boston Water and Sewer Commission (BWSC), which provides retail services in the City of Boston. In the proposed FY06 CEB, rate revenue from BWSC accounts for 32% of MWRA's total rate revenue. Table I-2, on page I-18, lists MWRA communities, the services received, and MWRA preliminary assessments for FY06.

Each year MWRA determines preliminary wholesale water and sewer assessments in February and final assessments in June before the beginning of the new fiscal year. These assessments must satisfy the statutory requirement that MWRA fully recover its budgeted water and sewer costs by apportioning net costs among its wholesale water and sewer customers.

Table I-3 presents the calculation of MWRA's FY06 rate revenue requirement. The table shows that most of MWRA's current expenses are directly attributable to either water or sewer service costs, or to investment in the water or sewer systems. Expenses that support both systems are allocated to water or sewer assessments based on generally accepted cost allocation principles. The allocation methodology used in preparing the proposed FY06 budget was revised prior to FY02 to more accurately estimate the division of support costs between the water and sewer programs. Investment income and other revenue offset

water and sewer expenses. The resulting net cost of water and sewer services is the amount MWRA recovers through water and sewer assessments.

Wholesale Assessment Methodology

MWRA calculates separate user assessments for water and sewer services. Budgeted water operating and capital costs are allocated based on each community's share of total water use for the most recent calendar year. The sewer assessment methodology allocates budgeted operating and maintenance costs based on share of wastewater flow and strength parameters, and capital costs based on proportion of flow, strength, and population. MWRA uses three-year averaging of wastewater flows to calculate the flow-related components of wholesale sewer assessments. This averaging moderates year-to-year swings in individual community assessments. Beginning in FY07, MWRA assessments will reflect flow data from the Authority's new wastewater metering system. Flow data from the new system will be available in calendar year 2005.

Retail Charges

As noted above, MWRA provides water and sewer services to communities on a wholesale basis. Each community then re-sells services on a retail basis. As a result, household water and sewer charges include each household's share of the community's MWRA water and sewer assessments, plus the community's own charges for the provision of local water and sewer services.

Each community independently establishes retail rates. When establishing local rates, community officials consider issues related to the pricing of services, level of cost recovery, and the local rate structure or methodology. Several factors contribute to a broad range of local rate structures in the MWRA service area:

- Differences in the extent to which water and sewer costs are supported through property taxes and other sources of revenue.
- Differences in the means by which communities finance investments in their own water and sewer systems.
- Differences in communities' retail rate methodologies.

Some communities have flat unit rates, while others have inclining block rates. Local rates may also provide for differentials among classes of users, such as higher rates for commercial or industrial users, abatements to low-income or elderly residents, and adjusted sewer rates for customers with second meters used for lawn irrigation.

Additional information on rate structure within the member communities is available on the MWRA Advisory Board website as part of its annual rate survey.

TABLE I-3
Calculation of the FY06 Rate Revenue Requirement
(\$000s)

	Sewer	Water	Total
Expenses			
Operations and Maintenance Costs:			
Direct Sewer and Water Expenses	\$75,571	\$45,037	\$120,607
PLUS			
Other Costs:			
Allocated Direct Expenses	\$52,264	\$35,499	\$87,763
Allocated Indirect Expenses	9,204	2,847	12,051
PLUS			
Capital Costs:			
Debt Service (Less: Debt Offsets)	\$214,064	\$94,066	\$308,130
Current Revenue/Capital	\$5,250	\$1,750	7,000
LESS			
Non-Rate Revenue:			
Investment Income	(\$19,237)	(\$7,371)	(\$26,608)
Fees and Other Revenue	(3,434)	(7,135)	(10,569)
Non-Recurring Revenue	(13,471)	(5,364)	(18,835)
EQUALS			
Rate Revenue Requirement	\$320,210	\$159,330	\$479,540

Table I-2

MWRA Preliminary FY06 Water and Sewer Assessments

Combined Water and Sewer Customers	WATER		SEWER		COMBINED	
	Preliminary FY06	% Change from FY05	Preliminary FY06	% Change from FY05	Preliminary FY06	% Change from FY05
ARLINGTON	3,449,670	20.4%	5,958,159	0.0%	9,407,829	6.6%
BELMONT	1,727,410	17.4%	3,556,210	0.2%	5,283,619	5.2%
BOSTON	61,952,635	16.8%	91,836,302	0.7%	153,788,936	6.6%
BROOKLINE	4,638,752	17.3%	9,205,069	2.0%	13,843,821	6.6%
CHELSEA	2,761,538	17.8%	4,441,476	-1.6%	7,203,014	5.0%
EVERETT	3,764,918	16.0%	5,898,059	-0.4%	9,462,977	5.6%
FRAMINGHAM	6,095,517	22.0%	8,114,031	-4.1%	14,209,548	5.6%
LEXINGTON	3,842,793	15.2%	5,324,581	2.8%	9,167,374	7.7%
MALDEN	4,982,167	26.1%	8,528,840	0.7%	13,511,007	8.8%
MEDFORD	4,343,878	22.2%	8,514,378	0.0%	12,858,256	6.6%
MELROSE	1,781,638	14.0%	4,305,780	2.0%	6,087,418	5.2%
MILTON	2,046,407	8.3%	3,968,816	-0.3%	6,015,223	2.5%
NEWTON	7,515,019	15.3%	14,063,898	0.9%	21,578,917	5.5%
NORWOOD	2,538,135	21.3%	5,082,715	2.1%	7,620,850	7.8%
QUINCY	7,734,773	19.5%	13,409,126	0.2%	21,143,899	6.5%
REVERE	3,533,606	17.2%	6,904,450	2.3%	10,438,056	6.9%
SOMERVILLE	5,049,679	18.5%	10,496,375	-1.1%	15,546,054	4.5%
STONEHAM	2,439,772	29.3%	3,254,211	0.6%	5,693,983	11.2%
WALTHAM	5,930,211	14.5%	9,386,564	-0.3%	15,316,775	5.0%
WATERTOWN	2,611,708	34.0%	4,261,931	-1.2%	6,873,638	9.7%
WINTHROP	1,203,104	19.4%	2,272,839	1.6%	3,475,943	7.1%
TOTAL	\$ 139,943,329	18.0%	\$ 228,583,808	0.4%	\$ 368,527,137	6.4%
Sewer and Partial Water Customers						
CANTON	1,697,027	13.8%	2,922,242	0.7%	4,619,268	5.2%
NEEDHAM	360,859	-54.5%	4,703,106	-0.3%	5,063,965	-8.1%
STOUGHTON	317,742	102.1%	3,361,185	1.1%	3,678,927	5.7%
WAKEFIELD	1,464,034	18.6%	4,147,923	-2.1%	5,611,957	2.6%
WELLESLEY	389,356	56.8%	4,065,388	1.0%	4,454,744	4.2%
WINCHESTER	842,608	34.4%	3,023,212	0.1%	3,865,820	6.0%
WOBURN	1,798,507	37.2%	7,884,712	1.1%	9,683,219	6.3%
TOTAL	\$ 6,870,133	17.2%	\$ 30,107,767	0.3%	\$ 36,977,900	3.0%
Sewer-Only Customers						
ASHLAND			1,537,530	4.4%	1,537,530	4.4%
BEDFORD			2,404,061	-0.1%	2,404,061	-0.1%
BRAINTREE			5,961,287	1.6%	5,961,287	1.6%
BURLINGTON			3,491,041	1.7%	3,491,041	1.7%
CAMBRIDGE			15,987,460	-0.2%	15,987,460	-0.2%
DEDHAM			4,397,083	1.0%	4,397,083	1.0%
HINGHAM			1,170,032	2.4%	1,170,032	2.4%
HOLBROOK			1,141,466	1.3%	1,141,466	1.3%
NATICK			3,964,662	2.3%	3,964,662	2.3%
RANDOLPH			4,048,582	0.7%	4,048,582	0.7%
READING			3,033,626	0.4%	3,033,626	0.4%
WALPOLE			2,439,445	-1.2%	2,439,445	-1.2%
WESTWOOD			1,903,321	-0.9%	1,903,321	-0.9%
WEYMOUTH			8,182,876	1.7%	8,182,876	1.7%
WILMINGTON			1,855,834	1.7%	1,855,834	1.7%
TOTAL			\$ 61,518,305	0.9%	\$ 61,518,305	0.9%
Water-Only Customers						
LYNNFIELD	364,096	36.9%			364,096	36.9%
MARBLEHEAD	1,552,210	22.5%			1,552,210	22.5%
NAHANT	300,418	20.8%			300,418	20.8%
SAUGUS	2,652,946	17.1%			2,652,946	17.1%
SOUTHBOROUGH	572,445	26.0%			572,445	26.0%
SWAMPSCOTT	1,528,376	11.8%			1,528,376	11.8%
WESTON	1,268,980	27.0%			1,268,980	27.0%
TOTAL	\$ 8,239,472	20.0%			\$ 8,239,472	20.0%
Partial Water-Only Customers						
LYNN	176,814	-16.3%			176,814	-16.3%
MARLBOROUGH	2,883,257	28.8%			2,883,257	28.8%
NORTHBOROUGH	703,425	238.5%			703,425	238.5%
PEABODY	511,758	46.3%			511,758	46.3%
TOTAL	\$ 4,275,255	42.2%			\$ 4,275,255	42.2%
SYSTEMS TOTAL	\$ 159,328,189	18.6%	\$ 320,209,880	0.5%	\$ 479,538,069	5.9%

Revenue and Expenditure Trends

Because MWRA is required by its Enabling Act to balance its budget and to establish annual assessments to cover all expenses, revenue must increase in concert with the growth in expenses each year. Member community assessments are the largest source of funds; the amount required in any year is the difference between MWRA expenses and other revenue sources, most notably investment income and previously debt service assistance from the Commonwealth (which directly reduced debt service expense).

MWRA regularly updates its estimates of anticipated revenues and expenses over a multi-year planning horizon. These planning estimates provide a context for budget discussions and a planning tool for MWRA and those affected by its rate revenue requirements and also allows MWRA to consider multiple-year rates management implications and strategies as it evaluates alternative capital and operating budget decisions.

The table below and Appendix E (in more detail) present future rate revenue requirements for FY07 through FY15.²

	Estimates of Future Rate Revenue Requirements (\$ in Millions)								
	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
RATE REVENUE	\$ 516.9	\$ 557.8	\$ 600.5	\$ 647.9	\$ 675.8	\$ 704.1	\$ 731.6	\$ 732.7	\$ 739.1
RATE REVENUE INCREASE	7.9%	7.9%	7.7%	7.9%	4.3%	4.2%	3.9%	0.2%	0.9%

Increasing debt service to finance the Capital Improvement Program is the most important factor driving estimates of future budget increases. Over the past seven years MWRA's tax-exempt commercial paper program, debt refinancings, federal grants, SRF loans, and Commonwealth debt service assistance have mitigated the impact on ratepayers of new capital spending. However, new water system

improvements, for which there are fewer non-ratepayer sources of funding, and the impact of recent financing strategies (i.e. restructuring debt to defer the repayment of principal) will increase MWRA capital financing costs over the next several years.

MWRA employs rates management tools where available (i.e. extended maturities on future borrowings, variable rate debt, and increased use of tax-exempt commercial paper) to help cushion and smooth the growth in capital financing expenses. Despite these initiatives, the size of the capital program will unavoidably continue to drive increases in community assessments.

The second largest budget growth factor is inflation of base operating costs. The estimated \$47 million increase in direct expenses from FY06 to FY15 is primarily the result of an assumed inflation rate of 2.5% annually. In addition, over the next ten years there will be an increase in direct expenses as a result of capital improvement projects. The largest increase will be for operation of new facilities. The Walnut Hill Water Treatment Plant, scheduled to reach full operation in FY05, will have an estimated incremental cost of \$3 million in FY06. Startup and operation of the Union Park Detention and

Treatment facility, the Reserved Channel CSO facility, and associated remote odor control facilities have incremental impacts between FY06 and FY11. Improvements to increase remote monitoring and control of wastewater facilities are expected to result in decreased operating costs in FY06 and FY08. The anticipated increases and decreases in costs associated with these capital improvements are shown on Page I-29.

² See footnote on Page I-2, referring to the adjustment for CVA revenue.

MWRA's planning estimates are projections based on a series of assumptions about future spending (operating and capital), interest rates, inflation, and other factors. The assumptions include:

- Direct expense inflation rate of 2.5%.
- CIP inflation rate of 2.5%.
- Capital spending based on 85% of the CIP expenditure forecast with 10% (two-thirds of the 15% reduction) added back three years later.
- Long-term fixed rate debt issues with 40-year terms and 6% interest rates.

MWRA uses the planning estimates to present a picture of what future rate increases might be and to test the impact of changes to assumptions. The planning estimates are not predictions of rate increases; rather, they provide the context and framework for the policy decisions that actually shape future rate revenue requirements and increases.

The planning estimates generally use conservative assumptions to ensure that MWRA rate increases will not be more than projected. The use of conservative assumptions also helps communities plan for future payments to MWRA. Historically, MWRA rate increases have been less than projected as MWRA and the Advisory Board focused on a particular year.

There are several areas where differences from planning estimate assumptions may alter projected increases:

- Lower than anticipated borrowing rates or higher than expected investment income rates.

- The planning estimates do not factor in any positive year-end variances.
- More opportunities for SRF borrowing than expected; a dollar borrowed through the SRF at 2% replaces the need to borrow a dollar long-term at an assumed 6%.
- Debt refinancing opportunities.
- Capital spending.
- Growth in direct expenses, greater than current assumptions of 2.5% is an area of increased concern. Many of the savings in prior years through staffing reductions, optimization of operations, and scope revisions to professional services are already reflected in the budget. More importantly, going forward the MWRA is faced with a growing need to maintain its facilities and ensure that adequate funding is available.

Managing rate increases in the coming years is likely to involve tradeoffs between smaller increases in the upcoming fiscal year and significantly larger increases in subsequent years.

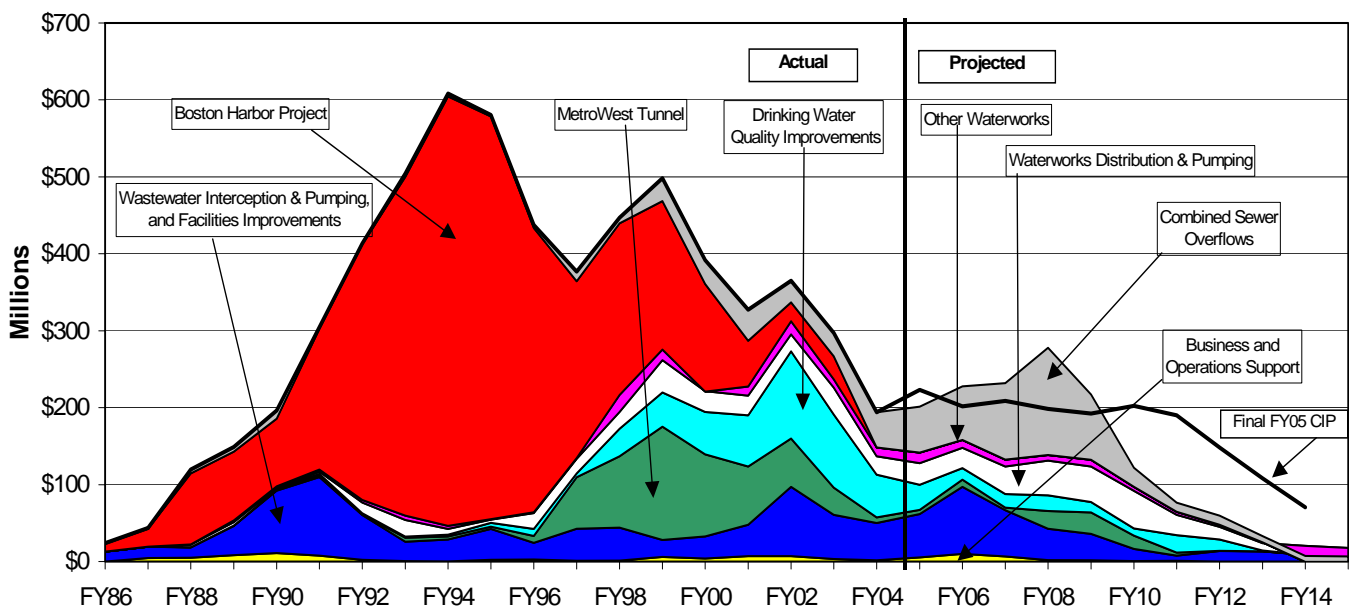
CAPITAL IMPROVEMENT PROGRAM

Each year MWRA prepares a ten-year plan for capital spending. After review and comment by the Advisory Board, the Board holds hearings on the capital plan to discuss recommendations and changes by the Advisory Board and staff before approving the budget in June. The budget remains in effect for one year before the Board approves an updated budget. MWRA divides the CIP into three program areas: Wastewater, Waterworks, and Business and Operations Support. Program categories are discussed further within this document. MWRA's entire proposed capital budget, including detailed expenditure forecasts and program descriptions, is available online at www.mwra.com.

MWRA's sewage treatment system has undergone a nearly complete transformation under the federally mandated 11-year, \$3.8 billion Boston Harbor Project. The project, which was completed in 2001, included: a new sludge-to-fertilizer facility; a new Deer Island Treatment Plant with primary and secondary treatment capabilities; a new 5-mile Inter-Island Tunnel that tied together two separate sewer systems (North and South) into one; and a new 9.5-mile Effluent Outfall Tunnel to discharge treated wastewater away from shallow Boston Harbor waters and into the deeper waters and stronger currents of Massachusetts Bay. MWRA's water system has been a more recent focus of major investment. MWRA's Integrated Water Supply Improvement program is a 10-year, \$1.7 billion series of projects that consists of aggressive watershed protection, modernized treatment facilities, and distribution system improvements including construction of covered storage facilities and pipeline rehabilitation. It is approaching 98% complete.

The graph below highlights major capital improvement spending, both completed (actual) and remaining (projected). See Figure 1 below.

MWRA CAPITAL PROGRAM FY86-15



Overview

In June 2003, the Board of Directors adopted the Final FY04 CIP, set a spending limit (cap) of \$1.1 billion for fiscal years 2004-2008 and identified planned spending of \$530 million for fiscal years 2009-2013. The proposed CIP projects total spending of \$1.1 billion for fiscal years 2004-2008, spending of \$530 million for fiscal years 2009-2013 and net spending of \$16 million for fiscal years 2014-2015.

Table 1

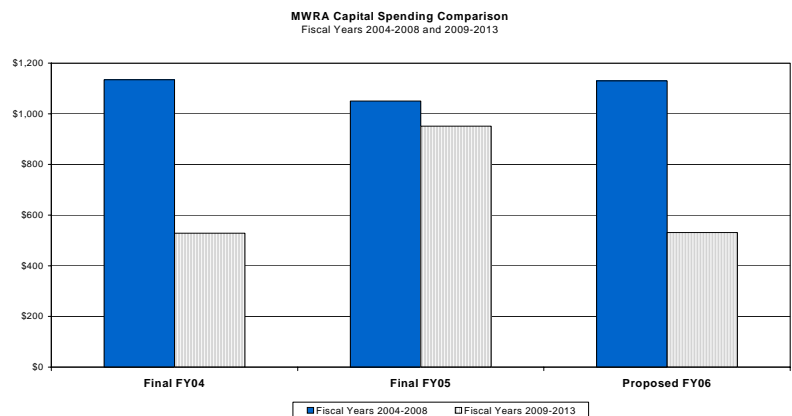
Comparison of Capital Spending by CAP Calculation

Final FY04 to Proposed FY06 CIP

Projected CAP Spending	FY04	FY05	FY06	FY07	FY08	Total FY04-08
Final FY04 - "Hard Cap"	\$ 250.9	\$ 203.5	\$ 215.2	\$ 250.1	\$ 214.8	\$ 1,134.5
Proposed FY06 CIP	\$ 193.3	\$ 200.4	\$ 220.3	\$ 229.8	\$ 286.1	\$ 1,129.8
\$ Change	\$ (57.6)	\$ (3.2)	\$ 5.1	\$ (20.2)	\$ 71.2	\$ (4.7)
% Change	-23.0%	-1.6%	2.4%	-8.1%	33.2%	-0.4%

The adjustments to capital projects presented in the proposed FY06 capital budget comply with the total capital spending limit set by the Board for fiscal years 2004-2008. However, projected spending in fiscal year 2008 exceeds the 20% change limit. Annual spending within the five-year period may vary within plus or minus 20% of the initial budget amounts as long as the five-year total is not exceeded. In the event an annual cap limit is exceeded, the MWRA may request approval to exceed the limit for an individual fiscal year.

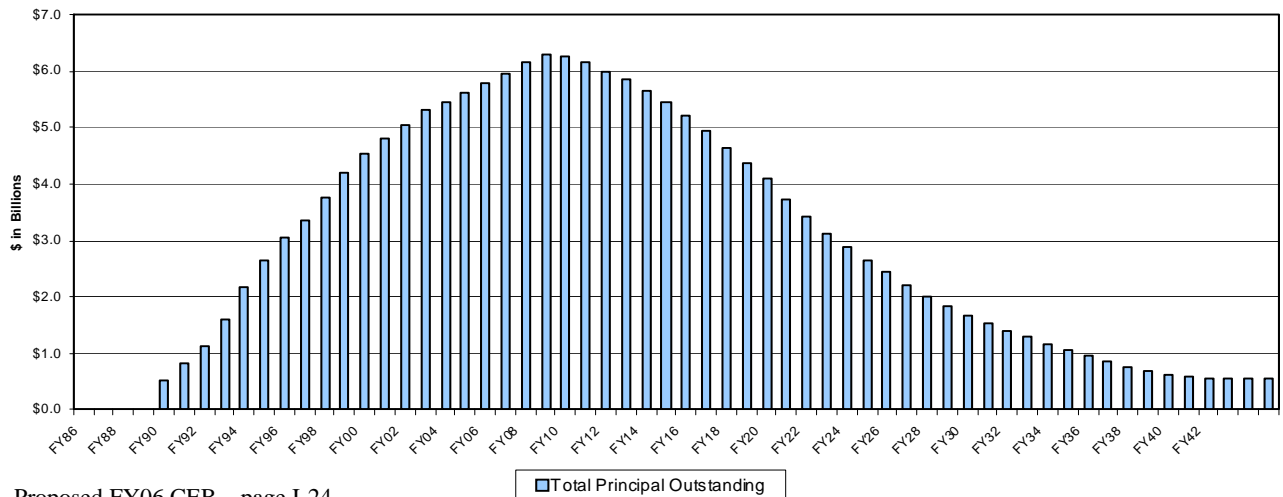
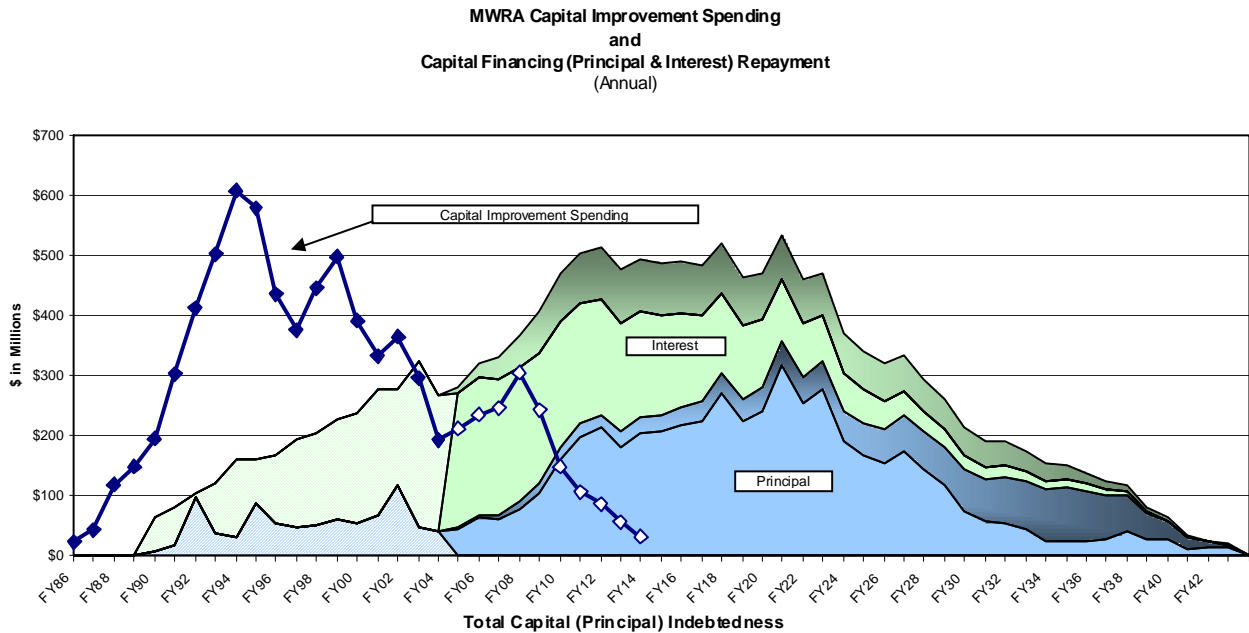
The Proposed FY06 CIP eliminates \$420 million of planned spending between fiscal years 2009-2013 and an additional \$84 million for fiscal years 2014-2015 compared to the FY05 CIP, resulting in the elimination or down-scaling of a number of projects presented in previous capital improvement programs. Proposed spending for fiscal years 2009-2013, through further project eliminations, matches total capital spending levels identified in the FY04 CIP, the same time the cap for FY04-08 was set. As compared to the FY05 CIP, it is a significant reduction. See adjacent bar chart.



The proposed capital budget attempts to address a necessary reality that the debt service costs associated with the capital improvement program are a significant burden to MWRA's ratepayers and the major contributor to rate increases in future years. Budgeted debt service to support capital improvements already completed since MWRA's inception, comprise 57% of total expenses for FY05 (see insert). This is further compounded by the significant reduction in the amount of debt service assistance received from the Commonwealth, as well as the continued uncertainty regarding the amount and actual receipt of debt service assistance.

FY2005 Expenses		
Total Expenses		
before Debt Service Offsets	\$ 501.4	
Less:		
Prior Year Variable Savings	(1.5)	
Current Year Variable Savings	(7.3)	
Sub-Total Net Expenses	\$ 492.6	
Capital Financing	282.0	57%
Direct Expenses	176.0	36%
Indirect Expenses	34.6	7%
TOTAL EXPENSES	\$ 492.6	100%

The change in capital spending presented in the proposed CIP moves the MWRA toward reducing its overall debt burden. By fiscal year 2010, MWRA's total indebtedness will begin to



decline as the amount of principal being paid on outstanding debt exceeds new capital spending.

The full impacts, risks, and potential consequences as a result of the change in capital plans presented in the proposed CIP must continue to be evaluated and weighed against system needs. The importance of master planning efforts already underway and opportunities to restructure existing debt and balance new capital borrowing to limit increases to the ratepayers are only reinforced by the changes presented in the proposed capital budget.

Proposed FY06 Capital Highlights

The proposed total spending of \$1.1 billion for fiscal years 2004-2008, and spending of \$530 million for fiscal years 2009-2013, supports the initiatives discussed below.

Wastewater System Improvements

The Wastewater System Improvements program area consists of 42 projects in the five program categories listed below.

Capital Improvement Program Expenditure Summary Proposed FY06 CIP \$ in Millions											
Program Area	Total Cost	Payments Thru FY03	Balance	FY04	FY05	FY06	FY07	FY08	5-Year FY04-08	5-Year FY09-13	Beyond FY13
Wastewater System Improvements	1,522.9	664.3	858.6	92.2	107.2	126.1	140.0	157.5	623.0	337.3	43.3
Interception & Pumping	500.0	342.5	157.5	31.9	26.1	41.0	35.6	16.2	150.8	21.8	0.6
Treatment	139.3	10.2	129.1	4.0	12.4	14.3	13.3	15.5	59.6	53.7	29.0
Residuals	67.7	56.6	11.1	8.9	1.4	0.0	0.0	0.0	10.4	0.0	0.3
CSO	747.0	205.3	541.7	45.9	59.8	65.7	90.2	124.3	385.8	247.2	18.8
Other Wastewater	68.9	49.7	19.2	1.5	7.5	5.1	0.9	1.5	16.5	14.7	-5.4

Interceptor Sewers and Pumping. The Authority is undertaking, and in some cases has completed, several major projects to rehabilitate, extend and increase the capacity of the interceptor system and its supporting facilities. These projects are necessary because the assets are either approaching or in some cases have surpassed their useful lives, or because their capacity is not adequate to serve the existing or projected service area populations. As they are completed, the new facilities alleviate sewer surcharging and overflow problems. The interceptor sewer and pumping projects total approximately \$500 million, of which approximately \$342.5 million was expended through FY03 and approximately \$150.8 million is expected to be expended during the 5-year period ending FY08. The most significant project is the Braintree-Weymouth Relief Facilities project, which includes a deep rock tunnel, two new pump stations, and new interceptors. As of January 1, 2005, the tunnel is 100% complete and overall the project is 80.8% complete. When major portions of the project are completed in FY05, the project will provide capacity for peak flows from Braintree, Hingham, Holbrook, Randolph, Weymouth, and sections of Quincy. The entire project is expected to be completed in FY07.

Treatment and Residuals. As the new Deer Island treatment facilities have become operational, plant staff have assumed responsibility for maintenance and ongoing capital improvements. The Proposed FY06 CIP includes \$139.3 million for these improvements,

including \$56 million for equipment and system replacement and upgrades over the next ten years. These improvements are funded through the Deer Island Treatment Plant Asset Protection project. The \$56 million amount is an estimate that is refined annually, as additional operational and maintenance information becomes available. To accommodate increased sludge volumes generated by secondary treatment and to increase plant efficiency, the Authority has completed modification of four existing processing trains and added two new trains to its sludge processing facilities in Quincy. Final construction work at the processing plant was completed in December 2001.

Combined Sewer Overflows. Discharges of combined wastewater and storm water runoff from 63 CSO outfalls in the Authority's system and four of the service area community systems (Boston, Cambridge, Chelsea and Somerville) impact water quality in the Charles, Mystic and Neponset Rivers and in Boston Harbor. Pursuant to a 1987 stipulation entered in the Clean Water Act Case, the Authority has responsibility for developing and implementing a long-term plan for CSO control at all locations. In the most recent assessment, the Authority completed its Final CSO Facilities Plan and Environmental Impact Report based on the CSO Conceptual Plan. The Final CSO Facilities Plan comprises 25 site-specific projects, including such measures as sewer separation, interceptor improvements, upgrades of existing CSO treatment facilities, new CSO facilities and storage. Schedule Six in the Federal Court Order ("Schedule Six") includes more than 50 milestones directing the design and construction of the projects. The Proposed FY06 CIP includes \$747.0 million for planning, design and construction costs of these projects. Expenditures through FY03 total \$205.3 million with additional spending of \$385.8 million projected for the period FY04 through FY08.

Fourteen of the 25 mandated projects are complete, and five additional projects are well into construction. Portions of two of these additional projects, the Cambridge/Alewife Brook Sewer Separation project and the East Boston Branch Sewer Relief project, have been constructed, but the remaining portions are subject to ongoing engineering reassessments. The plans for CSOs affecting the Charles River, Upper Mystic River, and Alewife Brook areas have received approval through variances from water quality standards, pending the outcome of ongoing additional studies to determine whether higher levels of CSO control are cost beneficial. In 2004, DEP issued the latest extensions to these variances to the fall of 2007. Additional facilities may be required to address the CSO objectives outlined by regulatory agencies for these areas.

The remaining six projects are in the design or planning stage. MWRA plans to seek additional changes to milestones in Schedule Six to account for recent revised plans for North Dorchester Bay, the Reserved Channel, Alewife Brook, and East Boston. For these areas, MWRA, in cooperation with BWSC and Cambridge, completed project reassessments in the period 2003-2004. For North Dorchester Bay, the revised plan is to construct a large storage tunnel, a small dewatering facility and related stormwater control conduits. A new Reserved Channel plan calls for sewer separation. For Alewife Brook, MWRA and the City of Cambridge recommended a new plan in 2003 that expanded the sewer separation project to overcome significant stormwater system problems that compromised the original plan's ability to meet CSO control goals.

DEP and EPA have approved most of the CSO facilities plan and have made most of the regulatory determinations necessary for the plan to comply with state water quality standards, including revising water quality standards for certain water bodies.

Waterworks System Improvements

Capital projects for the Waterworks System are designed to upgrade and extend the useful life of the water supply, transmission and distribution systems in order to assure a satisfactory and consistent level of water quality and distribution throughout the Waterworks System. There are currently 41 projects in the four program categories several of which are mandated by federal regulatory requirements. The total estimated expenditures for the Waterworks projects for FY04 through FY08, are approximately \$421.1 million. Approximately \$340.2 million in additional expenditures is forecast through FY13, reflecting significant capital investment in the Waterworks System. The major projects in the program are summarized below.

Capital Improvement Program Expenditure Summary												
Proposed FY06 CIP												
\$ in Millions												
Program Area	Total Cost	Payments Thru FY03	Balance	FY04	FY05	FY06	FY07	FY08	5-Year FY04-08	5-Year FY09-13	Beyond FY13	
Waterworks System Improvements	1,866.7	1,275.6	591.1	100.1	89.1	75.0	65.3	91.6	421.1	340.2	-12.3	
Drinking Water Quality Improvements	578.6	386.3	192.3	55.7	32.8	13.8	16.4	18.4	137.1	72.9	0.8	
Transmission	752.1	619.4	132.7	9.2	14.6	27.0	7.4	24.9	83.1	74.4	0.0	
Distribution & Pumping	506.1	198.6	307.5	23.8	28.0	24.2	32.5	41.1	149.7	165.3	24.6	
Other Waterworks	29.9	71.3	-41.4	11.3	13.7	10.0	9.0	7.2	51.2	27.5	-37.7	

Drinking Water Quality Improvements. The Authority is implementing an Integrated Water Supply Improvement Program for drinking water improvement. This program consists of aggressive watershed protection, modernized treatment facilities, and distribution system improvements including construction of covered storage facilities and pipeline rehabilitation. This program is based on current engineering practices, up-to-date technology and drinking water standards established under state and federal laws. Pursuant to an administrative consent order entered into with DEP and DCR with respect to the enforcement of the SDWA and the rules promulgated thereunder, the Authority is constructing the new Walnut Hill Water Treatment Plant. The plant will treat water delivered from the Wachusett Reservoir (including water transferred to the Wachusett Reservoir from the Quabbin Reservoir) through ozonation and chloramination. Construction of the treatment plant began in November 2000. When construction and testing are completed in 2005, the Walnut Hill Water Treatment Plant will be able to treat 405 mgd of drinking water.

Because existing uncovered distribution reservoirs are vulnerable to airborne contaminants and allow the growth of bacteria plants and algae, the Authority is eliminating the use of open distribution reservoirs by constructing covered storage facilities. These projects, which have been completed, replace active distribution storage of approximately 2.4 billion gallons of open reservoirs with more than 200 million gallons of covered storage downstream of the Walnut Hill Water Treatment Plant. Total estimated costs for drinking water quality improvements in the Proposed FY06 CIP are approximately \$578.6, of which \$435.0 million is for water treatment, and \$143.6 million is for covered storage facilities and watershed protection. Approximately \$386.3 million was expended through FY03 for these projects, and approximately \$137.1 million is expected to be expended during FY04 through FY08.

Transmission. Critical needs of the Authority's aqueduct system include correction of structural conditions to reduce leakage, and provision of redundancy for critical sections of the transmission system, such as the Hultman Aqueduct and the Southborough Tunnel, where

transmission has depended on a single conduit. The estimated costs for transmission projects included in the Proposed FY06 CIP total \$752.1 million, of which approximately \$619.4 million was expended through FY03, and approximately \$83.1 million is expected to be expended during Fiscal Years 2004 through 2008.

The most significant of the Authority's transmission projects is the construction of the MetroWest Water Supply Tunnel, a 17.6-mile long, 14-foot diameter deep rock tunnel running from Marlborough to Weston. The MetroWest Water Supply Tunnel is critical to provide an appropriate level of transmission redundancy and is a key element of the planning, design and eventual operation of the water treatment plant and covered distribution storage projects described above. Construction of the tunnel, which began in June 1996, is complete and the tunnel was placed in service in November 2003.

Distribution and Pumping. The Proposed FY06 CIP identifies 22 separate projects for rehabilitation, upgrade or new construction of pipelines, pumping facilities, valves and meters. These projects total approximately \$506.1 million, of which approximately \$198.6 million was expended through FY03, and approximately \$149.7 million is expected to be expended during FY04 through FY08. Over the next 30 years, approximately 200 miles of unlined pipe will be rehabilitated or replaced at a rate of approximately seven miles of pipe each year. These projects will provide improved reliability and safety of water delivery.

Other Waterworks Projects. These projects include expansion of the Waterworks System's central monitoring system, various system rehabilitation projects and two local community waterworks assistance programs. The total cost of these projects as contained in the Proposed FY06 CIP is approximately \$29.9 million.

CIP Impact on the Current Expense Budget

In addition to the annual financing costs included in the Current Expense Budget, the Capital Improvement Program affects the annual operating budget when capital facilities come on-line and require adjustments to operating budgets. In prior years, completion of the Deer Island Treatment Plant and the residuals processing facility in Quincy resulted in significant increases in operating expenses. The largest future CEB increase results from a full operating year for the new Walnut Hill Water Treatment Plant which is expected to start up in FY05. Other increases result from the cost of operating CSO facilities beginning in FY06 and again in FY09 and FY11. Startup of the Braintree-Weymouth Relief Facilities results in anticipated decreases in FY09 and FY10. Projects to automate wastewater central monitoring result in anticipated decreases in FY08 and FY09.

The table below summarizes, by program area, the estimated incremental costs and savings in MWRA's Current Expense Budget from FY07 through FY16 as a result of the capital program.

Incremental Costs and Savings from CIP Projects											
\$ in thousands											
	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	Cumulative
Wastewater	619	-49	-80	-169	459	0	0	0	0	0	780
Waterworks	250	0	0	49	-49	0	0	0	49	0	299
Business Operations and Support	0	0	0	0	0	0	0	0	0	0	0
TOTAL (excluding inflation)	869	-49	-80	-120	410	0	0	0	49	0	1,079
Inflation	22	-3	-6	-12	54	0	0	0	12	0	67
TOTAL (including inflation)	890	-52	-86	-132	463	0	0	0	61	0	1,145

Capital Financing and Grant Revenues

MWRA has used two primary sources of funds to finance its capital program: proceeds from borrowing and grant funds. Borrowing includes the issuance of fixed and variable rate revenue bonds; borrowing from the Commonwealth's Water Pollution Abatement Trust (also known as the State Revolving Loan Fund or SRF), and a tax-exempt commercial paper program.

In the past, federal and state grant receipts were a significant source of funds, totaling approximately \$1.1 billion through FY05. Grant receipts have diminished in recent years with MWRA receiving \$4.6 million in FY03, \$200,000 in FY04 and \$1.1 million in FY05. MWRA does not anticipate receiving grant funds in the near future because they have not been available for major drinking water and sewer construction projects.

Over the next three fiscal years MWRA expects to fund \$737 million in capital projects in the following way: \$713 million will be financed using a combination of long-term debt, SRF loans, and commercial paper, and \$24 million will be funded with current revenues.

MWRA Organization and History

The MWRA Enabling Act

MWRA was created by legislative act in 1984, and inherited the Sewerage and Waterworks Divisions of the Commonwealth of Massachusetts Metropolitan District Commission (MDC). In July 1985, MWRA assumed control of the water and sewer systems, including facilities, properties, and the right to utilize water withdrawn from system reservoirs. The Commonwealth, under the management of the MDC Watershed Management Division (now the Department of Conservation and Recreation – Division of Watershed Management), retained ownership of real property, including the reservoirs and watersheds.

In 1987, the legislature transferred responsibility to operate and maintain the Clinton Wastewater Treatment Plant from the Commonwealth to MWRA. The Enabling Act also established the MWRA Advisory Board to represent the cities and towns in the service area. The Advisory Board appoints three members of the MWRA Board of Directors, approves the extension of water and sewer services to additional communities, and reviews and makes recommendations on MWRA's annual Current Expense Budget and Capital Improvement Program.

History and Accomplishments

In 1985, the U.S. District Court for Massachusetts found MDC in violation of numerous aspects of the federal Clean Water Act, and the responsibility for those violations passed to MWRA as successor to MDC. The court issued a detailed compliance schedule for actions to be taken by MWRA to achieve and maintain compliance with the Clean Water Act.

MWRA achieved all of the milestones in the schedule related to the construction of treatment

facilities on Deer Island, and is working to achieve milestones with respect to implementation of its long term CSO control plan. These achievements have made noticeable, measurable improvements in the quality of Boston Harbor and its beaches.

MWRA is also working to achieve compliance with an extensive consent order issued by the Massachusetts Department of Environmental Protection (DEP) mandating the steps necessary to achieve required improvements to the MWRA water system.

Since taking over operation and maintenance of the water and sewer systems from MDC, MWRA has increased annual investment in the system infrastructure from an average of \$11 million per year to a peak average of more than \$435 million per year between (FY90 to FY04). This investment has greatly improved the operating efficiency of the existing water and sewer systems, protecting fresh water sources and improving the water quality in Boston Harbor.

MWRA Rates Management

Between FY96 and FY02 MWRA limited rate revenue increases to an average of 3.6% annually as a result of debt service assistance from the Commonwealth, federal grants to support the Boston Harbor Project, lower borrowing costs, use of financing tools that delayed costs to later years, a favorable bid climate for construction projects, and aggressive efforts to control capital and operating costs. In FY03, with the elimination of debt service assistance, MWRA had a 6.9% rate increase as part of an overall strategy in response to the loss. The FY04 rate increase was 3.9% and the rate increase for FY05 is 3.9% (Subsequent to MWRA's approval of its budget for FY05, the Legislature overrode the veto for debt service assistance. MWRA expects its share of the statewide appropriation to be \$8.7 million, which reduces the FY05 rate increase

from 3.9% to 1.9% compared to the FY04 budget.). In the planning estimates included with the CEB the rate revenue requirement, assuming debt service assistance is not restored, increases by 6.7% annually for the next three years.

With the prospect of higher rate increases in the future, MWRA must ensure that its operating and capital costs are kept to a minimum, and that every dollar adds to the value of water and sewer services. MWRA has taken several steps toward this end.

- First, MWRA works to limit increases in ongoing operating costs. The proposed FY06 direct expense budget is less than spending in FY00. Costs to operate new facilities, higher utility costs and increased maintenance have been offset by reduction in the workforce and controlling and optimizing chemical use.
- Second, MWRA seeks to maximize savings in the deregulated electricity market, and now competitively procures most of its power needs.
- Third, MWRA is working to reduce labor costs wherever appropriate. Consistent with the recommendations of the Black & Veatch study, the proposed budget assumes a staffing level of 1,270 for fiscal year 2006. This staffing level represents a decrease of more than 500 filled positions (or 28%) from peak staffing in 1997, an average annual reduction of nearly 60 positions.
- Fourth, MWRA uses a variety of financing tools including variable rate debt, tax-exempt commercial paper, interest rate swaps, refundings, and tender offers to take advantage of particular market conditions and appropriate maturity schedules to reduce annual debt service costs.

- Fifth, MWRA continues to aggressively seek additional SRF assistance.
- Finally, MWRA uses rate stabilization funds and bond redemption funds in the context of its longer-term rate smoothing strategy.

In addition to carefully managing operating costs, MWRA will continue to explore additional financing strategies to manage assessment increases in a fiscally responsible manner.

MWRA Organization

MWRA has five divisions. Each division provides operations or support services to carry out MWRA's activities under the direction of the Executive Office. The frontispiece of this document presents MWRA's organizational structure.

The **Executive Office** provides centralized MWRA management, direction, and policy development. The budget includes funds for the Office of the Executive Director, the Board of Directors, the Advisory Board, and other advisory committees. MWRA recently consolidated its planning functions into a new Planning and Coordination Department reporting to the Executive Office.

The **Planning and Coordination Department** provides decision support on planning, policy and operations matters. It provides regulatory, public policy and public health advocacy for MWRA's drinking water and wastewater programs and administers financial assistance programs to improve the infrastructure of member communities.

The **Operations Division** operates the water and wastewater treatment systems; the water transmission and distribution system; the wastewater collection, transport, and combined sewer overflow (CSO) systems; and the residuals processing facility. It also provides laboratory

and engineering and construction services; enforces sewer use regulations and seeks to limit the discharges of toxic materials; manages environmental studies of Boston Harbor and Massachusetts Bay; and monitors water quality.

The **Finance Division** is responsible for budgeting, rate setting, accounting, grants management, risk management, and treasury activities; and securing financing to support the capital improvement program.

The **Law Division** provides legal counsel to all divisions on compliance with federal and state law, real estate matters, labor and employment law, litigation, and construction issues. Division attorneys provide or supervise through outside counsel the representation of MWRA in all litigation.

The **Support Services Division** oversees the central functions of communications and community relations, real property and environmental management, human resources, affirmative action, procurement, materials warehousing, facility security, occupational health and safety, internal audit, fleet services, computer system development and management, facilities and office supplies management, library and records management, and mail and employee shuttle services. The division also manages the Fore River Staging Area (FRSA) in Quincy, the Chelsea Facility and the Charlestown headquarters.

Accounting Principles (GAAP) and, commencing with the annual reports for 1986, audited by independent certified public accountants. MWRA's audited financial statements at June 30, 2004 and 2003 are available online at www.mwra.com.

Statement of Financial Position

In accordance with its Enabling Act, each year MWRA submits annual reports to the Governor, the President of the State Senate, the House of Representatives, the Advisory Board, and the Chairs of the state Senate and House Committees on Ways and Means containing financial statements relating to its operations maintained in accordance with Generally Acceptable



Executive Office
Budget

EXECUTIVE OFFICE

Proposed FY06 Current Expense Budget EXECUTIVE DIVISION by Line Item						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 430,845	\$ 443,803	\$ 428,072	\$ 447,195	\$ 19,123	4.5%
OVERTIME	-	-	-	-	-	-
TRAINING & MEETINGS	36	39	3,975	2,600	(1,375)	-34.6%
PROFESSIONAL SERVICES	196,597	152,867	157,590	160,741	3,151	2.0%
OTHER MATERIALS	2,031	1,818	2,460	1,960	(500)	-20.3%
OTHER SERVICES	457,060	470,137	450,081	474,107	24,026	5.3%
TOTAL	\$ 1,086,569	\$ 1,068,664	\$ 1,042,178	\$ 1,086,603	\$ 44,425	4.3%

Proposed FY06 Current Expense Budget EXECUTIVE DIVISION by Department						
DEPARTMENT	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
EXECUTIVE OFFICE / BOARD OF DIRECTORS	\$ 481,349	\$ 448,779	\$ 438,477	\$ 455,445	\$ 16,968	3.9%
ADVISORY BOARD / OTHER COMMITTEES	605,220	619,885	603,701	631,158	27,457	4.5%
TOTAL	\$ 1,086,569	\$ 1,068,664	\$ 1,042,178	\$ 1,086,603	\$ 44,425	4.3%

The Executive Office provides executive management and guides the implementation of MWRA policies established by the Board of Directors. It is responsible for developing and implementing specific goals and programs to achieve MWRA's primary mission of providing reliable and efficient water and sewer services, improving water quality, and for creating a framework within which all divisions can operate effectively. The Executive Office is also implementing a centralized MWRA-wide security program to preserve and protect MWRA facilities and systems and MWRA employees.

The Executive Office guides implementation of MWRA's Business Plan and ensures that all initiatives are in concert with MWRA's overall mission. At its September 17, 2003 meeting, the Board of Directors approved organizational changes to MWRA's planning functions. These changes consolidate separate planning activities mostly from the Operations and Finance divisions. The new unit will report to the Executive Director through a single Director of Planning and Coordination. Responsibility for the Combined Sewer Overflow (CSO) program, previously part of Operations Planning, will remain with the Operations Division.

Executive Office goals are to:

- Ensure delivery of reliable and cost-effective water and sewer services to customer communities.
- Ensure that water supply and wastewater collection and treatment preserve public health and protect natural resources.
- Foster regional economic development through the maintenance and upgrading of the area's water and sewer systems.

The Executive Office budget supports the Executive Director's Office (which includes the Board of Directors cost center) and the MWRA Advisory Board and Advisory Committees cost center. The Board of Directors formulates policies to guide MWRA actions and is responsible for major policy and fiscal decision-making. The MWRA

Advisory Board was established by the Enabling Act to serve as a "watchdog" for MWRA's customer communities. The Advisory Board makes recommendations to MWRA on annual expense budgets and capital improvement programs. In addition, the Advisory Board reviews and comments on MWRA reports, holds hearings on related matters, and makes recommendations to the Governor and the legislature. The other advisory committees supported by this budget are the Water Supply Citizens' Advisory Committee and the Wastewater Advisory Committee. The Executive Office budget accounts for less than 1% of the proposed FY06 direct expense budget.

Budget Highlights

- *\$161,000 for **Professional Services**, an increase of \$3,000 or 2% from the FY05 budget. The budget funds the Water Supply Citizens' Advisory Committee and the Wastewater Advisory Committee.*
- *\$470,000 for the MWRA Advisory Board staff and operating expenses, including space rental and general administrative office materials and supplies.*

PLANNING AND COORDINATION DEPARTMENT

Proposed FY06 Current Expense Budget PLANNING DIVISION by Line Item						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ -	\$ 1,202,514	\$ 1,692,358	\$ 1,721,360	\$ 29,002	1.7%
OVERTIME	-	180	-	-	-	-
TRAINING & MEETINGS	-	4,183	20,304	18,304	(2,000)	-9.9%
PROFESSIONAL SERVICES	-	-	20,000	20,000	-	0.0%
OTHER MATERIALS	-	1,348	164,975	153,975	(11,000)	-6.7%
OTHER SERVICES	-	251,692	166,303	148,236	(18,067)	-10.9%
TOTAL	\$ -	\$ 1,459,917	\$ 2,063,940	\$ 2,061,875	\$ (2,065)	-0.1%

As previously noted, MWRA recently consolidated its planning functions into a new Planning and Coordination Department that reports to the Executive Office. The Department provides regulatory, public policy and public health advocacy for MWRA's drinking water and wastewater programs. It provides decision support on planning, policy and operations matters, using a range of technical and analytic tools. Staff administer financial assistance programs to improve the infrastructure of member communities. The Department integrates staff efforts and coordinates MWRA activities related to system and capital planning, infrastructure renewal, and watershed management (in conjunction with the Commonwealth's Department of Conservation and Recreation, DCR); strategic business planning; agency-wide performance measurement; and industry research. The following functions comprise the Department's primary responsibilities:

Mapping, Modeling, and Data Analysis. Technical staff develop and maintain the Geographic Information Systems (GIS) for the water and wastewater systems, including integration of field and engineering records into GIS for access by planning, engineering, and operations staff; provide demand analysis and forecasting of water and wastewater flows for master planning and system operations; model reservoir operations, perform drought forecasting and planning, and evaluate system expansion requests; and develop and maintain water and sewer system models in support of master planning, system operations, and optimization.

System Planning and Renewal. Staff with expertise in engineering, planning and finance are responsible for water and wastewater system master planning, infrastructure needs assessment, and capital project development. This work is done in coordination with staff across MWRA. Planning and Coordination staff review and process system expansion requests, water supply agreements, and emergency connection requests. Staff also provide assistance to the Operations Division on project siting, environmental reviews, and permitting, including impacts on MWRA facilities from other agency projects, and assists in the development of strategies for long-term emergency risk reduction and preparation for MWRA facilities and systems.

Regulatory and Policy Matters. Staff work with various regulatory entities to promote rule-setting that protects the environment and promotes public health in a cost-effective way. Senior staff members activity work with industry associations and other groups with interests and agendas consistent with MWRA's to advance water and wastewater regulations that make environmental and economic sense. **Senior staff conduct strategic policy research on a broad range of topics** and staff conduct public health research, including outreach and water quality reporting and the annual Consumer Confidence Report (CCR). Staff also coordinate with DCR to ensure water protection.

Community Support Program. Staff are responsible for inflow/infiltration (I/I) and sanitary sewer overflows (SSO) policy development, implementation, and reporting, provide oversight of and reporting on MWRA leak detection regulations and demand management programs, and reporting on the portions of MWRA's NPDES permit related to demand management and flow limitation activities. Staff administer community assistance programs including

sewer inflow/infiltration financial and technical assistance, water pipeline rehabilitation financial assistance, water distribution systems Best Management Practices technical assistance, and water leak detection technical assistance.

Budget Highlights

- *\$1.7 million for **Wages and Salaries**, an increase of \$29,000 or 2% from the FY05 budget, primarily due to wages and salaries adjustments.*
- *\$154,000 for **Other Materials**, a decrease of \$11,000 from the FY05 budget, due to a decrease in the mailing and distribution cost of the federally mandated Consumer Confidence Report (CCR), without a lead insert.*
- *\$148,000 for **Other Services**, a decrease of \$18,000 from the FY05 budget due to the elimination of funds for the reprinting of the Five Year report and Water System map, as these are being produced in FY05. The proposed FY06 budget includes \$130,000 for the production of the CCR, for combined funding of \$240,000.*



Operations Division
Budget

OPERATIONS DIVISION

Proposed FY06 Current Expense Budget OPERATIONS DIVISION by Line Item						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 59,876,891	\$ 58,432,405	\$ 59,919,746	\$ 60,860,273	\$ 940,527	1.6%
OVERTIME	3,264,743	3,631,487	3,347,948	3,361,633	13,685	0.4%
FRINGE BENEFITS	75,499	84,769	79,927	79,262	(665)	-0.8%
WORKERS' COMPENSATION	3,145,492	(244)	-	-	-	-
CHEMICALS	6,674,253	6,190,167	6,913,154	7,021,658	108,504	1.6%
UTILITIES	16,071,081	17,337,465	18,161,523	22,042,684	3,881,161	21.4%
ONGOING MAINTENANCE	13,878,580	14,953,854	15,838,562	17,219,704	1,381,142	8.7%
TRAINING & MEETINGS	75,998	134,060	193,204	166,168	(27,036)	-14.0%
PROFESSIONAL SERVICES	5,493,100	4,797,618	4,841,022	5,076,882	235,860	4.9%
OTHER MATERIALS	2,284,366	3,852,233	3,301,794	2,643,147	(658,647)	-19.9%
OTHER SERVICES	15,106,669	15,627,752	15,165,695	15,041,492	(124,203)	-0.8%
TOTAL	\$ 125,946,672	\$ 125,041,566	\$ 127,762,575	\$ 133,512,903	\$ 5,750,328	4.5%

Proposed FY06 Current Expense Budget OPERATIONS DIVISION by Department						
DEPARTMENT	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
OPERATIONS ADMINISTRATION	\$ 6,528,592	\$ 4,388,375	\$ 3,715,982	\$ 3,035,243	\$ (680,739)	-18.3%
CSO PROGRAMS/ENERGY	2,803,473	1,401,931	950,968	976,268	25,300	2.7%
WASTEWATER TREATMENT	53,838,758	55,923,448	55,833,130	57,367,582	1,534,452	2.7%
FIELD OPERATIONS	45,562,263	46,608,310	50,475,116	55,763,939	5,288,823	10.5%
LABORATORY SERVICES	4,404,807	4,724,112	4,999,648	5,134,353	134,705	2.7%
ENQUAD	5,479,579	4,740,856	4,586,897	4,575,645	(11,252)	-0.2%
ENGINEERING & CONSTRUCTION	5,130,527	4,992,108	4,848,975	4,687,660	(161,315)	-3.3%
CAPITAL ENG & CONSTR.	2,198,673	2,262,426	2,351,861	1,972,213	(379,648)	-16.1%
TOTAL	\$ 125,946,672	\$ 125,041,566	\$ 127,762,575	\$ 133,512,903	\$ 5,750,328	4.5%

FY02-FY04 Actuals for the CSO Programs/Energy represent the former Operation Planning Department.

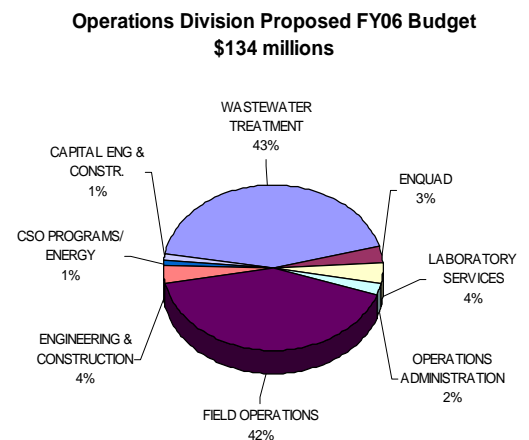
The Operations Division integrates wastewater and water system operations and maintenance, treatment, laboratory services, and engineering and construction functions, including oversight of the Combined Sewer Overflow (CSO) plan.

The Proposed FY06 Current Expense Budget and existing structure of the Operations Division is shown in the pie chart to the right and described below.

The **Wastewater Treatment Department**, which accounts for 43% of the Operations Division budget, operates and maintains the Deer Island and Clinton wastewater treatment plants and the Residuals Processing Facility at Fore River.

The **Field Operations Department**, which accounts for 41.8% of the Operations Division budget, is responsible for operating, maintaining, and metering the water and wastewater transport systems. The department also manages the water treatment and wastewater pretreatment functions.

Three departments in the Operations Division are responsible for the majority of the division's engineering and construction work.



The **Engineering and Construction Department (E&C)** manages and coordinates the planning, design, and construction of ongoing system improvements in the wastewater transport and treatment and water distribution systems. The **Capital Engineering and Construction Department (CECD)** is responsible for managing engineering, design and construction of the Integrated Water Supply Improvement Program (IWSIP), which includes the Walnut Hill Treatment Plant, the MetroWest Water Supply Tunnel, and seven covered storage facilities. CECD is also responsible for the planning, design, and construction of the program to rehabilitate MWRA's other water treatment, transmission and storage facilities as well as large water distribution mains. The **CSO/Energy Department** manages the CSO's, which includes long-term CSO central master planning and evaluation; CSO project permitting, community process, and engineering design; technical assistance during construction of MWRA managed CSO projects; oversight of community managed CSO design and construction activities; and start-up assistance for new CSO facilities. The department is also responsible for key Authority-wide energy initiatives including the procurement of competitive electricity supply. Operations is planning an organizational consolidation of the engineering and construction functions currently scheduled to be completed prior to the end of fiscal year 2005.

The **Environmental Quality Department (ENQUAD)** manages the monitoring of Boston Harbor and Massachusetts Bay water quality and oversees MWRA's compliance with its National Pollutant Discharge Elimination System (NPDES) permits.

The **Laboratory Services Department** supports various client groups in the Operations Division, in the Department of Conservation and Recreation, and in MWRA member communities, providing field sampling, laboratory testing and reporting services. Most of the testing is required to meet the strict guidelines of regulatory programs and permits including the Safe Drinking Water Act (SDWA) and MWRA's NPDES permits.

The **Operations Administration Department** provides oversight and general management support in the areas of finance, contract administration, personnel, and planning. The Administration Department budget also includes funds for MWRA vehicle purchases and division-wide memberships.

The Operations Division's goals are to:

- Plan, develop, implement, and operate efficient, reliable, and economical water treatment and delivery and wastewater transport and treatment systems.
- Ensure compliance with state and federal drinking water quality and wastewater discharge regulations including the SDWA, the Clean Water Act, and NPDES permits.
- Plan and implement rehabilitation of existing facilities and construction of new facilities including pipelines, pump stations, storage facilities, and treatment facilities on schedules that allow for sufficient system capacity and performance.
- Dispose of wastewater treatment by-products in a cost-effective and environmentally sound manner.

Major FY05 Year-To-Date Accomplishments

New Facilities Start-ups:

- Completion and activation of cell 3 at the Norumbega Covered Storage Tank in August 2004.
- Successful start-up of the new Braintree Weymouth Intermediate Pump Station in December 2004.
- Commencement of functional testing and vendor training of the new Walnut Hill Treatment Plant. The plant is scheduled to start-up in Spring 2005.
- Installation and acceptance of the majority (94%) of the new Wastewater Metering System.
- Brought in-house laboratory work for the Department of Conservation and Recreation, including operations of the Quabbin laboratory.
- Phase I design completion of the Wastewater SCADA system.

Engineering & Construction:

- Awarded 17 contracts valued at \$95 million. Major construction contracts include East/West Spot Pond Supply Mains Contract 3 (\$16.8 million), Braintree-Weymouth Replacement Pump Station (\$15.9 million), BOS019 CSO Storage Facility (\$10.5 million), Upper Neponset Valley Replacement Sewer Sections 685 and 686 (\$35.8 million) and Cummingsville Branch Sewer Replacement (\$4.2 million).
- Awarded three as-needed design contracts for total value of \$2 million as part of MWRA initiative to supplement existing engineering resources for specialized and/or complex engineering issues.
- Managed more than 70 Capital contracts resulting in more than \$85 million in spending through January 2005. Progress continued on key construction projects including the Walnut Hill Treatment Plant, Braintree-Weymouth Fore River Siphons, Union Park Detention and Treatment facility, and Weston Aqueduct Supply Mains contract 4 (Allston and Western Avenue Sewer). Commenced design of the CSO Program's North Dorchester Bay and Reserved Channel project.

Operations:

- Full compliance with National Pollutant Discharge Elimination System (NPDES) permit since April 2004 for both Deer Island and the Clinton treatment plants.
- Polymer system improvements at Deer Island resulted in polymer dosage reductions of 35% for the waste sludge operation and 22% reduction for the digested sludge operation YTD January 2005.
- Complied with the lead and copper rule required by Department of Environmental Protection (DEP) and Environmental Protection Agency (EPA) which required dosage increases for soda ash (+4%) and carbon dioxide (+12%).
- Field Operations staff addressed a number of water breaks and main line repairs this year such as East Boston and Somerville and assisted the Town of Norwood in isolating a water main break in December 2004.

- The Toxic Reduction and Control (TRAC) group continued the oversight of industries having difficulty meeting MWRA's mercury goals. During FY05 a settlement was reached with one large discharger and negotiations are continuing for three additional violators.

Maintenance:

YTD January 2005 the Operations Division spent \$8.7 million on maintenance of which \$4.7 million was for services and \$4.0 million for materials.

- Major projects completed YTD are: Dystor gas bag replacement in Deer Island, Ancillary Modifications - 3 (AM-3) consisting of a series of improvements to secondary clarifiers, Phase I of AM-1 gas system purge, major (5 year) maintenance of the steam turbine generators (STGs), boiler maintenance, HVAC system upgrade at Prison Point, and Belleview water piping project. Rehabilitation of the grit facility was also completed, resulting in more grit removal.
- Expanded Condition Monitoring program in FY05. Staff was trained in advanced laser and precision belt alignment, infrared camera use, and vibration monitoring.

Energy:

- Executed power procurement for Deer Island (six month contract starting December 1, 2004) and for FOD, Clinton and Support Services (21 month contract for smaller accounts and 33 months for larger accounts, commencing March 2005).
- During FY05 Deer Island continued to leverage its self-generation assets and participation in the competitive energy market to offset operating costs. The combined impact of participation in the Independent System Operators of New England (ISO-NE) price response program and the non-rate revenue from the sale of Renewable Portfolio Standards Program (RPS) resulted in net savings of \$1.1 million YTD January 2005.
- Deer Island was the recipient of two energy related awards: AMSA Operations Award for "Deer Island Comprehensive Energy Cost Reduction Program" and 2004 ISO New England Demand Response Achievement Award.

Environmental:

- Detailed review of NPDES permit issues; applications for renewal of Deer Island Treatment Plant (including CSOs) and Clinton permits to EPA and DEP submitted.
- Submission on time of all NPDES-required deliverables (DMRs, environmental monitoring reports).
- Successful implementation of modified monitoring plan, resulting in savings of approximately \$900,000 in FY05, including the first full year of in-house laboratory testing of water quality for the Harbor and Outfall Monitoring programs (HOM) required for Deer Island's NPDES permit.

Operations Division Budget Highlights:

- The Total Operations Division FY06 Proposed budget is \$133.5 million, which is \$5.8 million or 4.5% higher than the FY05 budget. Of the \$5.8 million increase \$3.0 million or 52% is new facilities related specifically to: Walnut Hill Treatment Plant (+\$2.9 million), Braintree Weymouth Intermediate Pump Station (+\$324,000),

Union Park CSO (+\$337,000) and Braintree Weymouth tunnel (-\$506,000 for elimination of barging and polymer reduction).

- Other significant increases which affected the FY06 budget are for increased: energy pricing \$1.6 million, contractual wage increases of \$1.7 million, \$640,000 increase for maintenance spending excluding new facilities. These increases were offset by lower numbers of funded positions (974 in FY06 vs 996 in FY05), interns, and temporary employees and fewer vehicle replacements.
- There are several expense categories that represent significant risk because they are budgeted at the low-end level of the estimates, or are not included at all in the FY06 budget. These are as follows: possible regulatory changes pertaining to “receiving water standards implementation” which will require increased use of chemicals, energy pricing, higher emergency-related maintenance needs, and higher overtime expenses related to wet weather events or emergencies.

FY06 Initiatives:

New Facilities Start-ups:

- First full year of operation for major new facilities: Walnut Hill Treatment Plant, (May 2005) Braintree Weymouth Intermediate Pump Station, (December 2004) and Braintree Weymouth Inter-Island Tunnel (April 2005).
- Finalize construction and commence testing of the new Braintree Weymouth Replacement Pump Station (April 2007).
- Partial year operation of Union Park CSO facility, (April 2006) based on agreement with Boston Water and Sewer Commission (BWSC).
- Complete the relocation of the Somerville laboratory to the Chelsea facility.

Engineering & Construction:

- Complete final design of the North Dorchester Bay CSO storage tunnel and commence construction by April 2006.
- Initiation of several study projects including Transmission Facility Engineering Evaluation and Cosgrove and Wachusett Tunnel Redundancy study.
- Initiation of several design projects including Metro West Water Supply Tunnel (MWWST) CP-6, Weston Aqueduct Supply Main 3, Wachusett Reservoir Algae Treatment Facility, Repairs to Quabbin and Wachusett spillways, and Lynnfield Pipeline project.
- Initiation of several construction contracts including MWWST CP-9, Oakdale Phase I Improvement, and CVA Redundancy Pipeline project and substantial completion of Spot Pond Supply Main CP-2. Initiation of Blue Hills Covered Storage Facility Design Build contract and Field Oversight contract.

Operations & Maintenance:

- Continue to manage and advance work on several critical headworks upgrade initiatives including heating system upgrades, screen replacement and facilities condition assessment.

- Commence the water pump station rehabilitation effort for: Spring Street, Brattle Court, Belmont, Hyde Park and Reservoir Road.
- Maintain compliance with the reporting requirements of MWRA's NPDES permits for the Deer Island and Clinton treatment plants.
- Implement Wastewater SCADA system.
- Continuation of Ancillary Modifications Projects at Deer Island: Winthrop screening, residuals area upgrades, south system pump station electrical modifications, and improvements to the secondary treatment process area.
- Install a new soda ash system and replace the hypochlorite tank in Clinton.
- Implement and manage Walnut Hill Treatment Plant service contracts, commence Preventive Maintenance program.

Energy:

- Support competitive procurement of electricity for MWRA facilities, including the Deer Island Treatment Plant and Walnut Hill Treatment Plant.
- Implement energy information system and support energy demand-side management initiatives in key Field Operations facilities.

Environmental:

- Negotiate a new Deer Island Treatment Plant discharge permit. The current permit expires August 2005.
- Review and redesign harbor and outfall monitoring plan based on 5 years of post-outfall data and procure a new contract for laboratory and testing services in support of this program.
- Ensure that the permit-required outfall monitoring meets NPDES requirements, is scientifically credible, and is cost-effective.
- Implement new DEP air permit requirements for Deer Island.

OPERATIONS ADMINISTRATION

Proposed FY06 Current Expense Budget OPERATIONS ADMINISTRATION						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 2,762,719	\$ 2,499,709	\$ 2,409,814	\$ 2,231,103	\$ (178,711)	-7.4%
OVERTIME	123	-	-	-	-	-
FRINGE BENEFITS	-	-	-	-	-	-
WORKERS' COMPENSATION	3,145,492	(244)	-	-	-	-
ONGOING MAINTENANCE	(3,452)	19,752	-	-	-	-
TRAINING & MEETINGS	1,736	1,803	10,904	4,000	(6,904)	-63.3%
PROFESSIONAL SERVICES	9,854	4,088	-	-	-	-
OTHER MATERIALS	125,526	1,598,907	1,031,186	565,728	(465,458)	-45.1%
OTHER SERVICES	486,594	264,360	264,078	234,412	(29,666)	-11.2%
TOTAL	\$ 6,528,592	\$ 4,388,375	\$ 3,715,982	\$ 3,035,243	\$ (680,739)	-18.3%

The Operations Administration Department is comprised of the Office of the Chief Operating Office and Division level support staff. The department goal is to oversee, manage, and implement MWRA policies and procedures for the Operations Division pertaining to the following functions: labor relations, finance, contract administration and general administration.

Budget Highlights

- \$2.2 million for **Wages and Salaries**, which represents 74% of the total FY06 budget. The proposed FY06 budget includes funding for 33 positions, the same level as in the FY05 CEB. The FY06 budget funds fewer than the number of filled positions to reflect an agency-wide initiative to reduce staffing through attrition. As of January YTD there are 37 positions filled in Operations Administration. The funding level will be reviewed and adjusted in the Final FY06 CEB.
- \$4,000 for **Training & Meetings** a decrease of \$6,904 or 63% from the FY05 budget due to cost containment strategies.
- \$566,000 for **Other Materials**, a decrease of \$466,000 or 45% as compared to the FY05 budget. Other Materials represents 19% of the total budget. The majority of the expenses are for the Authority-wide vehicle replacement program (\$556,500), which is a decrease of \$459,500 or 45% from the FY05 budget due to initiatives to contain rate increases. Actual vehicle and equipment purchases for the past four years are as follows:

FY02: \$622,000
 FY03 \$120,000
 FY04: \$1,580,000
 FY05 Projection: \$1,000,000

From FY00 to FY03, MWRA limited replacement of vehicles pending completion of an extensive fleet review. In FY03 the active fleet was reduced by more than 10% (from 561 to 496 vehicles) as a result of this program. Staff identified opportunities to meet the needs of the new waterworks system facilities through redeployment of existing vehicles, rather than adding to the fleet. The \$1.6 million actual spending for FY04 includes accelerated purchase of 26 vehicles initially planned for FY05 at an estimated cost of \$560,000.

- \$234,412 for **Other Services**, which is 8% of the total FY06 Administration budget. This includes \$233,312 for Authority-wide memberships; which is a decrease of \$30k or 11% due to initiatives to contain rate increases.

CSO PROGRAMS/ENERGY

Proposed FY06 Current Expense Budget CSO PROGRAMS/ENERGY							
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06		
WAGES & SALARIES	\$ 2,266,275	\$ 1,330,025	\$ 883,744	\$ 912,131	\$ 28,387		3.2%
OVERTIME	1,905	988	1,900	900	(1,000)		-52.6%
FRINGE BENEFITS	72	57	45	45	-		0.0%
UTILITIES	41	-	-	-	-		-
ONGOING MAINTENANCE	74,587	-	-	-	-		-
TRAINING & MEETINGS	3,675	8,138	5,316	5,480	164		3.1%
PROFESSIONAL SERVICES	30,849	17,916	50,000	50,000	-		0.0%
OTHER MATERIALS	33,112	26,134	3,184	2,672	(512)		-16.1%
OTHER SERVICES	392,957	18,673	6,779	5,040	(1,739)		-25.7%
TOTAL	\$ 2,803,473	\$ 1,401,931	\$ 950,968	\$ 976,268	\$ 25,300		2.7%

Budget and actuals for FY02-FY04 represent the former Operations Planning Department.

The CSO Program/Energy Department, which was formed in FY2004 as a result of Board of Directors approved organizational changes to MWRA's planning functions, comprises the following programs:

Combined Sewer Overflows Program is responsible for the \$747 million CSO control plan. Responsibilities include long-term CSO control master planning and evaluation; CSO project permitting; engineering design; technical assistance during construction of MWRA managed CSO projects; oversight of community managed CSO design and construction activities; and start-up assistance for new CSO facilities.

Energy Program is responsible for development, implementation and oversight of MWRA's comprehensive energy strategy including electricity supply procurements, demand side management initiatives, and other programs.

Budget Highlights

- \$912,131 for **Wages and Salaries**, which represents 93% of the total FY06 budget. The \$28,388 increase from the FY05 budget is for estimated wage increases. The level of funding is for 12 positions for both years.
- \$50,000 or 5.1% of the total FY06 budget for **Professional Services** is for an energy consultant to support the resolution of Authority-wide energy issues, including major energy purchases.

WASTEWATER TREATMENT

Proposed FY06 Current Expense Budget WASTEWATER TREATMENT						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 15,381,303	\$ 14,923,865	\$ 15,559,752	\$ 15,421,880	\$ (137,872)	-0.9%
OVERTIME	925,479	1,138,132	1,007,750	1,044,528	36,778	3.6%
FRINGE BENEFITS	21,098	27,844	19,859	20,093	234	1.2%
CHEMICALS	3,378,941	2,728,690	2,815,696	2,626,949	(188,747)	-6.7%
UTILITIES	10,932,336	11,979,324	11,340,510	12,522,270	1,181,760	10.4%
ONGOING MAINTENANCE	9,343,432	9,601,769	9,982,895	10,745,412	762,517	7.6%
TRAINING & MEETINGS	37,067	38,346	79,391	52,100	(27,291)	-34.4%
PROFESSIONAL SERVICES	850,257	1,001,608	1,100,988	1,105,188	4,200	0.4%
OTHER MATERIALS	493,081	398,500	462,323	322,755	(139,568)	-30.2%
OTHER SERVICES	12,475,764	14,085,370	13,463,965	13,506,407	42,442	0.3%
TOTAL	\$ 53,838,758	\$ 55,923,448	\$ 55,833,130	\$ 57,367,582	\$ 1,534,452	2.7%

Proposed FY06 Current Expense Budget WASTEWATER TREATMENT by Facility						
FACILITY	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
DEER ISLAND	\$ 39,559,412	\$ 40,325,656	\$ 40,868,139	\$ 42,461,747	\$ 1,593,608	3.9%
RESIDUALS	13,360,145	14,602,892	13,924,323	13,794,027	(130,296)	-0.9%
CLINTON	919,201	994,900	1,040,668	1,111,808	71,140	6.8%
TOTAL	\$ 53,838,758	\$ 55,923,448	\$ 55,833,130	\$ 57,367,582	\$ 1,534,452	2.7%

The Deer Island Treatment Plant, the Residuals Management Program, and the Clinton Treatment Plant comprise the Wastewater Treatment Department. Together, the budgets for these programs represent 43% of the Operations Division's FY06 proposed budget and 32% of MWRA's proposed FY06 direct expense budget.

The **Deer Island Treatment Plant** budget accounts for 32% of the Operations Division's FY06 proposed budget. DITP has a primary treatment peak capacity of 1.27 billion gallons per day (bgd) and secondary treatment peak capacity of 495 million gallons per day (mgd).

Incoming wastewater from MWRA customer communities is piped to several headworks facilities where bricks, logs, and other large objects are screened out before the influent is transmitted to Deer Island through underground tunnels. At Deer Island, wastewater from the north system is pumped through chambers that remove grit and detritus for disposal in an off-island landfill. South system flows undergo preliminary treatment at the Nut Island headworks and are then pumped directly into the primary treatment facility, bypassing the grit removal chambers. The primary treatment facility consists of stacked clarifiers where scum rises to the top and the sludge settles to the bottom. Secondary reactors and clarifiers remove organic matter through biological and gravity treatment. Primary and secondary sludge and scum are thickened, anaerobically digested, and further thickened to reduce the volume of sludge before it is barged to MWRA's Residuals Processing Facility at Fore River. Methane, a byproduct of anaerobic digestion, is used to fuel the plant's boilers, which produce steam to provide heat and generate electricity.

In late FY05, major operational changes will occur regarding sludge processing at Deer Island, transportation of sludge to Fore River, and sludge processing at the Residuals Processing Facility by a third party contractor, the New England Fertilizer Company (NEFCo). The new Braintree Weymouth cross-harbor tunnel is scheduled to start-up in Spring 2005. Once the tunnel comes on-line, MWRA will cease the current practice of thickening and barging sludge from Deer Island to Fore River, and will instead pump a much lower concentration of sludge (about half of the current 5.5% average total suspended solids) from Deer Island to the Residuals Processing Facility.

Deer Island Operating Assumptions for Fiscal Year 2006

The budget, which is based on a 5-year running average, assumes secondary treatment of 357 million gallons per day of combined flows for the north and south systems. Deer Island's treatment capacity is 495 million gallons per day.

Sludge quantities for FY06 are assumed to average 94.7 tons per day of total suspended solids (TSS). The assumed average solids content for digested sludge is 2% - 3% after the Braintree Weymouth tunnel is on line.

Budget Highlights

- \$14.9 million for **Wages and Salaries** represents 35% of the Deer Island FY06 budget, of which \$14.7 million is for regular pay to fund 249 positions. The FY06 budget does not include any funds for temporary employees and interns.
- \$999,503 for **Overtime** represents 2.4% of the FY06 budget, and is a \$45,000 or 4.7% increase from the FY05 budget mostly for contractual increases and Maintenance & Operations Specialist training.
- \$2.5 million or 6% of the FY06 budget is for **Chemicals**, including \$1.4 million for sodium hypochlorite for disinfection and odor control, \$300,000 for polymer for sludge thickening, \$188,000 for activated carbon for odor control, \$107,000 for ferrous chloride for struvite control, \$148,000 for sodium hydroxide for odor and oxidation prevention, and \$176,000 for hydrogen peroxide used for corrosion control.

The FY06 budget for chemicals is \$180,000 or 6.7% less than the FY05 budget. This is primarily due to a \$97,000 decrease for polymer usage in FY06 after the Braintree Weymouth Tunnel comes on-line in the spring of FY05 plus a \$50,000 decrease for activated carbon and a \$36,000 decrease for ferrous chloride, based on current trends.

- \$12.3 million or 29% of the FY06 budget is for **Utilities**, including \$9.9 million for electricity, \$1.3 million for water and \$1.1 million for diesel fuel. The FY06 budget for utilities is \$1,146,000 more than the FY05 budget primarily due to price increases for electricity (+\$588,000), diesel fuel (+\$452,000) primarily for price increases and water (+\$106,000).
- \$9.6 million or 23% of the FY06 budget is for **Maintenance**. The \$723,000 or 8% increase for Deer Island includes \$926,000 for facility painting, \$300,000 for cryogenic maintenance, and \$2.3 million for preventive and corrective maintenance materials. The largest increase (+\$736,000) is for corrective and preventive maintenance materials based on FY04 actual spending. Staff anticipates that maintenance expenses will increase in the future due to the age of the plant and more need for on-going maintenance.
- \$50,000 for **Training and Meetings** represents a \$27,000 or a 35% decrease from the FY05 budget.
- \$1.1 million for **Professional Services** represents a \$10,000 or 1% increase from the FY05 budget. The FY06 budget includes \$1million for the perimeter and access security contract at Deer Island, \$20,000 for engineering support, and \$26,000 for lab and testing analysis.
- \$296,000 for **Other Materials**, a \$101,000 or a 25% decrease from the FY05 budget. The \$101,000 decrease is for computer hardware and software supported by MIS. The FY06 budget includes \$89,000 for work clothes, \$55,000 for vehicle expense, \$20,000 for miscellaneous materials, \$58,000 for health and safety materials, \$14,000 for equipment/furniture, and \$32,000 for office supplies.
- \$723,000 for **Other Services**, a \$123,000 or 21% increase from the FY05 budget. The FY06 budget includes \$320,000 for Health and Safety for an ambulance services contract and hazardous materials disposal service, \$53,000 for Telephone expenses, \$118,000 for Permit Fees and \$198,000 for miscellaneous services such as security cameras, door alarms, copier rentals, spill containment, and maintaining the radio network. The increase from the FY05 budget is mainly due to an increase of \$60,000 for security cameras and \$60,000 for door alarms.

The **Residuals Management Program** manages the processing and disposal of sludge from the anaerobic digestion process at Deer Island, as well as the disposal of grit and screenings. MWRA seeks to dispose of all sludge and grit and screenings in a reliable, economical, and environmentally sensitive manner.

MWRA has a three-pronged approach to the processing and disposal of waste material:

- Grit and screenings from MWRA's transport system are disposed of in landfills.
- Liquid sludge from Deer Island will be pumped through the new Braintree Weymouth cross-harbor tunnel to the Fore River processing facility where it is dewatered, dried, and shipped by rail either for use as fertilizer or to appropriate disposal. MWRA is committed to the beneficial reuse of biosolids to the greatest extent practicable. MWRA contracts with the New England Fertilizer Company (NEFCo) to operate the processing facility and market and ship sludge products. A 15-year contract with NEFCo became effective March 1, 2001.
- Landfill capacity is reserved as a backup to the beneficial use efforts (per agreement with the Federal Court, EPA, and DEP) for disposal of all sludge produced.

Budget Highlights

- \$94,919 for **Wages and Salaries**, which represents .7% of the total FY06 budget.
- \$931,000 or 7% of the total FY06 budget is for **Maintenance**, in accordance with the NEFCo contract, which is a fixed level per year subject to inflationary adjustments. FY06 costs are \$37,000 lower than the FY05 Final CEB. The maintenance budget includes \$75,000 for inflation.
- \$10.7 million or 78% of the total FY06 budget is for **Sludge Pelletization**. The \$97,000 decrease from the FY05 Final CEB reflects a reduction in fixed quantities of \$332,000 for elimination of barging expenses after start-up of the Braintree Weymouth tunnel and a decrease of \$86,000 for excess quantities (above the contractual 90 tons per day fixed pricing) which are based on 4.7 tons per day (TSS) vs 5.6 tons per day (TSS) in the FY05 Final CEB. These decreases are offset by an increase of \$321,000 for inflation mostly for gas and electric.
- \$1,180,406 or 9% of the total FY06 budget is for **Grit and Screening** disposal, an increase of \$100,748 or 9% from the FY05 Final CEB. \$80,910 of the increase is attributable to higher projected quantities based on FY04 actual levels adjusted for operational changes. The current contract expires May 2005, so the budget also includes \$15,658 for a 5% increase from current prices.
- \$817,000 or 6% for the East Carbon Development Corporation contract for reserved landfill space in Utah.
- \$20,000 contingency for technical support and consulting services regarding the operating permit renewal, which expires in September 2005.

The **Clinton Wastewater Treatment Plant** provides sewage treatment services to the Town of Clinton and the Lancaster Sewer District. The plant provides secondary treatment using an activated sludge process in combination with advanced nutrient removal and dechlorination. The major facilities include a headworks, primary settling tanks, digesters, sludge processing, trickling filters, aeration tanks, secondary tanks, and a chemical addition building. The plant treats an average of 2.5 mgd. Residual materials are pressed and transported to an MWRA owned landfill for disposal. Staff also perform regular monitoring of the landfill site.

Budget Highlights

- *\$465,000 or 42% of the FY06 budget is for **Wages and Salaries** to fund seven positions, the same number of positions as in FY05.*
- *\$45,000 for **Overtime**, a \$8,000 or 16% reduction compared to the FY05 CEB. This reflects management's intent to minimize overtime expenses.*
- *\$216,000 for **Utilities**, which represents 19% of the total FY06 budget, and is \$36,000 or 20% more than the FY05 CEB. The majority of the increase relates to electricity rate increases.*
- *\$117,000 or 11% of the FY06 budget is for **Chemicals**, a decrease of \$8,000 from the FY05 CEB due to lower sodium hypochlorite based on latest trend.*
- *\$222,000 or 20% of the FY06 budget is for **Maintenance**, a 52% increase from the FY05 CEB. The FY06 budget includes \$100,000 for upgrade of the soda ash system. The plant will be 14 years old in FY06.*
- *\$26,000 for **Other Materials**, including \$16,000 for clean fill for the landfill operation.*

FIELD OPERATIONS

Proposed FY06 Current Expense Budget FIELD OPERATIONS						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 28,123,992	\$ 28,261,648	\$ 29,625,575	\$ 31,285,530	\$ 1,659,955	5.6%
OVERTIME	2,216,695	2,372,201	2,179,293	2,183,559	4,266	0.2%
FRINGE BENEFITS	52,218	54,749	56,270	56,675	405	0.7%
CHEMICALS	3,295,313	3,461,477	4,097,458	4,394,709	297,251	7.3%
UTILITIES	5,003,268	5,233,183	6,684,166	9,372,558	2,688,392	40.2%
ONGOING MAINTENANCE	4,130,814	4,931,775	5,344,054	5,861,353	517,299	9.7%
TRAINING & MEETINGS	19,969	75,224	64,641	82,213	17,572	27.2%
PROFESSIONAL SERVICES	193,968	102,704	225,833	494,835	269,002	119.1%
OTHER MATERIALS	935,430	981,075	933,250	888,113	(45,137)	-4.8%
OTHER SERVICES	1,590,596	1,134,274	1,264,575	1,144,394	(120,181)	-9.5%
TOTAL	\$ 45,562,263	\$ 46,608,310	\$ 50,475,116	\$ 55,763,939	\$ 5,288,823	10.5%

Proposed FY06 Current Expense Budget FIELD OPERATIONS by Program						
PROGRAM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WASTEWATER OPERATIONS	\$ 12,796,990	\$ 12,126,032	\$ 12,711,796	\$ 13,421,401	\$ 709,605	5.6%
WATER OPERATIONS & MAINT	11,729,277	12,981,667	15,280,690	18,810,612	3,529,922	23.1%
METRO MAINTENANCE	13,802,342	14,138,631	14,694,420	14,756,955	62,535	0.4%
OPERATIONS SUPPORT	6,155,807	6,055,558	6,425,030	6,898,054	473,024	7.4%
FOD ADMIN	1,077,847	1,306,422	1,363,180	1,876,917	513,737	37.7%
TOTAL	\$ 45,562,263	\$ 46,608,310	\$ 50,475,116	\$ 55,763,939	\$ 5,288,823	10.5%

The primary goal of the Field Operations Department (FOD) is to provide high quality, uninterrupted water delivery and wastewater collection services to MWRA communities. Field Operations includes wastewater transport operations and maintenance, waterworks operations and maintenance, and Toxic Reduction and Control (TRAC). The department is responsible for the treatment, transmission, and distribution of water from the Quabbin and Wachusett reservoirs to community water systems. It also manages the collection and transport of wastewater flow from MWRA communities to the Deer Island Treatment Plant. Through TRAC, FOD manages MWRA's industrial pretreatment, permitting, and monitoring program. FOD consists of five operating units: Wastewater Operations, Metropolitan Maintenance, Water Operations and Maintenance, Operations Support, and Administration.

Wastewater Operations is comprised of Wastewater Operations and TRAC. Wastewater Operations operates MWRA's wastewater transport facilities, including 12 pumping stations (eleven of which are unstaffed); four headworks facilities (all of which are continuously staffed); and five CSO facilities (all of which are unstaffed). This unit commenced operating the Braintree Weymouth Intermediate Pump Station in November 2004. During the construction of the new Braintree Weymouth Replacement Pump Station scheduled to come on line in the spring of FY07, by-pass pumping will be done by a contractor.

Water Operations and Maintenance is responsible for the treatment and delivery of water from the Quabbin and Wachusett reservoirs to the community water systems. The water system encompasses a service area from Chicopee in the western part of the state to Wakefield, Marblehead, and Norwood in the metropolitan area. Additionally, this unit maintains MWRA's western waterworks facilities, including the Ware Water Treatment Plant, the Interim Corrosion Control Facility in Marlborough, the Cosgrove Intake Facility, and the Norumbega Reservoir. This unit also oversees covered storage facilities, operates the MetroWest Tunnel, and will operate the Walnut Hill Treatment Plant scheduled to be on line in May 2005. There are two operations centers that provide

for monitoring and control of the water system on a 24-hour per day basis. The Metropolitan Operations and Control Center (OCC), formerly in Chestnut Hill, is now located at MWRA's Chelsea facility. The Western Operations Center (WOC) is located at the Cosgrove Intake adjacent to the Wachusett Reservoir.

Metropolitan Maintenance is responsible for maintenance of MWRA's wastewater and water systems and facilities within the Route 128 area. Staff maintains pipelines, valves, interceptors, pumps, facility equipment, buildings, and grounds. Metropolitan Maintenance staff maintains a waterworks network of 275 miles of water mains, 3,500 valves, 18 miles of deep rock tunnels, ten pump stations, eight tunnel shafts, ten distribution storage tanks and reservoirs, and 240 miles of wastewater interceptors and appurtenances. In addition, this unit performs TV inspections of the wastewater interceptor system.

Operations Support provides technical support to FOD in the areas of engineering, quality assurance, data management, metering, and monitoring. Engineering staff coordinates all engineering issues related to the operation of the water and wastewater systems. The Quality Assurance Unit monitors water treatment effectiveness, identifies treatment issues, and develops recommendations for water treatment improvements. Data management activities include performance reporting on water quality, development and maintenance of water quality treatment and optimization models, and tracking and analyzing chemical and hydraulic flow data. The Metering and Monitoring unit maintains 150 community water meters, 16 contract community water meters, 14 master water meters, and 212 wastewater meters. This unit collects meter data for operational and revenue generating purposes from the water and wastewater systems. It is also responsible for the maintenance of the water and future wastewater SCADA systems.

FOD Administration provides financial, administrative, planning, and policy oversight functions for the entire Field Operations Department.

Budget Highlights

- *\$31.3 million for **Wages and Salaries** of which \$30.7 million or 98% is for regular pay, to fund approximately 524 positions which is five fewer than the FY05 budget. The budget also includes \$293,000 for stand-by pay to support operational and maintenance needs and \$10,000 for interns for QA support in Waterworks. The Wages and Salary line item has been increased by \$1.7 million compared with the FY05 budget due to wage increases.*
- *\$2.2 million for **Overtime**, including \$1,147,000 for operational coverage needs, \$577,000 for emergency related overtime, \$417,000 for planned overtime for scheduled maintenance and \$42,000 for planned training.*

The Overtime line item in comparison with the FY05 budget shows a nominal increase of \$4,000. The FY06 proposed budget includes \$100,000 for OT reserves for contractual wage increases.

Budget Highlights (Continued)

- \$4.4 million for **Chemicals**, of which \$3.9 million is for water treatment and \$0.5 million, is for wastewater treatment. The budget includes \$2.0 million for soda ash, \$779,000 for sodium hypochlorite, \$543,000 for liquid oxygen for Walnut Hill ozone generation, \$334,000 for carbon dioxide to control the water alkalinity, \$247,000 for hydrofluosilicic acid, and \$225,000 for nitrazyme for Framingham Extension Relief Sewer odor and corrosion control.

The increase in comparison with the FY05 budget is \$297,000 and the majority relates to the first full year operation of Walnut Hill vs eight months budgeted in FY05. The FY06 budget reflects a full year of chemicals that will be needed to support the new Walnut Hill Treatment Plant scheduled to come on line in Spring 2005.

- \$9.4 million for **Utilities**, including \$7.0 million for electricity, \$1.5 million for diesel fuel, \$542,000 for natural gas, and \$312,000 for water. Utilities increased \$2.7 million in comparison with the FY05 budget of which \$1.8 million relates to the first full year operation of Walnut Hill for electricity (\$1.3 million), diesel fuel (\$267,000), and natural gas (\$182,000). Other increases relate to the first full year of operation of the Braintree Weymouth IPS (\$270,000), the start-up of the Union Park CSO facility (\$137,000), price increases for diesel fuel (\$250,000) and electricity (\$300,000).
- \$5.9 million for **Maintenance**, including \$2.4 million for materials and \$3.5 million for services. In comparison with the FY05 budget, maintenance increased by \$517,000 of which \$490,000 is due to electrical services and building and grounds services for the first full year operation of Walnut Hill.
- \$82,000 for **Training and Meetings**, a \$17,600 increase as compared to the FY05 budget for Facilities Asset Management Program/Reliability Centered Maintenance (FAMP/RCM) related training.
- \$495,000 for **Professional Services**, including \$75,000 for engineering and \$383,000 for security. In comparison with the FY05 budget Professional Services increased \$269,000 of which \$253,000 pertains to Walnut Hill security services for a full year operation vs eight months in FY05.
- \$888,000 for **Other Materials**, including \$442,000 for vehicle expenses for gas, mileage reimbursements and tolls, \$160,000 for work clothes, \$151,000 for health and safety supplies, and \$85,000 for lab and testing supplies. This represents a \$45,000 decrease from the FY05 budget due to lower projected need for office supplies and miscellaneous equipment/furniture.
- \$1.1 million for **Other Services**, including \$520,000 for telephone and SCADA needs at various facilities, \$421,000 for required police details, and \$60,000 for permit fees. The Other Services line item decreased by \$120,000 in comparison with the FY05 budget, mostly for lower estimated need for police detail.

LABORATORY SERVICES

Proposed FY06 Current Expense Budget LABORATORY SERVICES							
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06		
WAGES & SALARIES	\$ 3,267,086	\$ 3,391,346	\$ 3,572,289	\$ 3,455,802	\$ (116,487)	-3.3%	
OVERTIME	61,291	61,066	74,062	74,107	45	0.1%	
FRINGE BENEFITS	1,144	1,213	1,200	1,200	-	0.0%	
UTILITIES	135,436	124,958	136,846	147,856	11,010	8.0%	
ONGOING MAINTENANCE	199,218	245,116	289,144	508,542	219,398	75.9%	
TRAINING & MEETINGS	2,789	3,573	5,129	5,000	(129)	-2.5%	
PROFESSIONAL SERVICES	62,395	68,441	85,544	93,659	8,115	9.5%	
OTHER MATERIALS	579,619	736,653	731,283	738,656	7,373	1.0%	
OTHER SERVICES	95,829	91,746	104,151	109,531	5,380	5.2%	
TOTAL	\$ 4,404,807	\$ 4,724,112	\$ 4,999,648	\$ 5,134,353	\$ 134,705	2.7%	

The Department of Laboratory Services (DLS) goals are to provide high quality and responsive laboratory services to MWRA's water and wastewater treatment programs, including the Department of Conservation and Recreation and the MWRA member water communities. This includes timely and cost-effective laboratory tests to meet the strict testing guidelines required by all regulatory programs and permits, including the Safe Drinking Water Act (SDWA), Clean Water Act, and NPDES permits. The Department supports these functions at the following five locations: Southborough, Somerville, Quabbin, the Central Laboratory at Deer Island, and the Clinton Wastewater Treatment Plant. Testing supports drinking water transmission and treatment processes, wastewater operations and control at Deer Island and Clinton, NPDES compliance, harbor and outfall monitoring, TRAC, and wastewater residuals. DLS also conducts the Boston Harbor monitoring program, which involves regular sampling for nutrients, bacteria, and water quality parameters throughout Boston Harbor. The results are tracked and analyzed and compliance reports are regularly submitted to the Environmental Protection Agency and the Massachusetts Department of Environmental Protection.

Most MWRA laboratory testing is done in-house. Certain highly specialized or low volume tests are outsourced, such as tests for dioxins and radioactivity. In January 2004, MWRA brought the bulk of the laboratory testing for the Harbor and Outfall Monitoring (HOM) in-house including the water column laboratory work and the monthly boat samples of Massachusetts Bay to collect bacteria samples. In July 2004, MWRA brought laboratory testing for the Department of Conservation and Recreation in-house, including operation of the Quabbin Laboratory.

Budget Highlights

- \$3.5 million or 67% of the budget is for **Wages and Salaries**, of which \$3.4 million is in regular pay for the funding of 54 positions. Laboratory Services has seven fewer positions funded in FY06 vs FY05.
- \$508,000 or 9% of the budget is for **Maintenance**. It includes \$250,000 for HVAC humidity project, \$168,000 for equipment service contracts and \$83,930 for building and grounds services, of which \$25,000 is for replacement of metal laboratory hoods and exhaust vents and \$10,000 for replacement of countertops.
- \$94,000 for lab and testing analysis, an \$8,000 or 9% increase from the FY05 budget. Outside labs are used for emergencies, "second opinions", capacity constraints, unavailability of specialized equipment or economic justification.
- \$739,000 for **Other Materials**, a \$7,000 or 1% increase as compared to the FY05 budget. The FY06 budget includes \$502,000 for laboratory supplies and \$196,000 for equipment replacement.

ENVIRONMENTAL QUALITY

Proposed FY06 Current Expense Budget ENVIRONMENTAL QUALITY							
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06		
WAGES & SALARIES	\$ 1,086,720	\$ 1,112,367	\$ 1,157,247	\$ 1,207,619	\$ 50,372		4.4%
OVERTIME	2,354	421	2,625	625	(2,000)		-76.2%
FRINGE BENEFITS	-	-	20	20	-		0.0%
ONGOING MAINTENANCE	819	3,400	3,000	3,000	-		0.0%
TRAINING & MEETINGS	609	2,674	3,375	3,375	-		0.0%
PROFESSIONAL SERVICES	4,345,708	3,602,861	3,378,657	3,333,200	(45,457)		-1.3%
OTHER MATERIALS	11,615	11,787	19,790	17,545	(2,245)		-11.3%
OTHER SERVICES	31,754	7,346	22,183	10,261	(11,922)		-53.7%
TOTAL	\$ 5,479,579	\$ 4,740,856	\$ 4,586,897	\$ 4,575,645	\$ (11,252)		-0.2%

The Environmental Quality Department (ENQUAD) reports on environmental findings that may be linked to MWRA operations and projects. The department's main activities are monitoring sewage influent and effluent quality; monitoring the water quality of Boston Harbor, its tributary rivers, and Massachusetts Bay; data management and quality assurance; and compliance with the reporting requirements of MWRA's NPDES permits. These permit reports are submitted to state and federal regulators, the Outfall Monitoring Science Advisory Panel and its sub-committees, and several libraries. As required by the permits, ENQUAD also posts many of these reports on MWRA's web site. All technical reports and several reports on water quality in the harbor and the bay are also posted on the web site. The department also produces the State of Boston Harbor Report.

Budget Highlights

- \$1.2 million for **Wages and Salaries** for 16 positions, the same staffing level as in FY05.
- \$3.3 million for **Professional Services** for outside laboratory testing and analysis, a reduction of \$45,000 (1.3%) from the FY05 CEB. This is approximately \$1,000,000 less than was spent on harbor and outfall monitoring in FY03. Changes and reductions to the Ambient Monitoring Plan were accepted by EPA and DEP in Spring 2004. Contract costs were further lowered because the new scope of work reduced the number of water chemistry analyses to a level that can be done by MWRA's Department of Laboratory Services. The remaining funds are for Massachusetts Bay monitoring cost-shared with the U.S. Geological Survey; Gulf of Maine Ocean Observing System cost-shared with the Navy and others; permit-required water quality modeling cost-shared with UMass Boston; and permit-required biotoxicity testing for Clinton WWTP, CSO facilities, and DITP.

ENGINEERING AND CONSTRUCTION

Proposed FY06 Current Expense Budget ENGINEERING AND CONSTRUCTION							
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06		
WAGES & SALARIES	\$ 4,958,936	\$ 4,832,438	\$ 4,639,530	\$ 4,519,223	\$ (120,307)		-2.6%
OVERTIME	56,864	58,678	82,318	57,913	(24,405)		-29.6%
FRINGE BENEFITS	967	899	2,533	1,229	(1,304)		-51.5%
ONGOING MAINTENANCE	10,320	8,948	9,469	8,397	(1,072)		-11.3%
TRAINING & MEETINGS	7,949	771	8,921	4,000	(4,921)		-55.2%
PROFESSIONAL SERVICES	68	-	-	-	-		-
OTHER MATERIALS	80,837	72,928	87,504	78,198	(9,306)		-10.6%
OTHER SERVICES	14,586	17,446	18,700	18,700	-		0.0%
TOTAL	\$ 5,130,527	\$ 4,992,108	\$ 4,848,975	\$ 4,687,660	\$ (161,315)		-3.3%

The Engineering and Construction Department (ECD) manages and coordinates the planning, design, and construction of system improvements that will ensure the reliable operation of the wastewater collection, transport, and treatment systems, and maintain and improve the waterworks infrastructure and physical plant to ensure a safe and adequate supply of water.

ECD is organized into two units. The **Engineering Unit** provides in-house engineering, consultant management (during the facilities planning, environmental review, and design stages of capital projects), drafting, surveying, and other technical assistance required for the maintenance, repair, and rehabilitation of the wastewater and waterworks systems. In addition, unit staff provide specialized technical services in the electrical, structural, mechanical, and civil engineering disciplines; maintain the Design Information Services Center (DISC); provide engineering and project management support, computer-aided design and drafting (CADD) services, and survey and design services; and manage construction document control. The **Construction Unit** provides contract management and resident inspection on water and wastewater construction and rehabilitation projects. Staff administer, oversee, and monitor construction projects to ensure timely, cost-effective, high quality construction for a variety of infrastructure improvement projects. Staff manages contractor activities to ensure projects are completed in accordance with approved plans and specifications with quality construction practices, timely project completion, and cost efficiency.

Budget Highlights

- \$4.5 million for **Regular Pay**, which represents 96% of the total FY06 department budget and funds 61 positions. The decrease of \$120,000 is the result of a lower staffing level. FY06 has three fewer positions funded vs FY05.
- \$57,900 for **Overtime**, mostly to cover resident inspection after regular work hours at construction sites to ensure monitoring of construction projects. Overtime is also used for unplanned design or survey needs, attendance at evening public meetings and meeting deadlines. The \$24,000 decrease from FY05 is based on the number of construction jobs projected to be active in FY06.
- \$78,000 for **Other Materials**, a \$9,000 decrease compared with FY05. The budget includes \$57,000 for vehicle expense for staff traveling to construction sites and \$17,000 for office supplies. The decrease is based on a reduction for engineering supplies and specialty supplies for the DISC Unit.

CAPITAL ENGINEERING AND CONSTRUCTION

Proposed FY06 Current Expense Budget CAPITAL ENGINEERING AND CONSTRUCTION							
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06		
WAGES & SALARIES	\$ 2,029,859	\$ 2,081,007	\$ 2,071,795	\$ 1,826,986	\$ (244,809)	-11.8%	
OVERTIME	33	-	-	-	-	-	
FRINGE BENEFITS	-	6	-	-	-	-	
ONGOING MAINTENANCE	122,842	143,095	210,000	93,000	(117,000)	-55.7%	
TRAINING & MEETINGS	2,204	3,532	15,527	10,000	(5,527)	-35.6%	
PROFESSIONAL SERVICES	-	-	-	-	-	-	
OTHER MATERIALS	25,146	26,249	33,275	29,480	(3,795)	-11.4%	
OTHER SERVICES	18,589	8,537	21,264	12,747	(8,517)	-40.1%	
TOTAL	\$ 2,198,673	\$ 2,262,426	\$ 2,351,861	\$ 1,972,213	\$ (379,648)	-16.1%	

The Capital Engineering and Construction Department (CECD) is responsible for managing engineering, design, and construction of major waterworks facilities and pipelines, in particular MWRA's Integrated Water Supply Improvement Program (IWSIP). IWSIP is comprised of the Walnut Hill Water Treatment Plant, the MetroWest Water Supply Tunnel, and seven covered storage facilities. Together with the Planning and Field Operations departments, CECD assesses the condition of waterworks facilities and pipelines to determine and document the improvements needed to eliminate deficiencies and bring the water system up to current standards. These improvements are broken down into a series of design and construction contracts, which are prioritized and scheduled to allow safe and reliable operation of the system during construction.

The department also manages the engineering design, construction, start-up and training, and testing of other major waterworks capital projects. Staff defines scopes of work for consultant contracts and manages consultants conducting conceptual studies, preliminary designs, environmental reports and final designs. In addition, staff coordinates with cities and towns, regulatory agencies, and citizens groups to ensure acceptance of the projects by all stakeholders. The department monitors technical and regulatory standards to ensure that at completion facilities fulfill all of their essential functions in a cost-effective manner.

Budget Highlights

- *\$1.8 million or 93% of the FY06 budget is for **Wages and Salaries** for 21 positions.*
- *\$93,000 or 5% is for **Maintenance**, including \$92,000 for closing and taking away trailers at the temporary ammonia and feed facilities at eight chloramination sites after the Walnut Hill Water Treatment plant comes on line. This represents a \$117,000 reduction as compared to the FY05 budget, when chloramination was done all year.*



Law Division
Budget

LAW DIVISION

Proposed FY06 Current Expense Budget LAW DIVISION by Line Item						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 1,817,314	\$ 1,532,656	\$ 1,459,135	\$ 1,526,478	\$ 67,343	4.6%
OVERTIME	402	40	-	-	-	-
TRAINING & MEETINGS	5,606	5,200	5,256	4,000	(1,256)	-23.9%
PROFESSIONAL SERVICES	293,437	278,636	316,584	256,584	(60,000)	-19.0%
OTHER MATERIALS	1,653	3,208	5,464	5,539	75	1.4%
OTHER SERVICES	54,027	31,453	67,405	50,539	(16,866)	-25.0%
TOTAL	\$ 2,172,439	\$ 1,851,193	\$ 1,853,844	\$ 1,843,140	\$ 384,005	20.7%

The Law Division provides legal counsel to the Board of Directors and staff on compliance with federal and state laws; regulations; court and administrative orders; litigation matters; real estate matters; labor/employment issues; and construction issues. The General Counsel interprets the MWRA Enabling Act and provides advice on conflict of interest and Code of Conduct issues. Division attorneys provide or supervise through outside counsel the representation of MWRA in all litigation. The budget for the Division accounts for 1% of MWRA's FY05 direct expense budget.

Law Division goals include:

- Timely and cost effective resolution of legal disputes involving MWRA, through litigation or alternative means of dispute resolution.
- High quality legal services to support the business and operational needs of MWRA in the areas of real estate, labor and employment, regulatory compliance, litigation, construction and business law.
- Advocacy of MWRA interests in new and developing regulatory issues.

Budget Highlights

- *\$1.5 million for **wages and salaries**, an increase of \$67,000 compared to the FY05 budget. The proposed FY06 budget includes funding for one intern position to assist in legal research and litigation.*
- *\$257,000 for **Professional Services**, a decrease of \$60,000 as compared to the FY05 budget. Litigation expenses for trial preparation, including expert witnesses, outside counsel, deposition and copying expense, are difficult to predict in advance because they depend on the nature and complexity of new litigation filed, on actions taken by litigants, and discovery and trial schedules set by the courts. The budget funds outside legal counsel to assist in handling cases that require special expertise (such as insurance, eminent domain and, energy issues) or resources beyond those available in the Division, as well as representation in the Boston Harbor Case. In-house staff handle all other matters*
- *Law Division continues to exhaust all opportunities to shift the cost of legal representation to insurers and indemnitors and to litigate insurance coverage disputes as they arise, all in the interest of cost savings.*
- *Law Division staff attorneys have successfully defended or favorably settled a number of cases within the last year that has made possible a projection that outside counsel and expert witness expenditures can be reduced over prior year levels.*
- *Law Division staff, though usually representing MWRA in a defensive posture recently completed a cost recovery action against a design firm that yielded a \$2.6 million payment to MWRA.*
- *Law Division, in conjunction with the Operations Division has stepped up efforts to resolve contractor and vendor claims prior to litigation so as to resolve same as favorably and early as possible and reducing litigation costs and interest payable upon such claims when litigated.*



Finance Division
Budget

FINANCE DIVISION

Proposed FY06 Current Expense Budget FINANCE DIVISION by Line Item						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 3,054,196	\$ 2,652,874	\$ 2,763,402	\$ 2,723,995	\$ (39,407)	-1.4%
OVERTIME	78	50	-	-	-	-
FRINGE BENEFITS	-	-	-	-	-	-
ONGOING MAINTENANCE	-	-	-	-	-	-
TRAINING & MEETINGS	5,796	1,717	4,675	3,975	(700)	-15.0%
PROFESSIONAL SERVICES	221,528	288,609	311,920	367,300	55,380	17.8%
OTHER MATERIALS	984	3,056	6,084	8,353	2,269	37.3%
OTHER SERVICES	14,111	25,481	25,642	25,435	(207)	-0.8%
TOTAL	\$ 3,296,693	\$ 2,971,787	\$ 3,111,723	\$ 3,129,058	\$ (17,335)	-0.6%

Proposed FY06 Current Expense Budget FINANCE DIVISION by Department						
DEPARTMENT	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
DIVISION DIRECTOR'S OFFICE	\$ 270,649	\$ 227,366	\$ 280,225	\$ 195,820	\$ (84,405)	-30.1%
PLANNING/COORDINATION	249,688	45,140	-	-	-	-
BUDGET	577,146	479,092	521,778	381,709	(140,069)	-26.8%
TREASURY	998,270	830,900	808,173	945,946	137,773	17.0%
CONTROLLER	1,200,940	1,389,289	1,501,547	1,605,583	104,036	6.9%
TOTAL	\$ 3,296,693	\$ 2,971,787	\$ 3,111,723	\$ 3,129,058	\$ (17,335)	-0.6%

The Finance Division is responsible for overseeing rates and revenue management, budgeting, capital financing, accounting, disbursements, investments, and grant and loan management. At its September 17, 2003 meeting, the Board of Directors approved organizational changes to MWRA's planning functions. The changes consolidated the separate planning activities of the Operations and Finance divisions under a single Director of Planning who reports to the Executive Director. The organization change is reflected in the FY05 Current Expense Budget.

In FY03, the separate payroll, claims and risk management, and insurance functions of the Operations and Finance divisions were consolidated in the Finance Division. As part of the organizational change, structural changes within the Finance Division were also implemented. Specifically, Treasury Department functions were reorganized and a new Controller Department was created.

The Controller Department consists of accounting, accounts payable, and payroll functions that were previously performed within the Treasury Department. The Controller has responsibility for ensuring financial system integrity and integration among the three functions. Department staff are also responsible for appropriate treatment and classification of MWRA revenues and expenditures in accordance with accounting principles generally accepted in the United States and prepare statements of MWRA's financial condition.

The Treasury Department is responsible for securing funds for ongoing operations and capital programs, and processing disbursements. The Treasury Department also manages water and sewer assessments to communities and planning estimates of future rate projections. Treasury Department staff collect revenue, disburse funds, and manage debt issuance and investments. As part of the division reorganization, the Grant and Loan Management Department was merged with the Treasury Department, and the claims, risk management and insurance functions became the Risk Management Department and reports to the Division Director.

The Finance Division goals are to:

- Ensure the fiscal strength of MWRA through judicious, informed, and farsighted allocation of resources.
- Develop strategies for minimizing increases in community assessments and charges.
- Maintain favorable credit ratings for MWRA's revenue bonds.
- Provide financial planning, control, and accountability for MWRA.
- Ensure effective, coordinated operating and capital budget planning throughout MWRA.
- The FY06 proposed budget for the Finance division accounts for less than 2% of MWRA's direct expense budget.

DIVISION DIRECTOR'S OFFICE

Proposed FY06 Current Expense Budget						
FINANCE DIVISION DIRECTOR'S OFFICE by Line Item						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 269,356	\$ 227,356	\$ 277,125	\$ 193,338	\$ (83,787)	-30.2%
OVERTIME	-	-	-	-	-	-
TRAINING & MEETINGS	-	-	1,500	1,500	-	0.0%
OTHER MATERIALS	10	10	-	-	-	-
OTHER SERVICES	1,283	-	1,600	982	(618)	-38.6%
TOTAL	\$ 270,649	\$ 227,366	\$ 280,225	\$ 195,820	\$ 84,405	30.1%

The Division Director's Office oversees the centralized financial functions of rates development, revenue collection, budgeting, capital financing, accounting, disbursement and payroll processing, debt and investment management, grant and loan management, and risk management. The Director's Office provides advice and analysis to the Executive Director and the Board of Directors on all financial issues.

The division's continuing challenge in FY05 will be maintaining agency-wide focus on balancing the competing needs to minimize rate increases while ensuring the provision of critical MWRA services. This challenge is heightened by a significant loss in the amount of state debt service assistance received by the MWRA since 2002.

The Division Director's Office's goals are to:

- Guide and coordinate division activities to support MWRA and Finance Division objectives.
- Provide central and administrative support to the division's departments.

BUDGET

Proposed FY06 Current Expense Budget						
BUDGET by Line Item						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 570,339	\$ 463,610	\$ 508,022	\$ 369,391	\$ (138,631)	-27.3%
TRAINING & MEETINGS	-	-	1,075	450	(625)	-58.1%
PROFESSIONAL SERVICES	-	-	-	-	-	-
OTHER MATERIALS	58	41	481	300	(181)	-37.6%
OTHER SERVICES	6,749	15,441	12,200	11,568	(632)	-5.2%
TOTAL	\$ 577,146	\$ 479,092	\$ 521,778	\$ 381,709	\$ 140,069	26.8%

The Budget Department provides the financial analysis that allows MWRA to translate its goals, and legal and financial commitments into cost-effective annual and multi-year programs and budgets. Department staff work closely with division staff to coordinate development of the long-term Capital Improvement Program (CIP) and monitor the progress of capital projects compared to schedule and budget. Staff also coordinate development of MWRA's annual Current Expense Budget (CEB) and monitor spending compared to budget throughout the year. In addition, the department works closely with the Treasury Department to forecast near- and long-term expense and rate revenue requirements.

Budget Highlights

- *Total budget of \$370,000 for **Wages and Salaries**, a decrease of \$139,000 from the FY05 budget due to less staffing. Budget department staff rely on and work in conjunction with division finance staff to support the annual budget development, monitoring and reporting.*
- ***Other Services** include \$3,000 for a WEFA membership for inflation projections and \$8,000 to cover the costs of printing a limited number of budget documents and reports.*

TREASURY

Proposed FY06 Current Expense Budget TREASURY by Line Item						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 769,438	\$ 634,667	\$ 676,471	\$ 754,649	\$ 78,178	11.6%
OVERTIME	-	30	-	-	-	-
FRINGE BENEFITS	-	-	-	-	-	-
ONGOING MAINTENANCE	-	-	-	-	-	-
TRAINING & MEETINGS	835	831	500	1,000	500	100.0%
PROFESSIONAL SERVICES	221,528	184,282	121,920	177,300	55,380	45.4%
OTHER MATERIALS	770	2,257	850	3,300	2,450	288.2%
OTHER SERVICES	5,699	8,833	8,432	9,697	1,265	15.0%
TOTAL	\$ 998,270	\$ 830,900	\$ 808,173	\$ 945,946	\$ (137,773)	-17.0%

The Treasury Department secures funds for ongoing operations and capital programs, and processes disbursements. In addition, the Risk Management Department is included in the Treasury Department for budgeting purposes. Department staff collect revenue, disburse funds, and manage debt issuance and investments. The Treasury Department also manages the annual process of establishing water and sewer assessments to be paid by MWRA’s customer communities and planning estimates of future rate projections.

Budget Highlights

- *\$755,000 for **Wages and Salaries**, an increase of \$78,000 or 11.6% from the FY05 budget. The increase reflects the filling of positions previously vacant during the transition from the early retirement program. These increases were offset through less backfill in other areas.*
- *\$177,000 for **Professional Services**, an increase of \$55,000 or 45% from the FY05 budget. The proposed budget includes funds for trustee and bank deposit services. The budget also includes funds for insurance consultant services, which accounts for the increase from FY05.*

CONTROLLER

Proposed FY06 Current Expense Budget CONTROLLER by Line Item							
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06		
WAGES & SALARIES	\$ 1,200,481	\$ 1,282,234	\$ 1,301,784	\$ 1,406,617	\$ 104,833	8.1%	
OVERTIME	78	19	-	-	-	-	
FRINGE BENEFITS	-	-	-	-	-	-	
TRAINING & MEETINGS	-	823	1,600	1,025	(575)	-35.9%	
PROFESSIONAL SERVICES	-	104,327	190,000	190,000	-	0.0%	
OTHER MATERIALS	-	679	4,753	4,753	-	0.0%	
OTHER SERVICES	381	1,207	3,410	3,188	(222)	-6.5%	
TOTAL	\$ 1,200,940	\$ 1,389,289	\$ 1,501,547	\$ 1,605,583	\$ (104,036)	-6.9%	

The Controller Department consists of the Accounting, Accounts Payable, and Payroll units. The department has the responsibility for ensuring integrity within the financial accounting system and integration among the three functions. The department is also responsible for the appropriate treatment, classification and reporting of the MWRA's revenues and expenditures in accordance with accounting principles generally accepted in the United States of America.

Budget Highlights

- *\$1.4 million for **Wages and Salaries**, an increase of \$105,000 or 8.1% from the FY05 budget. The increase reflects the filling of positions previously vacant during the transition from the early retirement program. These increases were offset through less backfill in other areas.*
- *\$190,000 for audit services, consistent with the FY05 budget for these services.*



Support Services Division
Budget

SUPPORT SERVICES DIVISION

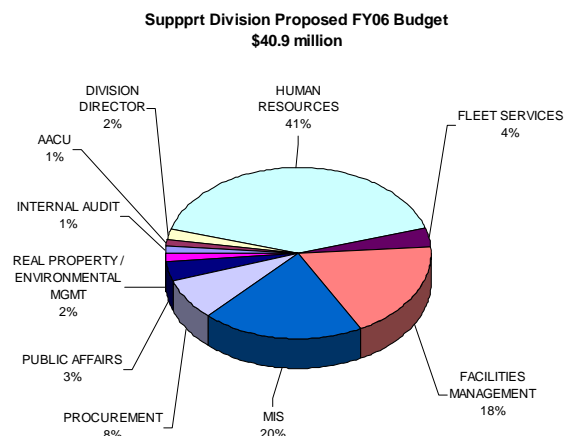
Proposed FY06 Current Expense Budget SUPPORT DIVISION by Line Item						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 15,083,467	\$ 14,092,833	\$ 13,840,999	\$ 14,062,093	\$ 221,094	1.6%
OVERTIME	98,564	50,779	56,215	54,103	(2,112)	-3.8%
FRINGE BENEFITS	12,245,009	10,771,098	12,284,624	13,380,328	1,095,704	8.9%
WORKERS' COMPENSATION	49,627	1,687,301	1,600,000	1,300,000	(300,000)	-18.8%
CHEMICALS	-	-	-	-	-	-
UTILITIES	999,467	1,039,882	989,511	1,012,831	23,320	2.4%
ONGOING MAINTENANCE	3,335,286	3,657,632	3,911,619	3,533,523	(378,096)	-9.7%
TRAINING & MEETINGS	44,894	52,698	59,123	58,643	(480)	-0.8%
PROFESSIONAL SERVICES	799,145	812,896	1,130,471	1,123,590	(6,881)	-0.6%
OTHER MATERIALS	696,945	1,009,591	686,529	675,574	(10,955)	-1.6%
OTHER SERVICES	9,255,805	5,941,170	5,657,444	5,663,503	6,059	0.1%
TOTAL	\$ 42,608,209	\$ 39,115,880	\$ 40,216,535	\$ 40,864,188	\$ 647,653	1.6%

Proposed FY06 Current Expense Budget SUPPORT DIVISION by Department						
DEPARTMENT	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
DIVISION DIRECTOR	\$ 444,099	\$ 429,759	\$ 737,661	\$ 781,440	\$ 43,779	5.9%
INTERNAL AUDIT	524,413	500,572	530,374	540,678	10,304	1.9%
PUBLIC AFFAIRS	1,704,957	1,364,023	1,385,456	1,415,424	29,968	2.2%
FACILITIES MANAGEMENT	11,538,026	7,915,969	7,516,021	7,481,638	(34,383)	-0.5%
FLEET SERVICES	1,144,995	1,085,856	1,317,658	1,454,942	137,284	10.4%
AACU	581,657	501,178	519,777	536,256	16,479	3.2%
HUMAN RESOURCES	14,247,134	14,289,480	16,089,191	16,674,121	584,930	3.6%
MIS	8,710,490	9,355,643	8,298,240	8,068,987	(229,253)	-2.8%
PROCUREMENT	2,987,067	3,070,600	3,095,841	3,221,324	125,483	4.1%
REAL PROPERTY / ENVIRONMENTAL MGMT	725,371	602,800	726,316	689,378	(36,938)	-5.1%
TOTAL	\$ 42,608,209	\$ 39,115,880	\$ 40,216,535	\$ 40,864,188	\$ 647,653	1.6%

¹The budget for Workers' Compensation was transferred from Operations to Human Resources in FY04.

The Support Services Division oversees the central functions of communications and community relations, real property and environmental management, human resources, affirmative action, procurement, materials warehousing, facility security, occupational health and safety, internal audit, fleet services, computer system development and management, facilities and office supplies management, library and records management, and mail and employee shuttle services. The division also manages the FRSA in Quincy, the Chelsea Facility and the Charlestown headquarters.

The division budget includes ten departments: Division Director, Internal Audit, Public Affairs, Facilities Management, Fleet Services, Affirmative Action and Compliance (AACU), Human Resources, Management Information Systems (MIS), Procurement, and Real Property and Environmental Management (RPEM). Internal Audit, AACU, and Public Affairs, funded as part of the Support Services budget, report to the MWRA's Executive Director. The \$40.9 million proposed FY06 budget accounts for 22% of MWRA's direct expense budget. The division budget includes \$13.4 million for fringe benefits for all MWRA personnel, as



well as \$4.3 million for lease, taxes and insurance, and operating and maintenance costs for the Charlestown Navy Yard (CNY) headquarters and the Chelsea facility, and \$1.3 million for workers' compensation claims and medical expenses. Net of these agency-wide expenses, the Support Services Division accounts for 12% of direct expenses.

DIVISION DIRECTOR

Proposed FY06 Current Expense Budget DIVISION DIRECTOR							
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06		
WAGES & SALARIES	\$ 438,896	\$ 424,503	\$ 379,608	\$ 427,017	\$ 47,409	12.5%	
OVERTIME	73	522	-	-	-	-	
FRINGE BENEFITS	-	44	-	-	-	-	
ONGOING MAINTENANCE	-	24	350,000	350,000	-	0.0%	
TRAINING & MEETINGS	248	49	1,300	1,300	-	0.0%	
OTHER MATERIALS	2,166	1,693	4,293	7,828	3,535	82.3%	
OTHER SERVICES	2,716	2,924	2,460	(4,705)	(7,165)	-291.3%	
TOTAL	\$ 444,099	\$ 429,759	\$ 737,661	\$ 781,440	\$ 43,779	5.9%	

The Division Director department consists of administrative and security/emergency response staff.

The division's goals are to:

- Provide comprehensive administrative, professional and technical support services to all divisions to create a cooperative framework within which MWRA can operate effectively.
- Develop and implement policies and programs to ensure facility and water/wastewater system security, public health and staff safety.
- Ensure proper and effective communication between MWRA and the communities served, other agencies, and state and local officials.

In FY05, Division Director accomplishments included:

- Coordinated agency-wide security guard services.
- Continued oversight of electronic security system installation at critical water sites.

Budget Highlights

- Total budget of \$781,000, an increase of \$44,000 or 5.9% over the FY05 budget.
- This budget includes \$427,000 for **regular pay** to support 6 positions, an increase of \$47,000 as compared to the FY05 budget.
- Ongoing **Maintenance** includes \$350,000 for support and maintenance of MWRA's electronic security systems. Routine support and maintenance are funded through the expense budget.

INTERNAL AUDIT

Proposed FY06 Current Expense Budget						
INTERNAL AUDIT						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 511,926	\$ 489,795	\$ 514,819	\$ 525,733	\$ 10,914	2.1%
OVERTIME	29	-	-	-	-	-
TRAINING & MEETINGS	11,076	8,038	11,975	11,975	-	0.0%
OTHER MATERIALS	1,272	889	2,600	2,100	(500)	-19.2%
OTHER SERVICES	110	1,850	980	870	(110)	-11.2%
TOTAL	\$ 524,413	\$ 500,572	\$ 530,374	\$ 540,678	\$ 10,304	1.9%

The Internal Audit Department monitors the efficiency and integrity of MWRA's operations and capital programs by auditing financial and program operations; reviewing compliance with accounting and management control systems, laws and regulations; and coordinating the formulation and revisions to MWRA policies and procedures. Internal Audit reports to MWRA's Executive Director.

The Internal Audit Department's goals are to:

- Encourage more economical and efficient operations, adherence to sound management procedures, and the use of controls designed to safeguard MWRA assets.
- Assure that automated and supporting manual management information systems have secure data control environments and provide accurate and useful management information.
- Assure that contractors and consultants doing business with MWRA have accounting and billing systems adequate to provide current, complete, and accurate cost and price information and project billings. Through FY05 mid-year, Internal Audit identified approximately \$802,000 in savings, including \$199,000 related to consultant billings to MWRA, \$593,000 related to vendor audits and contract negotiation support, and \$10,000 related to construction change orders and claims.

Budget Highlights

- \$526,000 for **Wages and Salaries** for staff to perform internal audits, management advisory services, preliminary review and incurred cost audits, and consultant disclosure statement reviews.
- \$12,000 for **Training and Meetings**, of which 61% is for travel to consultant offices required to perform cost audits.

PUBLIC AFFAIRS

Proposed FY06 Current Expense Budget PUBLIC AFFAIRS							
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06		
WAGES & SALARIES	\$ 1,619,632	\$ 1,308,363	\$ 1,271,435	\$ 1,301,515	\$ 30,080	2.4%	
OVERTIME	-	18	-	-	-	-	
TRAINING & MEETINGS	4,273	4,561	3,030	3,550	520	17.2%	
PROFESSIONAL SERVICES	5,050	1,025	1,050	1,050	-	0.0%	
OTHER MATERIALS	17,548	18,675	22,619	22,178	(441)	-1.9%	
OTHER SERVICES	58,454	31,381	87,322	87,131	(191)	-0.2%	
TOTAL	\$ 1,704,957	\$ 1,364,023	\$ 1,385,456	\$ 1,415,424	\$ 29,968	2.2%	

The Public Affairs Department is the institutional link to all MWRA constituencies. The **Community Relations Section** deals directly with cities and towns in the service area, responds to inquiries about MWRA, proactively incorporates community concerns into MWRA project work, coordinates outreach and education initiatives to highlight MWRA programs, and provides technical expertise for specific projects and initiatives. Community Relations staff also work *in conjunction with Planning Department staff* to ensure compliance with the Massachusetts Environmental Policy Act (MEPA), the Massachusetts Historical Commission (MHC), DEP, local conservation commissions, and the Boston Landmarks Commission (BLC). The **Communications Section** manages media relations, issues press releases and responds to information requests, oversees the design and distribution of MWRA publications, manages the web site, and provides design, editorial, and graphics services for other sections of MWRA. The **Education Section** is responsible for curriculum development, teacher training workshops, as well as providing to all grade levels school education materials on water quality, water conservation, wastewater topics, and environmental issues. The **Intergovernmental Affairs Section** works for passage of legislation necessary to carry out MWRA’s mission, monitors legislation, responds to inquiries by elected and appointed officials, and pursues funding from the state legislature for MWRA projects. Public Affairs reports to the Executive Director.

The goals of the Public Affairs Department are to:

- Enhance overall public understanding of MWRA’s mission, goals, and benefits to the public through aggressive outreach and effective communication.
- Develop and implement proactive strategies for educating and informing key MWRA constituencies and the public at large about MWRA’s mission, progress, and effective management.
- Gain public support for MWRA programs and projects, and respond to the needs and concerns of elected and appointed public officials.
- Provide support to MWRA staff to ensure that MWRA projects meet regulatory requirements in a cost-effective and efficient manner, and provide input to regulatory agencies in order to ensure MWRA interests are recognized during the development of regulations.

Budget Highlights

- *\$1.3 million for **Wages and Salaries**, an increase of \$30,000 or 2% from the FY05 budget, primarily due to wages and salaries adjustment. The budget supports 18 positions.*
- *\$109,000 for **Other Materials** and **Other Services**, including \$75,000 to fund services associated with the publication and distribution of MWRA's Annual Report, as well as production of materials to inform the public about MWRA activities and to educate school children about Boston Harbor and other environmental matters.*

FACILITIES MANAGEMENT

Proposed FY06 Current Expense Budget FACILITIES MANAGEMENT						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 1,106,183	\$ 971,144	\$ 910,858	\$ 1,010,082	\$ 99,224	10.9%
OVERTIME	53,098	25,466	33,100	30,988	(2,112)	-6.4%
FRINGE BENEFITS	1,014	549	50	50	-	0.0%
UTILITIES	998,994	1,039,111	988,011	1,011,331	23,320	2.4%
ONGOING MAINTENANCE	380,112	370,028	403,448	345,450	(57,998)	-14.4%
TRAINING & MEETINGS	1,490	117	140	140	-	0.0%
PROFESSIONAL SERVICES	435,172	399,908	575,000	638,446	63,446	11.0%
OTHER MATERIALS	244,989	139,645	145,319	17,679	(127,640)	-87.8%
OTHER SERVICES	8,316,974	4,970,001	4,460,095	4,427,472	(32,623)	-0.7%
TOTAL	\$ 11,538,026	\$ 7,915,969	\$ 7,516,021	\$ 7,481,638	\$ (34,383)	-0.5%

Proposed FY06 Current Expense Budget FACILITIES MANAGEMENT SUPPORT by Area						
AREA	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
FRSA	\$ 608,703	\$ 572,488	\$ 356,574	\$ 314,683	\$ (41,891)	-11.7%
FACILITIES MANAGEMENT	10,005,406	6,622,895	6,272,797	6,155,438	(117,359)	-1.9%
ADMINISTRATIVE SERVICES	923,917	720,586	886,650	1,011,517	124,867	14.1%
TOTAL	\$ 11,538,026	\$ 7,915,969	\$ 7,516,021	\$ 7,481,638	\$ (34,383)	-0.5%

The Facilities Management Department provides a wide range of support services to MWRA staff located at the Charlestown Navy Yard (CNY), Chelsea and Fore River Staging Area (FRSA) facilities. The department previously comprised two sections: Facilities Management and Administrative Services. In FY05 all department personnel costs were consolidated in the Administrative Services cost center. The FRSA and Facilities Management cost centers include all other costs associated with each of the three facilities managed by the department. These expenses include CNY rent and utility, maintenance, and other operating costs for the FRSA, CNY and Chelsea Facilities. Non-personnel expenses that were previously included in the Administrative Services area, such as copier and mail costs, are now included in the facility budgets.

Facilities Management is responsible for coordinating site management activities at the Chelsea facility, CNY, and FRSA. Staff institute maintenance procedures; respond to facilities requests from building occupants, coordinate workspace planning, provide office furnishings; and are responsible for developing and implementing appropriate measures to ensure the safety of MWRA staff and protect and preserve MWRA assets.

Staff are also responsible for the security, operation, and maintenance of the utilities and various structures and buildings located at FRSA. MWRA uses this facility for the operation of its sludge processing facility, the warehousing of records and geological samples and the Fore River Railroad Corporation's office, storage tracks and main rail line crossing the parcel. MWRA is continuing to pursue and execute options to surplus and sell those portions of FRSA not needed to support MWRA operations.

In addition, staff provides administrative and office support services that facilitate efficient use of MWRA resources. These responsibilities include providing and managing the Motor Pools at Chelsea and CNY, copying and printing services, general office equipment repairs, transportation, mail and courier services, and receptionist coverage at CNY and the Chelsea facility. Staff are also responsible for initiating and managing an expanded recycling program.

The goals of the Facilities Management Department are to:

- Provide a safe and well-maintained working environment for all MWRA staff at the Chelsea Facility, CNY, and FRSA and provide appropriate space for staff by coordinating workspace planning, design, and furniture acquisitions.
- Maintain the Chelsea, CNY and FRSA facilities to prevent loss or deterioration of MWRA assets.
- Assist staff in their activities at FRSA and the Chelsea Facility by coordinating overall site development plans and monitoring the activities of operations at the site.
- Contain MWRA operating costs by carefully managing resources, implementing a cost effective maintenance program and removing recyclable materials from the waste stream.
- Provide efficient, cost-effective and customer-focused administrative services to support CNY, FRSA and Chelsea Facility staff.
- Support efforts to limit the fleet size while meeting operational needs by providing reliable motor pool and transportation services.

In FY05 Facilities Management accomplishments included:

- Awarded a new cleaning contract in Chelsea resulting in savings of \$10,000.
- Identified tasks/services with FOD trades staff that eliminated the necessity to outsource, resulting in savings of \$10,000.
- Wired CNY card readers to be monitored by Chelsea security staff resulting in savings of \$6,000.
- Started a space assessment to identify long-range space/staffing needs at Chelsea and CNY.
- Added a third parking garage option for CNY employees and negotiated a reduced monthly rate, which is charged by all three facilities.
- Implemented an Authority-wide recycling committee, a mixed paper recycling program at the Chelsea facility and a scrap metal recycling program.
- Safely transported 9,200 shuttle passengers.
- Processed approximately 400,500 pieces of mail, filled 4,900 motor pool requests and responded to 71,200 incoming telephone calls.

Budget Highlights

- *Total budget of \$7.5 million, a decrease of \$34,000 or 0.5% as compared to the FY05 budget.*
- *\$31,000, for **Overtime** for coverage of facility maintenance and support services, a decrease of \$2,000 or 6% from the FY05 budget.*
- *\$1.0 million for **Utilities**, an increase of \$23,000 or 2.4% from the FY05 budget anticipating a rate increase in the standard offer cost per kwh.*
- *\$346,000 for **Maintenance**, a decrease of \$58,000 or 14.4% from the FY05 budget. Security services are now monitored at Chelsea for CNY resulting in a decrease in spending (\$13,000). Other decreases were in office equipment and some building services that were assumed by FOD staff.*
- *\$639,000 for **Professional Services**, an increase of \$64,000 or 11.0 % over the FY05 budget, primarily for Environmental services needed to remove and dispose of an oil plume at FRSA.*
- *\$4.4 million for **Other Services**, a decrease of \$33,000 or 0.7%, as compared to the FY05 budget, primarily due to continued reductions in operating costs.*

FLEET SERVICES

Proposed FY06 Current Expense Budget						
FLEET SERVICES						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 559,326	\$ 543,768	\$ 554,928	\$ 620,061	\$ 65,133	11.7%
OVERTIME	34,399	18,720	20,000	20,000	-	0.0%
FRINGE BENEFITS	1,335	768	-	-	-	-
UTILITIES	473	771	1,500	1,500	-	0.0%
ONGOING MAINTENANCE	506,059	454,673	471,975	472,000	25	0.0%
TRAINING & MEETINGS	1,278	(75)	-	-	-	-
OTHER MATERIALS	41,656	63,706	264,946	336,472	71,526	27.0%
OTHER SERVICES	469	3,525	4,309	4,909	600	13.9%
TOTAL	\$ 1,144,995	\$ 1,085,856	\$ 1,317,658	\$ 1,454,942	\$ 137,284	10.4%

Fleet Services manages and maintains MWRA's motor vehicle and equipment fleet and the radio communications network that provides communications and emergency support services to MWRA headquarters and field personnel. Fleet Services also manages development and processing of specifications for new vehicles and equipment, as well as managing the gas card program and fuel facility in Chelsea.

The goal of the Fleet Services Department is to maintain MWRA's vehicle and equipment fleet to minimize downtime and extend the life of the assets.

In FY05, the accomplishments of the Fleet Services Department included:

- Coordinated the installation of the communications line to the Braintree Weymouth IPS building including programming of some radios with new frequency and channel assignments.
- Worked with Surplus / Warehouse to increase the selling price for 81 vehicles sold at two separate auctions.

Budget Highlights

- \$1.5 million total proposed FY06 budget, an increase of \$137,000 or 10% over the FY05 budget.
- \$620,000 for **Wages & Salaries**, an increase of \$65,000 or 11.7% over the FY05 budget. The increase is primarily attributed to settlement of the union contracts and funding an additional mechanic hired during FY05.
- \$336,000 for **Other Materials**, an increase of \$72,000 over FY05 the budget comprising an increase of \$64,000 for fuel and \$8,000 for increased toll costs.
- The **Ongoing Maintenance** budget of \$472,000 is level funded, however funding for object codes within this line have been changed based on current staffing and operational requirements. This line includes funds for automotive materials and services to maintain MWRA's vehicle fleet.

AFFIRMATIVE ACTION and COMPLIANCE

Proposed FY06 Current Expense Budget AFFIRMATIVE ACTION & COMPLIANCE UNIT						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 568,945	\$ 498,465	\$ 515,708	\$ 532,485	\$ 16,777	3.3%
OVERTIME	109	-	-	-	-	-
TRAINING & MEETINGS	-	1,400	1,450	1,450	-	0.0%
PROFESSIONAL SERVICES	11,500	-	-	-	-	-
OTHER MATERIALS	903	313	1,919	1,621	(298)	-15.5%
OTHER SERVICES	200	1,000	700	700	-	0.0%
TOTAL	\$ 581,657	\$ 501,178	\$ 519,777	\$ 536,256	\$ 16,479	3.2%

The Affirmative Action and Compliance Unit (AACU) develops, administers, and monitors compliance with all aspects of MWRA’s Affirmative Action Plan, programs, and policies of affirmative action, equal opportunity, and non-discrimination. The Special Assistant for AACU reports to the Board of Directors through the Executive Director.

The goals of AACU are to:

- Assist divisions and departments in the implementation of MWRA’s affirmative action program and promote MWRA’s policy of non-discrimination for all persons in or recruited for its work force.
- Maintain internal audit and reporting systems adequate to measure MWRA’s accomplishments in areas of identified underutilization of minorities and females.
- Communicate to managers and supervisors MWRA's commitment to its equal opportunity policies and affirmative action programs.
- Provide for the equitable participation of minority and women-owned businesses (MBE/WBE) in procurement opportunities and ensure that minorities and women are represented in the labor force on construction contracts.
- Assist divisions and departments in understanding MBE/WBE program policies and practices and monitor and report on contractor compliance.

Budget Highlights

- Total budget of \$536,000, an increase of \$17,000 or 3.2% over the FY05 budget primarily due to wages and salaries adjustment. The budget supports 8 positions.

HUMAN RESOURCES

Proposed FY06 Current Expense Budget HUMAN RESOURCES						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 1,580,550	\$ 1,362,099	\$ 1,555,207	\$ 1,437,645	\$ (117,562)	-7.6%
OVERTIME	378	138	437	437	-	0.0%
FRINGE BENEFITS	12,242,555	10,769,692	12,284,574	13,380,278	1,095,704	8.9%
WORKERS' COMPENSATION	49,627	1,687,301	1,600,000	1,300,000	(300,000)	-18.8%
ONGOING MAINTENANCE	138	-	1,200	1,200	-	0.0%
TRAINING & MEETINGS	7,058	3,314	8,698	7,698	(1,000)	-11.5%
PROFESSIONAL SERVICES	350,150	411,681	554,420	474,094	(80,326)	-14.5%
OTHER MATERIALS	8,278	19,842	26,310	25,760	(550)	-2.1%
OTHER SERVICES	8,400	35,413	58,345	47,009	(11,336)	-19.4%
TOTAL	\$ 14,247,134	\$ 14,289,480	\$ 16,089,191	\$ 16,674,121	\$ 584,930	3.6%

Proposed FY06 Current Expense Budget HUMAN RESOURCES by Area						
AREA	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
EMPLOYEE/COMP/BEN	\$ 768,319	\$ 610,099	\$ 756,324	\$ 690,924	\$ (65,400)	-8.6%
LABOR RELATIONS	554,070	608,367	709,245	750,952	41,707	5.9%
TRAINING	607,775	585,776	706,061	519,281	(186,780)	-26.5%
CENTRALIZED FRINGE BENEFITS	12,316,970	12,485,238	13,917,561	14,712,964	795,403	5.7%
TOTAL	\$ 14,247,134	\$ 14,289,480	\$ 16,089,191	\$ 16,674,121	\$ 584,930	3.6%

¹The budget for Workers' Compensation was transferred from Operations to Human Resources in FY04.

The Human Resources Department is comprised of the following three units.

The **Employment, Compensation, Benefits and HRIS Unit** coordinates and oversees all external recruitment and selection activities including hiring, lateral transfers and promotions to meet the business needs of MWRA, develops and coordinates MWRA compensation and benefits strategies and programs and ensures the proper processing and recording of personnel actions. The compensation function also ensures that all MWRA employees possess the necessary licenses and certifications required by their positions. The **Labor Relations Unit** is responsible for fulfilling MWRA's collective bargaining and contract administration obligations under Massachusetts' public sector collective bargaining law, its workers' compensation responsibilities, and its responsibilities for employee occupational safety and health. The **Training Unit** develops, coordinates, delivers, and evaluates MWRA technical and professional development training programs and other programs directed at the improvement of employee knowledge, skills, productivity, and the quality of workplace interaction. It is responsible for MWRA performance evaluation programs oversight and tracking, Employee Assistance, and Tuition Reimbursement programs. In addition, the Human Resources Department includes the **Centralized Fringe Benefits** cost center, which includes the budgets for fringe benefits for all MWRA employees, as well as for mandatory payments for unemployment expenses and Medicare.

The goals of the Human Resources Department are to:

- Attract and retain a qualified high-performance workforce, hire and promote qualified minority and female employees, and offer a competitive total compensation (salary and benefits) package to all employees.
- Maintain effective relationships with the unions representing the MWRA workforce while protecting and enhancing management flexibility. Ensure that collective bargaining objectives are met, support MWRA initiatives by designing and implementing appropriate labor relations strategies, create an environment that fosters safety consciousness and productive work, maximize the number of early returns to work by

employees who have incurred on-the-job injuries or illnesses, and aggressively manage the Workers' Compensation Program to reduce costs.

In FY05, the accomplishments of the Human Resources Department included:

- Delivered to 1,278 employees mandatory training on the MWRA Drug and Alcohol Testing Policy.
- Conducted Productivity Improvement Program courses.
- Managed the technical training needs associated with the start-up of new water facilities.
- Completed negotiations on five collective bargaining agreements.

Budget Highlights

- *\$1.4 million for **Wages and Salaries**, a decrease of \$118,000 or 7.6% as compared to the FY05 budget.*
- *\$13.4 million for **Fringe Benefits**, an increase of \$1.1 million or 8.9% over the FY05 budget. The budget includes \$11.3 million for MWRA's share of health insurance costs, \$1.2 million for MWRA's share of Medicare taxes, \$827,000 for MWRA's share of dental insurance costs and union health and welfare fund contributions, \$70,000 for unemployment insurance payments, and \$36,000 for tuition reimbursement.*
- *\$1.3 million for **Workers' Compensation** expenses, a decrease of \$300,000 or 18.8% as compared to the FY05 budget. Human Resources is responsible for management of this program and coordination with the third-party administrator.*
- *\$474,000 for **Professional Services**, a decrease of \$80,000 or 14.5% as compared to the FY05 budget. The proposed FY06 budget includes \$162,000 for technical training, \$57,000 for professional development, \$17,000 for the Employee Assistance Program, \$52,000 for specialized investigation services and medical evaluation services \$130,000 for Workers Compensation claims administration and \$55,500 for arbitration expenses.*

MANAGEMENT INFORMATION SYSTEMS (MIS)

Proposed FY06 Current Expense Budget							
MIS							
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06		
WAGES & SALARIES	\$ 5,111,419	\$ 4,871,640	\$ 4,693,222	\$ 4,703,475	\$ 10,253	0.2%	
OVERTIME	2,491	1,603	2,678	2,678	-	0.0%	
FRINGE BENEFITS	-	-	-	-	-	-	
ONGOING MAINTENANCE	2,502,857	3,027,277	2,684,996	2,364,873	(320,123)	-11.9%	
TRAINING & MEETINGS	13,986	26,817	15,490	15,490	-	0.0%	
PROFESSIONAL SERVICES	(1,695)	-	-	-	-	-	
OTHER MATERIALS	374,648	658,762	119,054	164,787	45,733	38.4%	
OTHER SERVICES	706,784	769,544	782,800	817,684	34,884	4.5%	
TOTAL	\$ 8,710,490	\$ 9,355,643	\$ 8,298,240	\$ 8,068,987	\$ (229,253)	-2.8%	

The MIS Department provides MWRA with the information processing capacity necessary to carry out its mission. Applications in use range from financial to operational, and enhance MWRA's ability to access data and improve internal controls, reporting, and management performance. In addition to computing systems, the department also provides library and records management services.

In FY06 MIS will continue to provide three categories of services:

- *Operational services* are day-to-day routine activities required for applications and systems to work, including preventive maintenance; replacement programs; minicomputer, server, network, and voice equipment availability; back-up and recovery; accounts payable and payroll generation; period closings; and scheduled report productions. Up-time goals based on industry norms have been established, as well as schedules for annual replacement programs. Cyber Security will continue to be a major work item in FY06.
- *Responsive services* are provided as a result of calls for assistance, training, troubleshooting, repair of systems or requests for materials, research, and records. A variety of performance measures have been adopted based on business impact and problem type. For example, the target response rate to close any of the aforementioned types of calls is 90% within three days, except for calls regarding system outages, the target for which is 100% within one business day. Staff also track backlogs, average closure rates, and rolling averages to ensure responsiveness.
- *Developmental services* respond to requests for new or enhanced products, services, reports, and applications. These requests are generally turned into projects with plans, defined deliverables, and agreed upon schedules. MIS-generated projects based on infrastructure limitations, changing technology, and expiration of leased equipment may also be included. All activities seek to balance business demands with costs and the desire to be neither leading nor lagging in the use of technology. Measurement is based on timely completion of milestones and a +/- 10% of budget and schedule target is established for all major projects. In addition, for projects with large capital or CEB requirements, a customization cap is established and reported on.

The goal of MIS is to support more than 1,000 MWRA users, including those at the Charlestown Navy Yard, Chelsea, Deer Island, Southboro and other remote sites, by ensuring that:

- Existing applications, hardware, and network resources are cost-effectively maintained, supported, upgraded, and replaced.
- Information system development efforts are consistent with the MWRA Business Plan, reflecting management priorities.

- System security and integrity are maintained.
- Flexible tools and system capabilities are provided consistent with industry standards and norms.

Major focus areas and key projects for FY06 include:

- Cyber and network security, expanded support for OCC and EOC, and information security/document support for classified documents.
- Conversion of Lawson to a new operating system and MAXIMO system upgrades/data consolidation.
- Expanded Water Quality reporting requirements and support for Walnut Hill.
- TRAC, LIMS and Document Management system replacements.
- Continuation of TV Inspection software changes, GIS improvements, metering improvements and support for the Wastewater Automation project.
- Implementation of planned upgrades and continued improvement with storage management, clustering, and unattended operations solutions to expand services reduce costs and improve management of growing data and resources.
- Programming support for the over 400 annual reports and development requests.
- Records Center relocation.

In FY05 MIS accomplishments included:

- Infrastructure: A new Chelsea EOC was opened in July with technology improvements to assist incident command staff. Staff also designed a smaller center for Western Operations. The data and voice communication infrastructure for the new Walnut Hill Treatment Plant was completed, as was network connectivity for the new Quabbin Laboratory. Bandwidth improvements were made to the DITP connection; server backup improvements were implemented on a variety of systems to reduce time and avoid costs; a new wastewater meter network was installed; and a variety of obsolete equipment was replaced. Also, Chelsea “black start” testing was successful which demonstrated that new power-off controls are working properly.
- Security: Staff completed hundreds of security patch installs, virus updates and spam control enhancements. New products were competitively bid and installed. The first year of 24-hour by 7-day intrusion detection monitoring was successful.
- LIMS, TRAC, MAXIMO and Lawson multi-year replacement and upgrade projects were kicked-off. Staff also continued to expand SCADA and PICS management information system and developed new modules for Water Quality monitoring.
- Completed Exchange 2003 implementation, Microsoft re-licensing, active directories implementation, TRAC Permit system rewrite, cyclical requirements (W2s, period closings, monthly DEP reports, etc.) and hundreds of reports and database changes. Staff also responded to HelpLine calls within benchmark ranges, ensured systems availability against industry norms and offered a variety of training programs for staff.

Budget Highlights

- *Total budget of \$8.1 million, a decrease of \$229,000 or 2.8% as compare to the FY05 budget, reflecting a reduction of staff and the decision to defer until FY07 replacement of approximately 75% of PCs and related equipment.*
- *\$2.4 million for **license and maintenance** fees to support administrative, operations, and database applications used by MWRA staff. This represents a decrease of 11.9% from the FY05 budget due to reducing a number of non-critical business requests and maintenance contracts.*
- *\$165,000 for **Other Materials**, an increase of \$46,000 or 38.4% as compared to the FY05 budget, reflecting a partial restoration of PC and related hardware replacements.*
- *\$818,000 for **Other Services**, an increase of \$35,000 or 4.5% as compared to the FY05 budget due primarily to upgrading the data network connection from Deer Island to the Chelsea Computer Center, data and voice communications for Walnut Hill Treatment Plant and networking the new Quabbin laboratory. The proposed FY06 budget also includes MWRA network services to all staffed facilities, telephone services, leased lines for security connectivity to key water facilities and blackberry devices.*

PROCUREMENT

Proposed FY06 Current Expense Budget PROCUREMENT						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 2,970,520	\$ 3,090,184	\$ 2,919,452	\$ 3,049,354	\$ 129,902	4.4%
OVERTIME	7,987	4,312	-	-	-	-
FRINGE BENEFITS	93	45	-	-	-	-
CHEMICALS	-	-	-	-	-	-
ONGOING MAINTENANCE	(53,880)	(194,370)	-	-	-	-
TRAINING & MEETINGS	4,008	6,397	14,600	14,600	-	0.0%
PROFESSIONAL SERVICES	-	-	-	-	-	-
OTHER MATERIALS	3,044	105,077	97,531	95,112	(2,419)	-2.5%
OTHER SERVICES	55,295	58,955	64,258	62,258	(2,000)	-3.1%
TOTAL	\$ 2,987,067	\$ 3,070,600	\$ 3,095,841	\$ 3,221,324	\$ 125,483	4.1%

The Procurement Department includes three units. The **Purchasing Unit** operates a competitive purchasing system for the procurement of materials, goods, and non-professional services in accordance with MWRA policies and procedures. The **Contract Management Unit** reviews, drafts, and negotiates contracts, amendments, and change orders for all professional, non-professional, and construction services contracts. Staff direct the bid, review, and selection process, and maintain a contracts database. The **Materials Management Unit** manages an authority-wide inventory control and management system for better control, storage, distribution, and accounting of MWRA’s inventory. The unit has consolidated existing inventory locations into four regional warehouses/distribution centers that will support all MWRA activities. The consolidation will result in better control, reduce inventory levels, and establish consistency across MWRA.

The goals of the Procurement Department are to:

- Procure materials, equipment, supplies, and construction, professional, and non-professional services in a timely, efficient, and openly competitive process in accordance with MWRA policies and procedures, including those related to meeting affirmative action goals.
- Maintain centralized, efficient, cost-effective management of spare parts and operating supplies inventory.
- Provide timely and high quality services to initiating divisions to enable MWRA programs to meet their public, production, and schedule responsibilities.

In FY05 Procurement accomplishments included:

- Competitively bid in CY04 Renewable Portfolio Standard certificates, resulting in revenues of \$635,000.
- Competitively bid electric power for Deer Island Treatment Plant and for selected Field Operations and Support Division facilities.
- Completed Phase I and II of Walnut Hill Treatment Fit out.
- Incorporated new Standard Operating Procedures (SOPs) for delivery of wastewater chemicals.

Budget Highlights

- Total budget of \$3.2 million, represents a 4.1% increase from the FY05 budget; includes \$3.05 million to support 49 positions and \$85,000 for agency-wide printer/copier paper.

REAL PROPERTY and ENVIRONMENTAL MANAGEMENT

Proposed FY06 Current Expense Budget REAL PROPERTY / ENVIRONMENTAL MANAGEMENT						
LINE ITEM	FY03 Actual	FY04 Actual	FY05 Final	FY06 Proposed	Change FY05 to PFY06	
WAGES & SALARIES	\$ 616,072	\$ 532,870	\$ 525,763	\$ 454,725	\$ (71,038)	-13.5%
FRINGE BENEFITS	12	-	-	-	-	-
UTILITIES	-	-	-	-	-	-
ONGOING MAINTENANCE	-	-	-	-	-	-
TRAINING & MEETINGS	1,477	2,080	2,440	2,440	-	0.0%
PROFESSIONAL SERVICES	(1,033)	283	-	10,000	10,000	-
OTHER MATERIALS	2,441	989	1,938	2,038	100	5.2%
OTHER SERVICES	106,402	66,578	196,175	220,175	24,000	12.2%
TOTAL	\$ 725,371	\$ 602,800	\$ 726,316	\$ 689,378	\$ (36,938)	-5.1%

The Real Property and Environmental Management Department negotiates the purchase or lease of real estate and land necessary to support MWRA's capital projects. Staff participate in selecting sites, negotiating acquisitions or easements, and managing the sale or lease of MWRA surplus real property. In addition, staff have developed and are maintaining the Real Property Database, the compilation of more than 100 years of easements and land rights for the water and sewer systems. Department staff manage environmental regulatory compliance at MWRA facilities and also provide special expertise and assistance to MWRA staff regarding air quality and hazardous material issues. Assistance includes management of oil and hazardous materials site assessment and remediation, and air emission permits negotiation and preparation and submittal of monthly/quarterly monitoring reports.

The goals of the Real Property and Environmental Management Department are to:

- Acquire the real property needed to complete MWRA's major capital projects in a timely and cost-effective manner, and manage the disposition of surplus real property in an efficient manner, as well as to provide staff and others with current information regarding MWRA's real property rights.
- Manage the centralized environmental management program, providing technical assistance regarding hazardous waste management, air quality compliance, and related issues during all phases of MWRA projects; and monitoring of and providing assistance in maintaining environmental regulatory compliance at MWRA facilities.

In FY05, the accomplishments of the Real Property and Environmental Management Department included:

- Completed the sale of 11.6 acres of land and water at FRSA to the MBTA for \$1.2 million, for the MBTA's continued use for water transportation service between Boston/Logan and the Quincy area.
- Advertised two more parcels of land at FRSA as surplus and for sale---anticipate closing by the end of the fiscal year.
- Negotiated the final Deer Island Clean Air Act Operating Permit.
- Real Property and Environmental Management, in conjunction with other staff, completed requirements to close out the last 3 Clean State environmental matters.

Budget Highlights

- *The total proposed FY06 budget of \$689,000 represents a decrease of 5% as compared to the FY05 budget.*



Appendices

APPENDIX A

DESCRIPTIONS OF FUNCTIONAL AREAS

Facilities Planning, Design, and Construction - Management of planning, design, and construction activities to repair, rehabilitate, and construct MWRA transport, treatment, distribution, and support facilities. Functions include in-house engineering, drafting, surveying, technical assistance, environmental review, management of consultants, and construction project management, including contract management and administration.

Wastewater Transport - The continuous transportation and delivery of an average of more than 350 million gallons per day of wastewater from user communities to the Deer Island and Clinton treatment plants. Includes operation and maintenance of a large network of interceptors, and numerous pump stations, CSOs, and headworks facilities, as well as regular inspection of interceptors and tidegates. System operation requires 1) very careful attention to wet weather flows which can double or even triple average daily flows, and 2) response to emergency conditions such as flooding, back-ups, and illegal sewer discharges.

Wastewater Treatment - The continuous treatment of wastewater to meet NPDES requirements at the Deer Island and Clinton treatment plants, as well as the conversion of wastewater residuals from the Deer Island plant into fertilizer pellets or sludge cake at the residuals processing facility in Quincy. Includes operation, maintenance, and technical and administrative support for all treatment facilities.

DESCRIPTIONS OF FUNCTIONAL AREAS – CONTINUED

Water Transmission, Distribution, and Treatment - The transmission, pumping, treatment, and delivery of 250 million gallons per day of potable water from the Quabbin and Wachusett reservoirs to MWRA user communities. Includes operation and maintenance of aqueducts, tunnels, pipelines, pump stations, and treatment facilities. Also includes generation and sale of hydroelectric power.

Water and Wastewater Quality - Activities which work to ensure that the water MWRA delivers to user communities and that the wastewater discharged from MWRA treatment plants meet appropriate quality standards. Includes the Environmental Quality Department, which monitors sewage influent and effluent quality and the resulting impact on Boston Harbor; the Laboratory Services Department, which performs more than 150,000 analyses per year, including 30,000 tests to monitor and ensure the purity and quality of MWRA water at the system and community levels; and the TRAC Department, which operates a multi-faceted program to minimize and control the inflow of hazardous and toxic materials into the sewer system and includes permitting and monitoring of more than 800 industries.

Metering and Monitoring - Operation and maintenance of MWRA's 150 water meters, more than 200 wastewater meters, and a variety of instrumentation devices to ensure the accuracy and integrity of the meter systems and the information MWRA uses to support hydraulic modeling, planning, pipeline maintenance and rehabilitation, and customer assessments.

DESCRIPTIONS OF FUNCTIONAL AREAS – CONTINUED

Facilities and Equipment Management and Support - Management and maintenance of approximately 500 MWRA vehicles and pieces of communications equipment; management of the Fore River Staging Area and MWRA headquarters, including more than \$5.75 million in leases for CNY and Linden Street; management of the new Chelsea Facility; provision of supply- and demand-side energy management services; office supplies and postage; and provision of library and records management services, copying and printing services, and other general office services.

Administration - Senior management and support staff in the offices of the Executive Director, Finance Division Director and Operations Division Administration; also includes funding for the Advisory Board and other MWRA advisory committees (WSCAC, WAC).

Financial Management - Management of budgeting, accounting and payments, payroll, rates and revenue, capital financing, investments, grants and loans, auditing, and review of compliance with accounting and management control systems related to MWRA's annual spending.

Law - Provision of legal analysis and counsel to MWRA's operating and support areas including environmental regulation, real estate, labor relations, and claims management, as well as representation of MWRA in all court-related matters.

DESCRIPTIONS OF FUNCTIONAL AREAS – CONTINUED

Human Resources - Management and administration of human resources policies and programs for MWRA's employees, including recruitment and hiring; wage and salary compensation and fringe benefits of more than \$104 million; labor relations and collective bargaining for five bargaining units; development, implementation, and evaluation of occupational health and safety programs and practices; health screening and CDL testing; a \$1 million workers' compensation program; and annual provision of technical and non-technical training to MWRA employees.

Procurement - Management of the purchase of goods and professional and construction services needed to support MWRA's operating and capital programs and to ensure compliance with statutory, regulatory, and policy requirements, including MBE/WBE procurement goals. The Procurement Department annually manages the procurement of more than \$40 million of goods and materials as well as the procurement of an estimated 575 contracts, amendments, and change orders valued at approximately \$475 million.

Public Affairs - Activities to enhance public understanding of MWRA's mission, goals, and services through media outreach, public information, and educational initiatives. Responds to legislative inquiries from the 82 representatives and 26 senators representing the MWRA service area. Coordinates MWRA response to construction-related, operations, and financial issues in each of the 61 MWRA member communities.

DESCRIPTIONS OF FUNCTIONAL AREAS – CONTINUED

MIS - Provides hardware, software, network/voice communications, systems training, and programming resources including telephones, personal computers, word processing and spreadsheet software, electronic mail, and communications between remote sites and CNY. Specific applications and technologies are provided to support financial (budget, receivables/payables, rates, investments), operational (flow/meter capture, maintenance, materials management, safety), engineering (modeling, mapping, geographical information systems, project planning, computer-aided design), regulatory (TRAC, NPDES, water and wastewater quality), and administrative/support (payroll, training, contracts, purchasing) activities. This function is supported by the MIS Department, the FIS group at Deer Island, and other staff.

Planning - Coordinates development of the MWRA Business Plan and prepares other short-term and long-term plans to guide MWRA development and increase the overall efficiency and effectiveness of MWRA operations, maintenance, and capital programs; also includes the Real Property and Environmental Management Department, which negotiates the purchase or lease of real estate and land needed to support MWRA capital projects and provides special environmental and policy expertise and assistance to MWRA staff.

APPENDIX B

DIRECT EXPENSE BUDGET LINE ITEMS

Introduction

MWRA's direct expense budget funds the annual expenses of its operating and support divisions. Though the direct expense budget constitutes less than half of MWRA's total budget, it is these expenses which directly support the provision of water and sewer services to MWRA's customers. The direct expense budget includes the annual costs of operating the water and sewer systems, and funds the policy direction, administrative, financial, and legal support services for MWRA's ongoing operations. The direct expense budget also includes the personnel costs for management and oversight of MWRA's extensive capital programs.

There are 11 line items in the division budgets. The line items are:

Wages and Salaries - This line item includes funds for regular pay, shift differential, and holiday pay for MWRA staff, as well as funds for interns and temporary staff.

Overtime - This line item includes funds for overtime related to operations, emergencies, and training.

Fringe Benefits - This line item includes funds for health and dental insurance, unemployment compensation, Medicare, and overtime meals.

Workers' Compensation - This line item includes funds for compensation payments, medical payments, and settlements of compensation claims.

Chemicals - This line item includes funds for the chemicals used in water and wastewater treatment, such as chlorine, sodium hypochlorite,

potassium permanganate, and hydrofluosilicic acid.

Utilities - This line item includes funds for electricity, fossil fuels, and other utilities such as water and sewer services paid by MWRA to the towns in which it operates facilities.

Maintenance - This line item includes funds to purchase materials and services for the maintenance of MWRA's plants and machinery, water and sewer pipelines, grounds, and buildings.

Training and Meetings - This line item covers the costs of staff training, meetings, and professional seminars.

Professional Services - This line item funds outside consultants supporting MWRA activities, including engineering and construction services, laboratory and testing contracts, computer system consultants, and legal and audit services.

Other Materials - This line item includes funds for office materials, equipment, postage, laboratory supplies, MWRA vehicles, work clothes, and computer hardware and software.

Other Services - This line item includes funds for space leasing, health and safety initiatives, removal of grit and screenings from the sewerage system, and the contracted operation of MWRA's residuals processing plant.

Sections II – VI present summaries of the MWRA's five division budgets with a detailed description of program budgets and highlights within each division section.

APPENDIX C

BUDGET PROCESS AND TIMETABLE

MWRA operates on a fiscal year that starts July 1. The Current Expense Budget development process begins in September and, as described below, continues through a series of interactive reviews and revisions until June, when the Board of Directors approves the final budget. Throughout the formal budget process, MWRA staff maintain an ongoing dialogue with the Board of Directors and Advisory Board to discuss issues, the status of budget development, and other concerns.

September Divisions receive budget targets, guidelines, and manuals for the development of budget requests, and can begin to access MWRA’s interactive budgeting system.

Nov-Dec After the divisions return their budget requests, Rates and Budget Department staff compare the requests to the previous years’ budgets and expenses, review the justifications for the requests, and meet with program staff to clarify resource needs and identify opportunities for efficiencies.

January The Executive Director, supported by senior management, determines proposed funding levels required to meet service priorities. Staff may seek appropriate policy direction from the Board.

February MWRA transmits the Proposed Current Expense Budget to the Advisory Board for a 60-day review, during which time MWRA staff meet with Advisory Board staff, respond to questions, and provide updated information on plans and prices. (FY04 was an exception to this timetable since there is a first-time Governor and the House 1 budget was released in February versus January).

Mar-April MWRA hosts public hearings to solicit comments on the proposed budget community assessments from citizens in its service area. The Board of Directors may hold briefing sessions on the proposed budget. The Advisory Board transmits comments and recommendations on the proposed budget to MWRA.

May The Board of Directors holds a hearing on the proposed budget and the Advisory Board’s comments and recommendations.

June The Board of Directors adopts a final Current Expense Budget and a schedule of final wholesale water and sewer assessments.

APPENDIX D

MASSACHUSETTS WATER RESOURCES AUTHORITY BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised August 2003 to incorporate changes to capital budget section of Management Policies adopted by the Board of Directors June 11, 2003)

These policies and procedures govern certain budget, assessment, and rates management practices at the Massachusetts Water Resources Authority (MWRA). Policies and procedures may be amended from time to time, provided that changes in provisions governing reporting to or approvals by the Board of Directors or the Advisory Board must be approved by the Board of Directors. If any sections of these policies and procedures are at variance with requirements of MWRA's financing agreements, the latter shall govern.

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

MWRA is required by its enabling act to establish assessments which, with other revenues, provide sufficient funds each year to pay all current expenses, debt service, and obligations to the Commonwealth; to pay all costs of maintenance, replacement, improvements, extension, and enlargement of the sewer and waterworks systems; to create and maintain reserve funds; and to provide amounts required by financing agreements. These assessments are adopted by MWRA based on the rate revenue requirements set forth in the Current Expense Budget.

Costs Recovered

MWRA capitalizes certain of its asset costs in accordance with its capitalization policy. Capital expenditures are planned as set forth in the Capital Improvement Program and are recovered through assessments in accordance with MWRA financing agreements. The Current Expense Budget provides detailed information on capital and debt costs, additions to reserves, and all operations and maintenance costs to be recovered with current revenue.

Sources of Current Revenue

MWRA recovers most of its current expenses from users of the services it provides. In addition to rate revenue requirements, budgeted current revenue includes anticipated fines, fees, investment income on certain fund balances, and payments for contracted services. MWRA is committed to seeking additional sources of current revenue.

Coverage Requirements

MWRA's financing agreements include coverage requirements which provide that each year revenue less operating expenses (net revenue) must be more than the amount required for debt service payments on outstanding bonds. The primary bond coverage requirement is that net revenue must be 120 percent of required debt service fund deposits for bonds outstanding excluding subordinated bonds. The secondary coverage requirement is that net revenue must be 110 percent of required debt service fund deposits for all bonds outstanding, including subordinated bonds. Revenue must be raised annually to meet the primary and secondary bond coverage requirements and may be used for additions to reserves or for payment of obligations to the Commonwealth. Amounts remaining after these uses are used to pay capital costs in order to reduce the need for future borrowing or to reduce current debt service costs. In addition, MWRA has a supplemental bond coverage requirement that amounts contained in its Community Obligation and Revenue Enhancement (CORE) Fund shall equal 10 percent of required debt service fund deposits for bonds outstanding, excluding subordinated bonds. Amounts required to be on deposit in the CORE Fund are recovered through assessments as necessary.

Budget Surpluses

In any year in which current revenue exceeds both current expenses on a budget basis and amounts required to meet bond coverage tests, the amount of over-recovery is deposited first to reserve funds, if any, which are below the level specified in any financing agreements, and second into MWRA's rate stabilization fund or bond redemption fund. Amounts deposited in these funds are used to offset rate requirements in subsequent years. Use of rate stabilization and bond redemption fund amounts is carried out in furtherance of MWRA's budgeting objectives and in accordance with its financing agreements. MWRA consults with the Advisory Board concerning use of amounts in the funds.

Budgeting and Assessment Objectives

MWRA intends to follow prudent budgeting practices, and has the following objectives in developing budgets and community assessments:

1. To minimize total costs, consistent with MWRA's statutory responsibilities to provide effective, environmentally sound wholesale water delivery and wastewater collection and treatment services;
2. To minimize the cost of debt;
3. To avoid single year assessment spikes by prudent management of cost and assessment increases, and
4. To support inter-generational equity by avoiding unfair assessment burdens on either current or future ratepayers.

Allocation of Costs and Revenue to Systems

Most of MWRA's current expenses are directly attributable to either water or sewerage service costs or to investment in either the water or sewerage systems. Expenses which support both systems (indirect system costs) are allocated to the water or sewer system based on generally accepted cost allocation principles. Investment, contract, and other income offsets water and sewerage expenses on either a direct or allocated, indirect basis. The resulting net cost of water and sewerage services is the amount to be recovered through water and sewer assessments.

Allocation of Rate Revenue Requirements to User Assessments

Users of MWRA wholesale water and sewerage services are assessed for those services according to MWRA's water and sewer assessment methodologies. Assessments for water services are computed by MWRA based on metered water use for the immediately preceding calendar year. The total assessment is allocated based on each community's share of water delivered in the immediately preceding calendar year.

Assessments for sewer services are computed on the basis of a combination of metered wastewater flow and loads, and population.

- O&M costs are allocated based on total annual metered wastewater flow, and total annual average strength, septage, and high strength flow loads.
- Capital (or debt service) costs are allocated based on a combination of metered wastewater flow and loads, and population. One quarter of capital costs are allocated based on maximum month flow, and total annual average strength, septage, and high strength flow loads. The remaining three-quarters of capital costs are allocated based on population. Half of the population allocation is based on census population and half is based on contributing population.

Schedule and Procedure for Adoption of Assessments

During the preparation of the proposed Current Expense Budget, required water and sewer rate revenue is determined, and a preliminary calculation of the allocation of costs to user-specific assessments is made. This information is provided to MWRA customers to assist them in their own fiscal planning. As provided in the Enabling Act, the proposed Current Expense Budget and preliminary assessments undergo statutory review, including public hearings and review by MWRA's Advisory Board. Further refinements of projected expenses and revenues also occur during this period. If review and analysis of the proposed Current Expense Budget results in lower projected expenses or higher projected revenue, some or all of such savings from preliminary estimates of assessments can be included in the adopted budget as additions to the rate stabilization fund and used to reduce rate revenue requirements in subsequent years. Alternatively, some or all of such savings can be used to reduce final assessments to customers below preliminary estimates.

The Current Expense Budget and final water and sewer assessments are adopted in June for the fiscal year beginning in July. The budget adopted in June may differ from the proposed budget as a result of review and further refinement of the proposed budget, although final assessments adopted by MWRA must be sufficient to recover water and sewer rate revenue requirements specified in the adopted budget. Final water and sewer rate requirements and their allocation to users may thus change from preliminary estimates. In addition, any individual community's final assessment may be higher or lower than the preliminary estimate, both because of changes in the factors which effect the allocation of assessments among wholesale customers, and because of differences between MWRA's proposed and final budgets as approved by the Board of Directors.

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer rate methodologies and to certain specified-data including:

- Calendar year metered water volume and metered wastewater flow obtained from MWRA's water and wastewater metering systems;
- Federal and state community census statistics, and sewer population estimates and other information supplied on Customer Service Update forms and Municipal Discharge Permits; and
- High strength user monitoring data and estimates of community septage volumes as obtained by MWRA's Toxic Reduction and Control Department.

The review and dispute resolution process provides MWRA's wholesale customers with the opportunity to review and comment on the reasonableness of the data used to calculate preliminary water and sewer assessments. During the year MWRA provides its customers with monthly summaries of water and wastewater flow data distributed, at a minimum, on a bimonthly basis. Because annual metered water and wastewater flows are major components for establishing water and sewer charges for each community, customers are strongly encouraged to review this data closely upon receipt and raise questions with MWRA staff concerning the data. MWRA expects that prompt customer review and comment on meter data will result in the resolution of most water and wastewater metering questions and assure the most consistency between preliminary assessments in February and final assessments announced in June. Community contributions of high strength flow and septage, and population data are made available with the release of preliminary assessments in February.

If after an initial review a community believes that specific data used to calculate assessments should be reevaluated, a community may submit a written objection to the Executive Director with a copy to the Rates Manager or their designee. The objection must be signed by the local

official on record with MWRA as responsible for water or sewer services in the city, town, or district. The objection should state the community's concern with the data used to calculate community assessments, and should also include information and technical data to support the community's objection.

In order for any data adjustments to be incorporated into the allocation of final fiscal year assessments, all objections to data used to calculate preliminary assessments must be received no later than the date of the final public hearing on the proposed budget and preliminary assessments, held pursuant to Section 10 of the MWRA Enabling Act. MWRA staff will review and evaluate the merits of all written objections. Customers are notified in writing of the results of this review prior to the release of final assessments.

Adjustments to preliminary data, if any, are not retroactive beyond the applicable calendar year for proposed assessments. Final fiscal year assessments are calculated incorporating adjustments, if any, resulting from the review and objection process, and final rate revenue requirements as adopted by the Board of Directors.

Written objection(s) may also be submitted following the adoption of final fiscal year assessments, but no later than the end of the fiscal year for which the assessments are applicable. Objections submitted in this manner must also be directed to the Executive Director with a copy to the Rates Manager or their designee.

Following MWRA staff review, adjustments to assessments resulting from the challenge of rate basis data that are submitted following the adoption of final fiscal year assessments will be applied to the subsequent year's assessments. Customers are notified in writing of the results of this review and any assessment adjustments prior to the release of the subsequent year's assessments.

Water and Sewer Assessment Payment Schedule

MWRA adopts a schedule of assessments and a schedule of payments annually. Any adjustments for prior years resulting from the review and objection process are apportioned to each of the scheduled payment amounts. No interest is paid or billed by MWRA for previous year's adjustments.

Beginning in FY2001, assessments are payable to MWRA in ten equal installments due on the first day of August, September, October, November, December, February, March, April, May, and June.

Interest Charge on Delinquent Payments

For payments received after a payment date MWRA levies an interest charge of one percent per month or 0.033 percent per day. Interest charges do not accrue until 45 days after the bills are mailed to MWRA's customer communities. Interest charges are added to subsequent regular billings.

Retail Rates

MWRA assessments are for MWRA's provision of wholesale services. Local bodies which receive wholesale services in turn provide retail services to their users at the local level.

MWRA encourages its customers to establish retail rates which:

1. Recover the full cost of providing local water and/or sewerage services, including both direct costs and an allocation or estimate of indirect costs,
2. Charge users of local water and/or sewerage services in a manner which demonstrates to customers that increased use of services results in increased user costs,
3. Comply with MWRA policies directed to conservation of water; elimination of infiltration and inflow of surface water and ground water into the sewage collection, treatment, and disposal system; and removal or pretreatment of industrial wastes, and
4. To the extent consistent with #1 and #2, provide assistance to low income users through lifeline rates.

CAPITALIZATION POLICY

It is the policy of MWRA that capitalization of expenditures conform with generally accepted accounting principles. Under such guidelines, MWRA has adopted the provisions of the Financial Accounting Standards Board's Statement No. 71, "Accounting for the Effects of Certain Types of Regulation," which is intended to assure that utility revenues are appropriately matched with incurred costs. Capital expenditures create assets or extend their useful lives. Assets are valued at their cost and provide benefits over an extended period of time. Sources of funds for capital expenditures include grants, proceeds of MWRA borrowing, loans, and current revenue.

Asset value created by MWRA is of two kinds. One is the value of tangible assets either created or increased through MWRA capital investments. Such assets include land, buildings, plant, equipment, and the system infrastructure for water and wastewater. The cost of such fixed asset investment includes not only purchase, rehabilitation, and construction cost, but also ancillary expenses necessary to make productive use of the asset. Ancillary costs can include, but are not limited to, costs for planning studies, professional fees, transportation charges, site preparation expenditures, and legal fees and claims directly attributable to the asset.

The second kind of asset value created by MWRA investment is the value of intangible assets. While such investment does not result in tangible MWRA assets, it does create a benefit to MWRA and its users over several years. Such assets include the cost of MWRA efforts to establish base-line leak detection information for the water systems of MWRA customers. The cost of providing water consumption-limiting devices to households is another example.

Expenditures for tangible assets are included in the Capital Improvement Program and Budget if the expected cost of the individual asset or capital project is \$100,000 or more and if the expected useful life is more than one year. Expenditures for intangible assets are capitalized if the expected cost is \$100,000 or more and if the expected benefit period is three years or more. Annually recurring costs and expenditures for maintenance of assets are not capitalized, even though their cost may exceed \$100,000. Examples of such maintenance expenditures include replacement of vehicles or computers, replacement of inoperable valves or other equipment before the anticipated useful life has been reached, and pipeline or interceptor repairs that do not add significant life to the underlying asset.

RESERVES FUNDED FROM CURRENT REVENUE

Operating Reserve

The operating reserve has been established to provide a source of funds to be used to pay operating expenses of the sewer or water systems should there not be sufficient funds otherwise available for that purpose. Bond agreements specify that the fund level shall not be less than one-sixth of MWRA's annual operating expenses.

Insurance Reserve

The insurance reserve has been established to provide funds to restore, replace, or reconstruct lost or damaged property or facilities of the water or sewer system. It provides funds reserved against risks for which MWRA does not currently maintain insurance. This self-insurance reduces the cost MWRA might otherwise incur for purchased insurance policies. MWRA periodically evaluates the level of its insurance reserve and every three years a consulting engineer or an insurance consultant recommends an appropriate insurance reserve fund requirement. The latest consultant review recommends an increase of \$3 million in the reserve's funding level over the next three years. Between FY2005 and FY2007, the budget includes an increase of \$1 million per year to increase the reserve to \$21 million.

Renewal and Replacement Reserve

The renewal and replacement reserve has been established to fund a required capital improvement which is not provided for by moneys otherwise available. Amounts may not be withdrawn until MWRA has specified the project to which the amount will be applied and its estimated cost and estimated completion date. It must also certify that such expenditure is reasonably required for the continued operation of the systems or for maintenance of revenues and that other provisions have not been made for funding such expenditures. Every three years, MWRA receives recommendations from a consulting engineer as to the adequacy of the renewal and replacement reserve fund requirement. During FY2000, based on the recommendation of its consulting engineer, MWRA reduced the size of the renewal and replacement reserve to \$35 million from \$50 million.

CURRENT EXPENSE BUDGET MANAGEMENT POLICIES AND PROCEDURES

A. Budget Allocations

Budget Contingency Holdbacks

After the Board of Directors adopts the Current Expense Budget each year, the Executive Director, the Chief Operating Officer, or a division director may reserve between two percent and four percent of a division's approved budget as a budget contingency to be expended only upon approval of the Executive Director. The contingency holdback may be from any line item or cost center or combinations thereof, and any amount reserved as a budget contingency is not be included in the monthly budget allocation process described below. The Administration and Finance Committee will be notified of all budget contingency holdback amounts.

Monthly Allocation of the Annual Current Expense Budget

Initial monthly allocations are made for purposes of adopting and filing an operating budget in accordance with MWRA's financing agreements. Before the end of the first reporting period of the fiscal year, divisions, with the assistance of the Rates and Budget Department, allocate the approved budget, less any holdbacks, by month.. The allocations set forth planned expenditures and accruals for each of the 12 months of the year to be compared to actual expenditures and accruals as reported in MWRA's monthly variance reports.

B. Budget Variance Monitoring and Analysis

At the close of each monthly accounting period, the Treasury Department prepares MWRA financial statements.. The Rates and Budget Department then prepares monthly variance reports that compare planned and actual revenues and expenses.

Variance Analysis

Division directors and staff review variance reports and explain variances between planned and actual expenditures as requested by the Rates and Budget Department. Variance explanations are prepared as needed, usually at the end of each quarter of the fiscal year. At least twice each year MWRA staff prepare forecasts of year-end expenditures and revenue . Barring extraordinary circumstances, division directors are responsible for controlling spending within the overall division budget. The Rates and Budget Department reviews all variances and projections so that appropriate measures may be taken to ensure that overall spending is within the MWRA budget.

Variance explanations are submitted to the Rates and Budget Department in accordance with the schedule developed by the Rates and Budget Department. Each month the Rates and Budget Department prepares a summary of budget variances for inclusion in the Management Indicators Report (Yellow Notebook). The Rates and Budget Department also prepares a monthly staff summary (except for July and August) to the Board of Directors describing major budget

variances and a quarterly budget variance report for inclusion in the Board of Directors Report on Key Indicators of MWRA Performance (Orange Notebook). At least twice a year, the Rates and Budget Department prepares a staff summary to the Board of Directors on year-end projections of revenue and expenses.

C. Budget Amendments

An amendment to an MWRA Current Expense Budget is defined as follows:

A proposed change in an adopted budget or a proposed budget transmitted to the MWRA Advisory Board in accordance with Section 8(b) of Chapter 372 of the Acts of 1984 which meets any of the following criteria:

1. Any increase in total current expenses.
2. An increase of five percent or more in total division expenses.
3. An increase in any expense line item (subsidiary account) of 15 percent or more if that line item is at least 2.5 percent of total current expenses.
4. An addition or deletion of a specific new program or initiative, the cost of which is greater than one percent of total current expenses, unless the addition or deletion has been specifically recommended by the Advisory Board.

The Executive Director, with the concurrence of the Chairman of the Board of Directors and the Chairman of the Administration and Finance Committee of the Board of Directors, submits proposed amendments to the Advisory Board for comment and recommendation. At the end of the Advisory Board 30-day review period, the Board of Directors may take action on the amendment.

CAPITAL BUDGET MANAGEMENT POLICIES AND PROCEDURES

Capital Budget Spending Cap

Every five years, beginning in June 2003 for the period FY04 through FY08, the Board will establish a five-year Capital Budget Spending cap and annual caps for each year of the cap period. Spending for any year in the cap period may, with Board approval, vary within plus or minus 20% of the annual cap, as long as total spending for the five-year period does not exceed the five-year cap. Before the end of each five-year cap period, the Board will adopt a cap for the next five-year period and annual caps for each year in the period.

Capital Budget Contingency

A contingency for each fiscal year is incorporated into the Capital Improvement Program for the purpose of providing for unanticipated or unpredictable expenditures under the CIP spending cap.

Expenditures in Excess of the Spending Cap

In the event of unanticipated spending requirements, the Executive Director may recommend to the Board of Directors that annual expenditures exceed an annual cap by more than 20% or that five-year expenditures exceed the current five-year CIP spending cap. In such an event, a proposed plan to adjust the five-year cap or any of the annual caps will be presented to the Board. Any such proposed plan will be submitted to the MWRA Advisory Board for review and comment for a period of thirty days. At the end of the thirty-day period, the Board of Directors may take action on the proposed plan.

Capital Budget Monitoring and Reporting

The Authority shall continually monitor the progress of capital projects for purposes of managerial control and decision-making and for financial planning and management. Two capital budget variance analysis reports will be provided to the Board of Directors, one for the first six months of a year and one at year end. The reports will include planned project schedules and budgets compared to actual performance. The reports will highlight any major changes, either in scope or budget, of any project. Based on these reports, staff may recommend to the Board of Directors revisions, if appropriate, to the annual and five year caps based upon said changes. In addition, capital budget progress reports shall be provided to the Board of Directors on a regular basis, both as project specific updates and in Quarterly Orange Notebook reports that shall include discussions of project progress compared to schedules. Monthly Financial Summary reports shall include discussions of capital expenditures compared to budget.

APPENDIX E

MWRA Planning Estimates FY2007 to FY2015 ^A									
	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015
EXPENSES									
Direct Expenses	\$187,844	\$192,762	\$197,473	\$202,328	\$207,857	\$213,075	\$218,402	\$223,862	\$229,520
Indirect Expenses	44,295	40,569	41,664	42,838	46,267	49,536	49,617	53,269	51,046
Capital Financing (before offsets)	354,006	383,777	401,930	445,280	463,817	483,828	506,375	498,693	501,760
Sub-Total Expenses	\$586,145	\$617,108	\$641,068	\$690,446	\$717,940	\$746,439	\$774,393	\$775,824	\$782,326
Debt Service Assistance	0	0	0	0	0	0	0	0	0
Bond Redemption Savings	(12,779)	(11,602)	0	0	0	0	0	0	0
Variable Rate Savings	0	0	0	0	0	0	0	0	0
Total Expenses	\$573,366	\$605,506	\$641,068	\$690,446	\$717,940	\$746,439	\$774,393	\$775,824	\$782,326
REVENUE & INCOME									
Non-Rate Revenue & Income									
Interest Income/Other Charges	\$39,672	\$39,575	\$40,488	\$41,507	\$42,166	\$42,242	\$42,723	\$43,025	\$43,173
Rate Stabilization	16,744	8,087	34	897	0	0	0	0	0
Total Non-Rate Revenue	\$56,416	\$47,662	\$40,521	\$42,404	\$42,166	\$42,242	42,723	43,025	43,173
Total Rate Revenue	\$516,949	\$557,844	\$600,547	\$648,043	\$675,774	\$704,197	\$731,671	\$732,799	\$739,152
Rate Revenue Increase	7.9%	7.9%	7.7%	7.9%	4.3%	4.2%	3.9%	0.2%	0.9%
Estimated Annual Household Charge **									
Charge based on DEP data (weighted)	\$675	\$721	\$771	\$825	\$863	\$901	\$939	\$985	\$1,006
Charge based on 90,000 gal. (weighted)	\$996	\$1,064	\$1,138	\$1,218	\$1,273	\$1,329	\$1,385	\$1,407	\$1,437
WASTEWATER									
EXPENSES									
Direct Expenses	\$127,020	\$131,038	\$134,118	\$137,239	\$140,813	\$143,917	\$147,663	\$150,914	\$155,225
Indirect Expenses	10,109	10,197	9,989	9,949	9,983	9,867	9,940	9,831	9,995
Capital Financing (before offsets)	240,890	265,208	279,261	315,295	316,615	339,616	358,804	350,485	352,022
Sub-Total Wastewater Expenses	\$378,019	\$406,444	\$423,367	\$462,483	\$467,411	\$493,400	\$516,407	\$511,230	\$517,243
Debt Service Assistance	0	0	0	0	0	0	0	0	0
Bond Redemption Savings	(7,238)	(5,795)	0	0	0	0	0	0	0
Variable Rate Savings	0	0	0	0	0	0	0	0	0
Total Wastewater Expenses	\$370,781	\$400,649	\$423,367	\$462,483	\$467,411	\$493,400	\$516,407	\$511,230	\$517,243
REVENUE & INCOME									
Non-Rate Revenue & Income									
Interest Income/Other Charges	\$24,089	\$23,783	\$24,083	\$24,647	\$24,705	\$24,884	\$25,218	\$25,200	\$25,232
Rate Stabilization	12,425	2,731	0	0	0	0	0	0	0
Total Non-Rate Revenue	\$36,514	\$26,513	\$24,083	\$24,647	\$24,705	\$24,884	25,218	25,200	25,232
Wastewater Rate Revenue	\$334,267	\$374,135	\$399,284	\$437,836	\$442,705	\$468,516	\$491,189	\$486,030	\$492,011
Rate Revenue Increase	4.4%	11.9%	6.7%	9.7%	1.1%	5.8%	4.8%	-1.1%	1.2%
Estimated Annual Household Sewer Charge **									
Charge based on DEP data (weighted)	\$391	\$432	\$459	\$499	\$508	\$537	\$563	\$583	\$596
Charge based on 90,000 gal. (weighted)	\$578	\$637	\$677	\$736	\$750	\$792	\$831	\$833	\$851
WATER									
EXPENSES									
Direct Expenses	\$60,824	\$61,724	\$63,355	\$65,089	\$67,044	\$69,157	\$70,739	\$72,948	\$74,294
Indirect Expenses	34,186	30,371	31,676	32,889	36,284	39,669	39,677	43,438	41,051
Capital Financing (before offsets)	113,116	118,194	122,295	129,610	146,827	143,837	147,195	148,208	149,738
Sub-Total Water Expenses	\$208,126	\$210,289	\$217,326	\$227,589	\$250,155	\$252,664	\$257,611	\$264,594	\$265,083
Debt Service Assistance	0	0	0	0	0	0	0	0	0
Bond Redemption Savings	(5,542)	(5,807)	0	0	0	0	0	0	0
Variable Rate Savings	0	0	0	0	0	0	0	0	0
Total Water Expenses	\$202,584	\$204,482	\$217,326	\$227,589	\$250,155	\$252,664	\$257,611	\$264,594	\$265,083
REVENUE & INCOME									
Non-Rate Revenue & Income									
Interest Income/Other Charges	\$15,583	\$15,792	\$16,405	\$16,860	\$17,461	\$17,358	\$17,505	\$17,825	\$17,941
Rate Stabilization	4,319	5,356	34	897	0	0	0	0	0
Total Non-Rate Revenue	\$19,902	\$21,148	\$16,438	\$17,757	\$17,461	\$17,358	\$17,505	\$17,825	\$17,941
Water Rate Revenue	\$182,682	\$183,334	\$200,887	\$209,832	\$232,694	\$235,306	\$240,106	\$246,769	\$247,142
Rate Revenue Increase	15.0%	0.4%	9.6%	4.5%	10.9%	1.1%	2.0%	2.8%	0.2%
Estimated Annual Household Water Charge **									
Charge based on DEP data (weighted)	\$284	\$290	\$312	\$327	\$355	\$364	\$375	\$402	\$410
Charge based on 90,000 gal. (weighted)	\$418	\$427	\$460	\$482	\$523	\$537	\$554	\$574	\$586

** Annual household charges are estimated for communities that receive full water and wastewater services from MWRA weighted by the number of households in each of these core communities. Estimated household charges based on DEP data are based on average residential consumption of 61,000 gallons per year. The ratio of MWRA to local charge is assumed to be 31% local, 69% MWRA in FY05

^A See footnote on Page I-2, referring to the adjustment for CVA revenue.

APPENDIX F

GLOSSARY OF FINANCIAL AND OPERATING TERMS

SM permit: Permission granted by MWRA to persons who wish to construct property improvements on land either adjoining or overlapping MWRA property interests. Permission may be conditioned on various operational and/or engineering concerns.

Accrued Costs: Adjustments to paid expenditures to account for materials or services received but for which payment has not been made.

Activated Sludge: The sludge that results when primary effluent is mixed with bacteria-laden sludge and then agitated and aerated to promote biological treatment.

Advanced Waste Treatment: Wastewater treatment beyond the secondary or biological stage that includes the removal of nutrients such as phosphorus and nitrogen and the removal of a higher percentage of suspended solids and organic matter than primary treatment.

Advisory Board: The agency that represents the interests of MWRA's 61 user communities to the Board of Directors in an advisory capacity in accordance with the provisions of MWRA's Enabling Act. The Advisory Board elects three members of the Board of Directors, reviews and comments on MWRA's CIP and CEB, and approves the addition of new communities to the wastewater and water systems.

Aerobic: In the presence of oxygen.

Anaerobic: Life or processes such as bacteria that digest sludge that require, or are not destroyed by, the absence of oxygen.

AOC: Assimilable Organic Carbon - One measure of the "food" available to bacteria within a water system. More complex carbon compounds can become assimilable when oxidized by strong disinfectants.

Ash: The inert material remaining after the combustion of wastewater sludge. Ash is either wet or dry depending on combustion system design.

Bacteria: One-celled microscopic organisms commonly found in the environment. Bacteria can be harmful, such as pathogens or helpful and perform a variety of biological treatment processes.

BDOC: Biologically Degradable Organic Carbon - Another, more precise, measure of the "food" available to bacteria within a water system.

BGD: Billion gallons per day.

Biofilm: Growth of various bacteria within a water distribution system on the pipe walls. Biofilm growth can contribute to iron corrosion, colored water, poor taste, excessive chlorine demand, and complications with coliform testing.

Blow-off valves: Valves operated during pipeline repair to de-water (drain) a portion of a pipeline.

BOD: Biochemical Oxygen Demand - An indicator of the amount of biodegradable contaminants in wastewater.

Board of Directors: The 11-member governing board of MWRA.

Bond Resolution: A document adopted by the Board of Directors that governs MWRA's issuance of revenue bonds and sets forth its obligations to bondholders.

Boston Harbor Project: An extensive plan of activities which MWRA developed and implemented to construct new wastewater treatment facilities in response to a federal court order to comply with the provisions of the U.S. Clean Water Act.

Business Systems Plan (BSP): The strategic planning framework for MWRA's management information systems. The BSP is updated annually to reflect ongoing business requirements, new opportunities identified by ongoing MWRA strategic planning efforts, technology changes, and user requests.

BWSC: Boston Water and Sewer Commission - The agency responsible for providing water and sewer services to the City of Boston, MWRA's largest customer.

CAC: Citizens' Advisory Committee.

CADD: Computer aided drafting and design.

Capital Improvement Program (CIP): A plan which identifies and estimates the nature, schedule, cost, and financing of long-term assets that MWRA intends to build or acquire during a specific period.

Capital Investment: Development of a facility or other asset that adds to the long-term value of an organization.

CDF: Cosgrove Disinfection Facility

Cathodic Protection: A form of corrosion protection that is particularly effective against galvanic corrosion. Galvanic corrosion occurs when pipe metal is in the presence of other metals while immersed in water. The interaction of these elements causes an electric current to flow away from the pipe, taking electrons with it and pitting the pipe as a result. Cathodic protection reverses the current, thereby stopping the corrosion.

Centrifuge: A machine that uses centrifugal force to separate substances of different densities and remove moisture. MWRA uses centrifuges at the Deer Island Wastewater Treatment Plant to de-water sludge.

CFM: Cubic Feet per Minute - A measure of the quantity of a liquid flowing through a pipe.

Chloramination: The process of adding chloramine to drinking water. Chloramine, a form of chlorine and ammonia, is used as a residual disinfectant because it lasts longer in the water distribution system than primary disinfectants.

Chloramine: A long lasting residual disinfectant created by combining measured amounts of chlorine and ammonia. Chloramine forms fewer disinfection by-products than chlorine.

Chlorination: The process of adding chlorine to drinking water to inactivate pathogens.

Chlorine: A relatively strong primary disinfectant, effective against bacteria, *giardia*, and viruses, but not *cryptosporidium*. Concerns exist about the health effects of its by-products, some of which are or will be regulated.

Clarifiers: Settling tanks or basins in which wastewater is held for a period of time, during which heavier solids settle to the bottom and lighter materials float to the surface.

Clean Water Act: A law passed by Congress in 1972, and subsequently amended, which sets national standards for pollution reduction, permits discharges from wastewater treatment plants, and promotes achievement of the national goal that all surface waters be "fishable and swimmable."

Cleaning and Lining: Cleaning and cement lining of unlined cast iron water mains to improve hydraulic capacity and extend useful life.

Coliform bacteria: A group of lactose fermenting bacteria, which while not of direct health concern, are used as a first line indicator of potential problems. See fecal coliform and *E.coli*.

Comminutor - A machine or process that pulverizes and reduces solids to minute particles.

Commonwealth Debt Service Assistance (DSA): Funds appropriated by the Commonwealth to offset MWRA capital financing expenses.

Commonwealth Reimbursements: Income received from the Commonwealth of Massachusetts as reimbursement for certain chemical and operational costs in accordance with prevailing legislation.

Community Obligation and Revenue Enhancement (CORE) Fund: A fund established by MWRA's bond resolution that is used to provide insurance against delays by communities in paying charges due to MWRA.

Composting: The process of converting wastewater treatment residuals to a soil-like humus material often used in the horticultural industry. The process involves the aerobic breakdown of the residuals and the addition of sawdust or wood chips.

Corrosion Control: Adjustments to the chemistry of treated water to reduce its ability to dissolve lead, copper, or other metals. Corrosion control can include adjustments to pH and alkalinity, as well as the addition of corrosion inhibitors such as phosphates.

Coverage Requirement: Requirement of MWRA's bond resolution which provides that pledged revenue available annually to pay debt service must exceed the annual debt service requirement by a certain percentage.

Cross-Connection: A point at which potable water piping is connected to a non-potable water source creating an opportunity for the introduction of pollutants into the potable water.

Cryogenic oxygen plant: MWRA operates a cryogenic oxygen-based facility as part of its secondary wastewater treatment program at Deer Island.

Cryptosporidium: A protozoan parasite that can cause severe gastrointestinal disease in healthy individuals, and may be fatal to people with compromised immune systems. *Cryptosporidia* exist in the environment as hard walled oocysts that are very resistant to chlorination, but can be inactivated by disinfection with ozone or ultraviolet light.

CSO: Combined Sewer Overflow – An overflow point in a combined sewer system that collects both sewage and storm water runoff for wastewater treatment. During rainstorms, systems can become overloaded, with the excess discharged directly into surface waters from CSO pipes. In the metropolitan Boston area there are approximately 63 CSOs that currently discharge into rivers or Boston Harbor.

CSO Facilities: MWRA has five facilities that intercept the flow from CSO pipes and provide limited wastewater treatment prior to discharge. The CSO facilities have some capacity to store flow and pump it to the Deer Island plant after rainstorms end.

CT: Concentration x Contact Time - A measure of disinfection effectiveness established under the Surface Water Treatment Rule. CT is the product of the concentration of disinfectant [C] and the time it has been in contact with the water [T]. Required CT varies by type of disinfectant, organism, temperature, and pH.

Current Expense Budget: A financial plan that estimates the revenues and expenses associated with MWRA's operations for a fiscal year.

C-Value: The carrying capacity of a water main for a specified length and pressure drop that is determined by its diameter and resistance to flow. The friction coefficient "C" of the main is often used as a measure of flow resistance. C-values for new pipe are about 120 for water mains that are 6- to 16-inches in diameter, and 130 and 140 for larger diameter mains.

DAF: Dissolved Air Flotation - A process of adding super saturated air into water to cause coagulated solids to rise to the top to be skimmed off. DAF replaces conventional gravity sedimentation (clarification) and is particularly cost-effective for low turbidity waters subject to periodic algae blooms.

DBP: Disinfection By-products - Complex compounds formed by the use of oxidizing agents such as chlorine or ozone in waters containing organic matter.

D/DBP Stage 1: Disinfectants/Disinfection By-products, Stage 1 Rule – Promulgated 11/1998, and effective 1/2002, this rule set DBP limits at 80 parts per billion for Trihalomethanes and 60 parts per billion for Haloacetic Acids, averaging all samples over four quarters.

D/DBP Stage 2: Disinfectants/Disinfection By-products Stage 2 Rule-. The federal government expects to issue this rule in draft form late in 2002 and promulgate the final rule in late 2003. The rule will further regulate the amount of DBPs allowed in water. The 80/60 values set in Stage 1 will now apply to each individual sample location in a "Locational Running Annual Average".

Debt Service: In a given fiscal year, the amount of money necessary to pay interest and principal on outstanding notes and revenue bonds.

DEP: Department of Environmental Protection - The Massachusetts agency that regulates water pollution control, water supplies, and waterways and dispenses federal and state grant funds to support these activities.

Department: A sub-unit of an MWRA division.

De-watering: The process of removing water from wastewater treatment residuals. De-watered sludge has the appearance of mud or wet soil material.

Diffusers: A system of shafts, rising from the end of MWRA's effluent outfall tunnel to the seabed, that disperses treated wastewater over a large area.

Digesters: Tanks for the storage and anaerobic or aerobic decomposition of organic matter present in sludge.

Direct Program Expenses: Costs directly associated with providing services or performing activities.

Disinfection, Primary: The inactivation (killing) of pathogenic organisms in a water system by the use of chemical or other disinfection agents.

Disinfection, Residual: The presence of a measurable residual of disinfectant within a water distribution system to help control bacterial re-growth and guard against contamination.

Dissolved Oxygen (DO): A measure of the amount of oxygen in a given amount of water. Adequate levels of DO are needed to support aquatic life. Low dissolved oxygen concentrations can result from inadequate wastewater treatment.

Division: A major organizational unit within MWRA, encompassing the activities and resources for providing a major service or function.

Division of Watershed Management (DWM): A division of the Metropolitan District Commission (MDC) responsible for watershed management activity. MWRA reimburses the Commonwealth for the cost of DWM's operations.

E.coli: A normal inhabitant of the digestive tract of mammals. The presence of *E.coli* indicates probable contamination by fecal matter.

Effluent: Treated wastewater discharged from a treatment plant.

EIR: Environmental Impact Report – A document prepared in adherence with the Massachusetts Environmental Policy Act (MEPA) to review the environmental impact of projects and ensure opportunities for public review and comment.

EIS: Environmental Impact Statement – A document prepared in adherence with the National Environmental Policy Act to review the environmental impact of projects and ensure opportunities for public review and comment.

Enabling Act: Legislation (Chapter 372 of the Acts of 1984) that established MWRA and defined its purpose and authority as of January 1, 1985.

ENF: Environmental Notification Form - The first step in the MEPA process.

EOC: Emergency Operations Center

EOEA: Executive Office of Environmental Affairs - The Massachusetts cabinet office that oversees state environment agencies.

EPA: Environmental Protection Agency - The federal government agency responsible for environmental enforcement and investigation.

ESWTR: Enhanced Surface Water Treatment Rule - A federal rule is being promulgated in three stages:

1) Interim Enhanced Surface Water Treatment Rule (IESWTR): The IESWTR was promulgated in 1998 and tightened the requirements for the operation of water filtration plants in large systems to take a first step toward controlling *cryptosporidium* in source waters. IESWTR also added *cryptosporidium* to the list of issues considered within watershed protection plans for unfiltered systems.

2) LT1ESWTR primarily extends the IESWTR to smaller systems

3) LT2ESWTR: The federal government expects to issue LT2ESWTR as a draft in late 2002, and to promulgate the final rule in late 2003. LT2ESWTR will further tighten the standards for the operation of filtration plants and add requirements for 99% inactivation of *cryptosporidium* and the use of two primary disinfectants for unfiltered systems. The concept of proportional treatment, with less treatment required for cleaner sources, will be implemented as part of the rule.

Eutrophication: Nutrient enrichment of a lake or other water body typically characterized by increased growth of planktonic algae and rooted plants. Eutrophication can be accelerated by wastewater discharges and polluted runoff.

Expenditures: Payments for goods and services received.

Expenses: Costs associated with the operating activities of a period, including expenditures and accrued costs.

Facility Information System (FIS): The management information system at the Deer Island Treatment Plant.

Fecal coliform bacteria: A group of bacteria used as a primary indicator organism for potential contamination from human or animal waste. Also called thermo-tolerant bacteria. Specific organisms in the group may or may not be of health concern (see *E.coli*).

Filtration: A water treatment process involving the removal of suspended particulate matter by passing the water through a porous medium such as sand or carbon.

Fiscal Year: The 12-month financial period used by MWRA that begins July 1 and ends June 30 of the following calendar year. MWRA's fiscal year is numbered according to the calendar year in which it ends.

Flash coat: A light coat of shotcrete used to cover minor blemishes on a concrete surface.

Force Main: A pressure pipe joining the pump discharge at a water or wastewater pumping station with a point of gravity flow.

Giardia: A protozoan parasite that can cause severe gastrointestinal disease, although there is medical treatment available. *Giardia* exist in the environment as hard-walled cysts, and are moderately resistant to chlorine disinfection.

Goal: A statement in general terms of a desired condition, state of affairs, or situation. Goals, which are long-term in nature and not usually directly measurable, provide general direction for the activities of operating units.

Graphitization: A corrosion mechanism that alters the molecular structure of the carbon/iron matrix of cast iron pipe. During the process, iron atoms are forced away from the metal leaving behind an unstable carbon matrix. The result is a weakened pipe, easily susceptible to ruptures. High frequency in the number of breaks causes leakage to be a major problem of graphitized pipe.

Grit: Sand-like materials that quickly settle out of wastewater.

Groundwater: A body of water beneath the surface of the ground. Groundwater is made up primarily of water that has seeped down from the surface.

HAA: Haloacetic Acids - A class of disinfection by-products related to chlorine disinfection. HAAs are regulated under D/DBP Stage 1 Rule at 60 ppb.

Harbor Electric Energy Company (HEEC): A subsidiary of the Boston Edison Company which installed a cross harbor power cable and built a sub-station to provide power for construction and operation of the new Deer Island Treatment Plant.

Head House: A structure containing the control gates to a conduit such as a sewer pipeline.

Headworks: A preliminary treatment structure or device, usually including a screening and de-gritting operation, that removes large or heavy materials such as logs and sand from wastewater prior to primary treatment.

Heavy Metals: Metals such as lead, silver, gold, mercury, bismuth, and copper that can be precipitated by hydrogen sulfide in an acid solution.

ICC: Interim Corrosion Control Facility - A facility located in Marlborough near Walnut Hill, where MWRA adjusts pH and alkalinity to reduce the leaching of lead from home plumbing.

Incentives and Other Charges: A fee system designed to help recover permitting, inspecting, and monitoring costs incurred by MWRA's TRAC Program and provide incentives to permitted users to reduce discharges.

Indirect Expenses: Costs not directly associated with providing services or performing activities.

Infiltration/Inflow (I/I): The problem of clean water flows entering sewers resulting in diminished pipe capacity for sanitary flows and in costly pumping and treatment of unnecessarily large wastewater volumes. Infiltration is groundwater that leaks into the sewerage system through pipe joints and defects. Inflow, primarily a wet-weather phenomenon, refers to water that enters sewers from improperly connected catch basins, sump pumps, land and basement drains, and defective manholes. Inflow also enters through improperly closed or defective tidegates during high tides.

Influent: The flow of water that enters the wastewater treatment process.

Insurance Reserve: A fund established to adequately reserve against risks for which MWRA does not currently maintain insurance.

Interceptors: The large pipes that convey wastewater from collection systems to treatment plants.

Investment Income: Income derived by investing certain operating and reserve fund balances in interest-yielding securities in accordance with the provisions of MWRA's bond resolution.

Labor Costs: Direct costs of employing permanent and temporary personnel, including wages, salaries, overtime pay, fringe benefits, and workers' compensation.

Land Application: The use of wastewater treatment residuals on land for agricultural benefits.

Landfilling: The disposal of residuals by burial. Modern landfills have double liners, leachate collection systems, and other design features to protect against groundwater contamination.

LCR: Lead and Copper Rule – A federal rule that set an action level for lead and copper at “worst case” consumer taps. Optimized corrosion control, notification, education, and lead service replacements are all components of compliance plans.

Leachate: Water that drains from a landfill after having been in contact with, and potentially contaminated by, buried residuals. Modern landfills are designed to collect leachate for subsequent treatment.

Limnology: The scientific study of physical, chemical, meteorological, and biological conditions in fresh waters.

LIMS: Laboratory Information and Management System – An automated database system used to transfer information between MWRA's Central Laboratory and to its client groups and to process information obtained by the Central Laboratory to monitor substances that enter and leave the MWRA wastewater system. Use of LIMS removes the potential for human error in the sampling process by bar coding samples, eliminating the need to transcribe sample data, producing pre-printed project-specific sample check-off forms for field crews, and automating testing through pre-set test codes and project specific parameters.

Mapping Protocols: Sets of specifications defining the content and format of data to be collected.

MCL: Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available control technology.

MCLG: Maximum Contaminant Level Goal - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MDC: Metropolitan District Commission - Prior to 1985, the agency responsible for water and sewer services in metropolitan Boston, a responsibility MWRA assumed in July, 1985. MDC continues to oversee and manage parks and recreational areas, roadways in the metropolitan area, and the watershed system including the Quabbin, Wachusett, and Sudbury Reservoirs.

Massachusetts Environmental Policy Act (MEPA) Unit: A unit of the Commonwealth's Executive Office of Environmental Affairs responsible for implementation of the state environmental review process.

Methane: A colorless, nonpoisonous, flammable gas produced as a by-product of anaerobic sludge processing. At Deer Island, MWRA uses methane as fuel to provide heat and hot water and to generate electricity.

MGD: Million gallons per day.

MIS: Management Information Systems

Mission: A description of the fundamental purposes and major activities of an operating unit or program.

Mitigation: Financial remuneration or non-financial considerations that MWRA provides to communities to alleviate the negative effects of major construction projects.

Molybdenum (Mo): A metallic element that resembles chromium and tungsten in many properties, and is used in strengthening and hardening steel. Mo is a trace element in plant and animal metabolism.

NEFCo: New England Fertilizer Company - The contractor responsible for the operation of barging and processing sludge into fertilizer pellets at MWRA's residuals processing plant located in Quincy. NEFCo is also responsible for marketing and distributing the pellets and disposing of any product that is not marketable.

National Pollutant Discharge Elimination System (NPDES) Permit: A permit issued by EPA in conjunction with DEP that governs wastewater discharges into surface waters.

Nitrification: An aerobic process in which bacteria changes the ammonia and organic nitrogen in wastewater into oxidized nitrogen (usually nitrate). Second-stage BOD is sometimes referred to as the nitrification stage (first-stage BOD is called the carbonaceous stage). Also, a similar process in the water distribution system, where ammonia from chloramine can be used by nitrifying bacteria, resulting in a reduced chlorine residual, and the potential for additional bacteria growth.

OCC: Metropolitan Operations Control Center, located at MWRA's Chelsea Facility.

Operating Reserve: A fund established to adequately reserve for operating contingencies, required by MWRA's bond resolution to be not less than one-sixth of the its annual operating expenses.

Organic Matter: Material containing carbon, the cornerstone of plant and animal life. It originates from domestic and industrial sources.

Other User Charges: Revenue received per agreements MWRA has for provision of water, sewer, and other services to entities other than communities which are charged assessments.

Outfall: The place where effluent is discharged into receiving waters.

Ozonation: The application of ozone to water, wastewater, or air, generally for the purposes of disinfection or odor control. MWRA is constructing a new water treatment plant at Walnut Hill that will use ozone to inactivate pathogens, including *cryptosporidium*, with lower levels of DBPs.

Ozone: A strong disinfectant made from oxygen and electrical energy. Ozone is effective against *cryptosporidium*.

Pathogens: Harmful organisms, often called germs that can cause disease. Waterborne pathogens (or the diseases they cause) include *giardia*, *cryptosporidium*, cholera, typhoid, *E.coli*, Hepatitis A, *legionella*, and MAC.

Payments in Lieu of Taxes (PILOT): Amounts which MWRA pays each fiscal year to cities and town for land owned by the Commonwealth in the Quabbin, Ware River, Wachusett, and Sudbury watersheds. Consistent with the provisions of MWRA's Enabling Act, these payments are based on the past commitments of the Commonwealth of Massachusetts.

Penalty Revenue: Revenue derived from penalties assessed by MWRA to violators of its sewer use regulations.

Performance Measure: An indicator of the work and/or service provided, defined by output, work or service quality, efficiency, effectiveness, or productivity.

Performance Objective: A statement of proposed accomplishments or attainments that is short-term in nature and measurable.

Plume: The rising discharge of treated wastewater effluent from a treatment plant outfall pipe.

Preliminary Treatment: The process of removing large solid objects, sticks, gravel, and grit from wastewater.

Pretreatment: The reduction or elimination of pollutant properties in wastewater prior to discharge into a sewer system.

Primacy: Primary enforcement authority for federal Safe Drinking Water Act regulations delegated to a state by EPA.

Primary Treatment: A wastewater treatment process that takes place in a rectangular or circular tank and allows substances in wastewater that readily settle or float to be separated from the water being treated. Primary treatment results in 50-60% removal of suspended solids and 30-34% removal of BOD.

Program: An organized group of activities and the resources to carry them out, aimed at achieving one or more related objectives.

Rate Revenue: Revenue received from annual assessments of communities within MWRA's service area for water and sewer services.

Rate Stabilization Reserve: A fund established by the Board of Directors that is used to reduce rate revenue requirements. MWRA finances this reserve with unexpended or surplus funds available from the Current Expense Budget at the end of each fiscal year.

Relief Sewer: A sewer built to carry flows in excess of the capacity of an existing sewer.

Remote Headworks: The initial structures and devices of a treatment plant set apart by some distance from the plant site.

Renewal and Replacement Reserve: A fund established to adequately reserve for the cost of capital improvements not provided for by funds available through the Capital Improvement Program or the Current Expense Budget.

Residuals: The by-products of the wastewater treatment process, including scum (floatables), grit and screenings, primary sludge, and secondary sludge.

Revenue Bonds: Bonds payable from a specific source of revenue and which do not pledge the full faith and credit of the issuer.

Safe Yield Model: The equation used to determine the maximum dependable draft that can be made continuously on a source of supply during a period of years during which the probable driest period or period of greatest deficiency in water supply is likely to occur.

SAMS: Sewerage Analysis and Management System – A database which contains specifications of the location, size, and condition of MWRA wastewater interceptors and appurtenances and which produces maps for use by MWRA and outside parties.

Sanitary Sewers: In a separate system, pipes that carry only domestic wastewater.

SCADA: Supervisory Control and Data Acquisition - Equipment for monitoring and controlling water or wastewater facilities remotely.

Screenings: Large items such as wood and rags that are collected from wastewater in coarse screens prior to primary treatment.

Scum: Floatable materials such as grease, oil, and plastics that are skimmed from the surface of wastewater as it flows through large settling tanks.

SDWA: Safe Drinking Water Act - A federal law enacted in 1986 and amended in 1996 that requires EPA to establish national primary drinking water regulations for water suppliers which consist of MCLs or treatment techniques.

Secondary Treatment: Usually following primary treatment, secondary treatment employs microorganisms to reduce the level of BOD and suspended solids in wastewater.

Sedimentation Tanks: Settling tanks where solids are removed from sewage. Wastewater is pumped to the tanks where the solids settle to the bottom or float on the top as scum. The scum is skimmed off the top, and solids on the bottom are pumped out for further treatment and/or final disposal.

Seeding: The initial filling of sludge into digesters.

Sensitive user: A member of a group within the general population likely to be at greater risk than the general population of adverse health effects due to exposure to contaminants in drinking water. Sensitive users include infants, children, pregnant women, the elderly, and individuals with histories of serious illness.

Septic Tanks: Tanks used for domestic wastes when a sewer line is not available to carry them to a treatment plant. Periodically, the septage is pumped out of the tanks, usually by commercial firms, and released into a wastewater treatment system.

Sewer Jet Truck: Vehicle used to clean and/or remove blockages from sewer lines by pushing fluids in the sewer.

Shotcrete: Mortar or concrete conveyed through a hose and projected at high velocity onto a surface; also known as air-blown mortar, pneumatically applied sprayed mortar, or gunned concrete.

Siphon: A closed conduit, a portion of which lies above the hydraulic grade line, resulting in a pressure less than atmospheric and requiring a vacuum within the conduit to start flow. A siphon utilizes atmospheric pressure to effect or increase the flow of water through the conduit.

Slip Lining: Insertion by pushing or pulling of lines fabricated of plastic, concrete cylinder pipe, reinforced concrete, or steel through existing conduits from access pits.

Sludge: Material removed by sedimentation during primary and secondary treatment. Sludge includes both settled particulate matter and microorganisms and is the single largest component of wastewater residuals. At the time sludge is removed during the treatment process, it contains only 0.5% to 5% solid content by weight. It has the appearance of muddy water.

Sodium Hypochlorite (NaOCl): A liquid form of chlorine that MWRA uses as the primary chemical in the disinfection and odor processes at the Deer Island Treatment Plant, and as the disinfectant at the Cosgrove and Ware water disinfection facilities. MWRA will also use sodium hypochlorite at the Walnut Hill water treatment plant.

Storm Sewers: Separate systems of pipes that carry only water runoffs from roofs, streets, and parking lots during storms.

Surcharging: Loads on a system beyond those normally anticipated; also, the height of wastewater in a sewer manhole above the crown of the sewer when the sewer is flowing completely full.

Suspended Solids: The particulate matter contained in wastewater.

SWTR: Surface Water Treatment Rule – A federal rule promulgated in 1989 that affects all utilities using surface waters or waters under the influence of surface waters. SWTR requires filtration unless certain criteria on source water quality, watershed control, and disinfection effectiveness can be met (see also ESWTR).

Telemetry: Remote measuring or monitoring devices connected to a central monitoring station via telephone lines.

TCR: Total Coliform Rule – A federal rule that requires monitoring of water distribution systems for coliform bacteria and chlorine residual. No more than 5% of the coliform samples in a month can be positive.

TOC: Total Organic Carbon - A measure of the amount of organic material in water. Often used as a surrogate for disinfectant demand or DBP precursors.

Transition: A short section of conduit used as a conversion section to unite two conduits having different hydraulic elements.

TTHM: Total Trihalomethanes - A class of disinfection by-products, related to primarily chlorine disinfection (see D/DBP Rule).

TRAC: Toxic Reduction and Control – The department responsible for MWRA's industrial pretreatment program.

United States Geological Survey (USGS): The federal agency that collects Geographic Information System (GIS) data for developing mapping protocols.

Vector Jet Truck: A vehicle used to clean and/or remove blockages from sewer lines by pushing and/or pulling fluids in the sewer.

VMM: Vehicle Management and Maintenance – The program responsible for management and maintenance of MWRA's vehicles and heavy equipment.

Wastewater: The water carried by sewers serving residences and businesses that enters wastewater facilities for treatment.

Wastewater Treatment Plant (WTP): A series of tanks, screens, filters, and other equipment and processes for removing pollutants from wastewater.

Watershed Reimbursement: An amount that MWRA pays to the Metropolitan District Commission (MDC) each fiscal year for maintaining and managing the primary sources of MWRA's water supply (watersheds) in accordance with the laws of the Commonwealth of Massachusetts. The amount of the reimbursement is determined by prevailing legislation.

Wholesale Water and Sewer Services: Potable water and wastewater collection, transport, delivery, and treatment services that MWRA provides to communities. Communities provide the same services directly to retail customers or end users.

WOCC: Western Operations Control Center.



Position Control Register

Massachusetts Water Resources Authority

Effective : 1/31/2005

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
Board of Directors		Executive	
01110	11100		Board of Directors
	1110001		Asst To The Board Of Directors
Sub-Cost Center:	Board of Directors	Total Positions:	1
		Vacants:	0
		Filled Positions:	1
Cost Center:	Board of Directors	Total Positions:	1
		Vacants:	0
		Filled Positions:	1
Department:	Board of Directors	Total Positions:	1
		Vacants:	0
		Filled Positions:	1
Executive Office		Executive	
01210	12100		Executive Director's Office
	1210001		Executive Director
	1210003		Asst to the Executive Director
	1210004		Executive Assistant
	1210005		Financial & Admin Manager
Sub-Cost Center:	Executive Director's Office	Total Positions:	4
		Vacants:	0
		Filled Positions:	4
Cost Center:	Executive Director's Office	Total Positions:	4
		Vacants:	0
		Filled Positions:	4
Department:	Executive Office	Total Positions:	4
		Vacants:	0
		Filled Positions:	4
Division:	Executive	Total Positions:	5
		Vacants:	0
		Filled Positions:	5

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
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Planning Department	Planning Department
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15100	Planning Department
1510001	Director, Planning & Coord
1510002	Director, Planning
1510003	Sr Program Mgr, Map Model Dsgn
1510004	Sr Program Manager
1510005	Sr Program Manager, Planning
1510006	Program Mgr, Regulatory Comp
1510007	Planning Manager
1510008	Policy & Planning Manager
1510009	Secretary I
1510010	Sr Sanitary Engineering Aide
1510011	Staff Engineer
1510012	Project Manager
1510013	Project Manager
1510014	Project Manager
1510015	Project Manager
1510016	Staff Engineer
1510017	Program Manager, WRP
1510018	Project Manager
1510019	Project Engineer, CSO
1510021	Project Manager, Planning
1510022	Project Manager
1510023	Project Engineer
1510024	Programmer Analyst II
1510025	Project Manager, Public Health
1510028	Project Manager

Sub-Cost Center:	Planning Department	Total Positions:	25	Vacants:	2	Filled Positions:	23
Cost Center:		Total Positions:	25	Vacants:	2	Filled Positions:	23
Department:	Planning Department	Total Positions:	25	Vacants:	2	Filled Positions:	23
Division:	Planning Department	Total Positions:	25	Vacants:	2	Filled Positions:	23

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
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Director's Office	Finance
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04110	41100	Director's Office
	4110001	Director of Finance
	4110005	Administrative Manager
	4110005A	4510008 Acting Administrative Manager
	4110006	Executive Secretary

Sub-Cost Center:	Director's Office	Total Positions:	3	Vacants:	0	Filled Positions:	3
Cost Center:	Director's Office	Total Positions:	3	Vacants:	0	Filled Positions:	3
Department:	Director's Office	Total Positions:	3	Vacants:	0	Filled Positions:	3

Controller	Finance
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04310	43100	Controller
	4310001	Controller
	4310002	Sr Accountant
	4310004	Sr Accountant
	4310005	Payroll Manager
	4310006	Payables Supervisor
	4310007	Payables Coordinator
	4310008	Accounting Manager
	4310010	Deputy Accounts Payable Mgr
	4310011	Sr Accountant
	4310013	Payables Coordinator
	4310014	Payables Coordinator
	4310015	Payables Coordinator
LOA	4310016	Payables Coordinator
	4310017	Payroll Administrator, Ops
	4310018	Asst Personnel/Payroll Admin
	4310019	Payroll Administrative Asst
	4310020	Payroll Specialist
	4310024	Payroll Administrative Asst
	4310026	Payroll Administrative Asst
	4310027	Payroll Assistant
	4310028	Accounts Payable Manager
LOA	4310030	Asst Mgr, Rates Revenue & Fin
	4310031	Payroll Specialist
	4310031A	4110005 Acting Payroll Specialist

Sub-Cost Center:	Controller	Total Positions:	23	Vacants:	1	Filled Positions:	22
Cost Center:	Controller	Total Positions:	23	Vacants:	1	Filled Positions:	22
Department:	Controller	Total Positions:	23	Vacants:	1	Filled Positions:	22

Rates & Budget	Finance
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04410	44100	Rates & Budget
	4410001	Budget Director
	4410004	Financial IS Project Leader
	4410007	Sr Financial Analyst

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
	4410011		Budget Manager			
	4410012		Assistant Budget Manager			
	4410016		Sr Financial Analyst			
	4410019		Document/Report Develop Spec			
Sub-Cost Center:	Rates & Budget		Total Positions:	7	Vacants: 2	Filled Positions: 5
Cost Center:	Rates & Budget		Total Positions:	7	Vacants: 2	Filled Positions: 5
Department:	Rates & Budget		Total Positions:	7	Vacants: 2	Filled Positions: 5

Treasury	Finance
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04510	45100	Treasury				
	4510001	Treasurer				
	4510002	Sr Financial Projects Analyst				
	4510004	Account Coordinator				
	4510006	Cash Manager				
	4510008	Risk Management Coordinator				
	4510009	Debt/Investment Analyst				
	4510030	Account Coordinator				
	4510037	Manager, Risk Management				
	4510038	Claims Coordinator				
	4510041	Director, Adm & Fed/State Fin.				
	4510042	Asst Grants Manager				
	4510043	Claims Management Specialist				
Sub-Cost Center:	Treasury		Total Positions:	12	Vacants: 1	Filled Positions: 11
Cost Center:	Treasury		Total Positions:	12	Vacants: 1	Filled Positions: 11
Department:	Treasury		Total Positions:	12	Vacants: 1	Filled Positions: 11
Division:	Finance		Total Positions:	45	Vacants: 4	Filled Positions: 41

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
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Operations Administration	Operations
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05210	52100	Operations Administration
	5210001	Chief Operating Officer
	5210002	Deputy Chief Operating Officer
	5210003	Special Asst/Division Director
	5210004	Secretary I
	5210006	Head Administrative Assistant
	5210007	Manager, Contract Admin
	5210008	Asst Manager,Contract Admin
LOA	5210009	Contract Administrator
	5210011	Contract Assistant
	5210012	Administrative Systems Coord
	5210013	Contract Assistant
	5210015	Manager, Finance
	5210016	Sr Financial Analyst
	5210018	Manager, CEB
	5210019	Contract Assistant
	5210023	Sr Financial Planner
	5210024	Head Clerk
	5210025	Executive Secretary
	5210027	Head Clerk
	5210036	Sr Financial Analyst
	5210037	Director, Coord & Control
	5210038	Sr Contract Administrator, Tun
LOA	5210040	Contract Administrator
	5210042	Sr Contract Administrator
	5210043	Manager, Contract Admin
	5210045	Assistant Finance Manager
	5210047	Administrative Systems Coord
	5210048	Sr Contract Administrator
	5210050	Manager, Fin & Spec Projects
	5210053	Administrative Systems Coord
	5210057	Jr Engineering Aide
	5210058	Technical Assistance Manager
	5210059	Manager, Contract Admin
	5210063	Sr Contract Administrator
	5210065	Sr Program Manager
	5210066	Contract Administrator
	5210070	Executive Secretary

Sub-Cost Center:	Operations Administration	Total Positions:	37	Vacants:	0	Filled Positions:	37
Cost Center:	Operations Administration	Total Positions:	37	Vacants:	0	Filled Positions:	37
Department:	Operations Administration	Total Positions:	37	Vacants:	0	Filled Positions:	37

ENQUAD	Operations
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02250	22500	ENQUAD
	2250001	Director, ENQUAD

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2250002		Project Manager, Environ Data
	2250003		Project Manager, Marine Study
	2250004		Proj Mgr, Hrbr & Outfl Monitor
	2250005		Program Manager, Water Quality
	2250006		Program Manager, Outfall Monit
	2250009		Environmental Info Analyst
	2250010		Administrative Manager
	2250011		Biologist IV
	2250012		Environmental Scientist
	2250013		Project Manager
	2250014		Project Manager
	2250015		Sr Program Manager
	2250016		Sewerage Quality Database Coor
	2250017		Staff Engineer
	2250019		Proj Mgr, Marine Info Analyst

Sub-Cost Center:	ENQUAD	Total Positions:	16	Vacants:	0	Filled Positions:	16
Cost Center:	ENQUAD	Total Positions:	16	Vacants:	0	Filled Positions:	16
Department:	ENQUAD	Total Positions:	16	Vacants:	0	Filled Positions:	16

Residuals	Operations
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02150	21500	Operations & Administration
	2150006	Manager, Residuals Operations

Sub-Cost Center:	Operations & Administration	Total Positions:	1	Vacants:	0	Filled Positions:	1
Cost Center:	Operations & Administration	Total Positions:	1	Vacants:	0	Filled Positions:	1
Department:	Residuals	Total Positions:	1	Vacants:	0	Filled Positions:	1

Deer Island	Operations
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02915	29150	Senior Management
	2915001	Director, DIWWTP
	2915009	Administrative Assistant I
	2915010	Deputy Director, Operations
	2915011	Deputy Dir, O&M Support
	2915012	Manager, Engineering Services
	2915013	Deputy Director, Maintenance

Sub-Cost Center:	Senior Management	Total Positions:	6	Vacants:	0	Filled Positions:	6
Cost Center:	Senior Management	Total Positions:	6	Vacants:	0	Filled Positions:	6

02930	29310	Thermal
	2931001	Second Class Engineer
	2931002	Second Class Engineer
	2931004	Second Class Engineer
	2931009	Third Class Engineer
	2931010	Third Class Engineer
	2931011	Third Class Engineer
	2931015	Third Class Engineer
	2931016	Second Class Engineer
	2931017	Third Class Engineer

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2931018		Technical Assistant
	2931019		Program Manager, Energy
	2931020		Manager, Power Generation

Sub-Cost Center: Thermal Total Positions: 12 Vacants: 0 Filled Positions: 12

02930 29375 DI Wastewater Operations

2937501	Shift Operations Manager
2937502	Shift Operations Manager
2937503	Sr Shift Manager
2937504	Shift Operations Manager
2937505	Shift Operations Manager
2937506	Shift Operations Manager
2937507	Shift Operations Manager
2937509	Technical Assistant
2937510	Operator
2937511	Area Supervisor
2937513	Area Supervisor
2937514	Operator
2937515	Operator
2937516	Area Supervisor
2937517	Area Supervisor
2937518	Operator
2937519	Operator
2937520	Operator
2937521	Operator
2937522	Operator
2937523	Area Supervisor
2937524	Area Supervisor
2937525	Operator
2937526	Operator
IA 2937527	Operator
2937528	Area Supervisor
2937529	Area Supervisor
2937530	Operator
2937531	Operator
2937532	Operator
2937533	Operator
2937534	Area Supervisor
2937535	Operator
2937536	Area Supervisor
2937537	Operator
2937538	Operator
2937539	Operator
2937540	Operator
2937541	Operator
2937542	Area Supervisor
2937543	Operator
2937544	Area Supervisor

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
	2937545		Operator			
	2937546		Operator			
	2937548		Operator			
	2937551		Operator			
	2937553		Operator			
Sub-Cost Center:	DI Wastewater Operations		Total Positions:	47	Vacants:	0 Filled Positions: 47
02930	29385		Process Control			
	2938501		Project Engineer, Process			
	2938504		Monitoring Coordinator			
	2938505		Program Manager, Process Eng			
	2938506		Program Manager, PICS Control			
	2938507		PICS Project Engineer			
	2938508		Project Manager, PICS			
	2938509		Project Manager, PICS			
	2938510		Program Manager, Process Eng			
	2938511		Program Manager, Process Eng			
	2938513		Project Engineer			
	2938514		Manager, Process Control			
	2938515		Administrative Coordinator			
	2938516		Jr Sanitary Engineer			
	2938517		Project Engineer, Pilot Plant			
	2938518		Project Manager, Process Eng			
	2938520		Project Manager			
	2938521		Project Manager, Residuals			
	2938522		Project Mgr, Process Monitor			
	2938523		Project Manager, Residuals			
	2938524		Project Manager, Process Ctrl			
	2938525		Secretary I			
Sub-Cost Center:	Process Control		Total Positions:	21	Vacants:	0 Filled Positions: 21
Cost Center:	DI Operations		Total Positions:	80	Vacants:	0 Filled Positions: 80
02940	29410		Safety			
	2941001		Safety Supervisor			
	2941003		O&M Safety Specialist			
	2941004		Secretary I			
Sub-Cost Center:	Safety		Total Positions:	3	Vacants:	0 Filled Positions: 3
02940	29450		DI Administration & Finance			
	SHR	2945004	Secretary II			
	SHR	2945004	Secretary II			
		2945005	Financial Analyst			
		2945011	Finance & Tech Support Analyst			
		2945012	Secretary I			
		2945014	Manager, DI Admin & Finance			
Sub-Cost Center:	DI Administration & Finance		Total Positions:	5	Vacants:	0 Filled Positions: 5
Cost Center:	DI O&M Support		Total Positions:	8	Vacants:	0 Filled Positions: 8
02970	29710		Technical Information			
		2971001	Program Manager, Tech Info			

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
	2971003		TIC Clerk			
	2971004		O&M Systems Specialist			
	2971005		Project Engineer, CADD			
	2971006		CADD Coordinator			
	2971007		File Clerk			
Sub-Cost Center:	Technical Information		Total Positions: 6	Vacants: 0	Filled Positions: 6	
	02970	29720	Capital Design & Planning			
	2972006		Sr Sanitary Engineer			
	2972010		Project Manager			
	2972013		Technical Support Specialist			
	2972016		Contract/Procurement Assistant			
	2972017		Administrative Manager			
	2972020		Construction Coordinator			
Sub-Cost Center:	Capital Design & Planning		Total Positions: 6	Vacants: 0	Filled Positions: 6	
Cost Center:	DI Capital Program/Planning		Total Positions: 12	Vacants: 0	Filled Positions: 12	
	02980	29815	Plant Maintenance			
	2981501		Project Manager, Mechanical			
	2981502		Program Manager, Electrical			
	2981503		Program Manager, I & C			
	2981504		Project Manager, Sr Designer			
	2981505		Program Manager, Mechanical			
Sub-Cost Center:	Plant Maintenance		Total Positions: 5	Vacants: 0	Filled Positions: 5	
	02980	29855	Work Coordination Maintenance			
	2985501		Work Coordination Center Mgr			
	LOA 2985502		Head Clerk			
	2985504		Treatment Plant Mgr, Maint IV			
	2985505		Planning/Scheduling Coord			
	2985507		Planning/Scheduling Coord			
	2985508		Planning/Scheduling Coord			
	2985509		Planning/Scheduling Coord			
	2985510		Planning/Scheduling Coord			
	2985511		Planning/Scheduling Coord			
	2985512		Planning/Scheduling Coord			
	2985513		Jr Compliance Monitor			
Sub-Cost Center:	Work Coordination Maintenance		Total Positions: 11	Vacants: 0	Filled Positions: 11	
	02980	29865	Condition Monitoring Maint.			
	2986501		Project Mgr, Condition Monitor			
	2986503		Program Mgr, Condition Monitor			
	2986504		Project Mgr, Condition Monitor			
Sub-Cost Center:	Condition Monitoring Maint.		Total Positions: 3	Vacants: 0	Filled Positions: 3	
	02980	29880	Trade Labor Maintenance			
	2988001		Facilities Manager			
	2988002		Secretary I			
	2988003		Administrative Systems Coord			
	2988004		Manager, Maintenance			
	2988005		Assets Manager			

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2988006		Jr Civil Engineer
	2988007		Building/Grounds Supervisor
	2988008		Building/Grounds Worker
	2988009		Building/Grounds Supervisor
	2988010		Building/Grounds Worker
	29880100		HVAC Specialist
	29880101		HVAC Specialist
	29880102		HVAC Specialist
LOA	29880103		Instrumentation Specialist
	29880104		Instrumentation Specialist
	29880105		M & O Specialist
	29880106		M&O Specialist
	29880107		Communication & Control Tech
	29880108		Instrumentation Specialist
	29880109		Unit Supervisor, Instrument
	2988011		Building/Grounds Worker
	29880110		Instrumentation Specialist
	29880111		Instrumentation Specialist
	29880112		Communication & Control Tech
	29880113		Instrumentation Specialist
	29880114		Communication & Control Tech
	29880115		Communication & Control Tech
	29880116		Instrumentation Specialist
	29880117		Communication & Control Tech
	29880118		Instrumentation Specialist
	2988012		Building/Grounds Worker
	29880120		Unit Supervisor, Instrument
	29880121		Communication & Control Tech
	29880122		Communication & Control Tech
	29880123		Instrumentation Specialist
	29880124		Building/Grounds Worker
	29880126		Building/Grounds Worker
	29880127		M & O Specialist
	29880128		Area Manager, Secondary
	29880129		Electrician
	2988013		Building/Grounds Worker
	29880134		Project Manager
	29880136		M & O Specialist
	29880137		Building/Grounds Worker
IA	29880139		Building/Grounds Worker
	2988014		Building/Grounds Equip Oper
	29880142		O & M Safety Specialist
IA	2988015		Building/Grounds Worker
	2988016		Building/Grounds Worker
	2988017		Building/Grounds Worker
	2988018		Equipment Repair Specialist
	2988019		Building/Grounds Equip Oper
	2988021		Building/Grounds Equip Oper

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2988023		Facilities Specialist
	2988024		Facilities Specialist
	2988025		Trades Foreman
	2988026		Facilities Specialist
	2988027		Building/Grounds Worker
	2988028		M & O Specialist
	2988029		M & O Specialist
	2988030		Unit Supervisor
	2988031		M & O Specialist
	2988032		M & O Specialist
	2988033		Area Manager, Mech/Primary
	2988034		M & O Specialist
	2988035		M & O Specialist
	2988036		STP Mechanic
	2988037		M & O Specialist
	2988038		M & O Specialist
	2988039		M & O Specialist
	2988040		M & O Specialist
	2988041		Unit Supervisor
	2988042		M & O Specialist
	2988043		Unit Supervisor
	2988044		M & O Specialist
	2988045		M & O Specialist
	2988046		M & O Specialist
	2988047		Unit Supervisor
	2988048		M & O Specialist
	2988049		M & O Specialist
	2988050		M & O Specialist
	2988051		M & O Specialist
	2988052		Area Manager, Residuals
	2988054		M & O Specialist
	2988055		M & O Specialist
	2988056		M & O Specialist
	2988057		M & O Specialist
	2988058		M & O Specialist
	2988059		M & O Specialist
	2988060		M & O Specialist
	2988061		Unit Supervisor
	2988062		Electrician
	2988063		Electrician
	2988064		Unit Supervisor
	2988065		Electrician
	2988066		Electrician
	2988067		Electrician
	2988068		Electrician
	2988069		Electrician
	2988070		Electrician
	2988071		Area Manager, Elec/Piping

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
LOA	2988072		Electrician
	2988073		Electrician
	2988074		Electrician
	2988075		Electrician
	2988076		Electrician
	2988077		Electrician
	2988078		Electrician
	2988079		Electrician
	2988080		Plumber/Pipefitter
	2988081		Plumber/Pipefitter
	2988082		Plumber/Pipefitter
	2988083		Unit Supervisor
	2988084		Plumber/Pipefitter
	2988085		Plumber/Pipefitter
	2988086		Plumber/Pipefitter
	2988087		Plumber/Pipefitter
	2988088		Plumber/Pipefitter
	2988089		Plumber/Pipefitter
	2988090		Unit Supervisor
	2988091		Metal Fabricator/Welder
	2988092		Metal Fabricator/Welder
	2988093		Toolmaker
	2988094		Machinist
	2988095		Area Manager, HVAC & I/C
	2988096		HVAC Specialist
	2988097		Unit Supervisor
	2988098		HVAC Specialist
	2988099		HVAC Specialist
	2988100		Unit Supervisor

Sub-Cost Center:	Trade Labor Maintenance	Total Positions:	130	Vacants:	8	Filled Positions:	122
Cost Center:	DI Maintenance	Total Positions:	149	Vacants:	8	Filled Positions:	141
Department:	Deer Island	Total Positions:	255	Vacants:	8	Filled Positions:	247

Clinton	Operations
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02910	29100	Clinton
	2910001	Superintendent, Clinton
	2910002	Area Supervisor
	2910005	Area Supervisor
	2910006	Asst STP Operator
	2910010	Area Manager
LOA	2910011	M & O Specialist
IA	2910013	M & O Specialist

Sub-Cost Center:	Clinton	Total Positions:	7	Vacants:	0	Filled Positions:	7
Cost Center:	Clinton	Total Positions:	7	Vacants:	0	Filled Positions:	7
Department:	Clinton	Total Positions:	7	Vacants:	0	Filled Positions:	7

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
Wastewater Operations			Operations
02210	22100		TRAC
	2210001		Manager, TRAC
	2210009		Industrial Coordinator
	2210010		Industrial Coordinator
	2210011		Industrial Coordinator
LOA	2210012		Industrial Coordinator
	2210013		Industrial Coordinator
	2210014		Industrial Coordinator
	2210015		Sampling Associate
	2210016		Industrial Coordinator
	2210018		Regional Inspector
	2210019		Regional Inspector
	2210020		Sampling Coordinator
	2210021		Program Manager, TRAC Is
	2210021A	2210037	Acting Program Manager,TRAC IS
	2210022		Sampling Associate
IA	2210023		Sampling Associate
	2210024		Sampling Associate
	2210025		Sampling Associate
	2210027		Sampling Associate
	2210028		Sampling Associate
	2210029		Compliance Coordinator
	2210030		Project Manager, Permitting
	2210031		Compliance Coordinator
	2210032		Compliance Coordinator
	2210034		Compliance Coordinator
	2210037		Data Management Supervisor
	2210038		Data Tracking Assistant
	2210038A	5910008	Acting Data Tracking Assistant
	2210040		Sr Sampling Associate
	2210041		Sampling Associate
	2210042		Sampling Associate
	2210043		Sampling Coordinator
	2210046		Industrial Coordinator
	2210048		Regional Manager
	2210049		Industrial Coordinator
	2210050		Industrial Coordinator
LOA	2210055		Enforcement Coordinator
	2210055A	2210032	Acting Enforcement Coordinator
	2210056		Industrial Coordinator
	2210059		Industrial Coordinator
	2210060		Sr Sampling Associate
	2210061		Industrial Coordinator
	2210062		Sampling Associate
	2210063		Regional Manager
IA	2210064		Sampling Associate

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2210065		Data Tracker
	2210066		Source Coordinator
	2210067		Sampling Associate
LOA	2210070		Administrative Systems Coord
Sub-Cost Center:	TRAC		Total Positions: 46
			Vacants: 4
			Filled Positions: 42
Cost Center:	Toxic Reduction & Control		Total Positions: 46
			Vacants: 4
			Filled Positions: 42
02470	24700		Wastewater General
	2470001		Director,Transport
	2470003		Program Manager, Process Cntrl
	2470004		Manager, Operations
	2470006		Asst Pumping Station Super
	2470006A	2470021	Acting Asst Pump Station Super
	2470008		Area Supervisor
	2470009		Operator
IA	24700101		Operator
	24700102		Area Supervisor
LOA	24700103		Operator
	24700104		Operator
	24700105		Operator
	24700108		Operator
	2470011		Operator
	24700111		Area Supervisor
	24700112		Area Supervisor
	24700113		Area Supervisor
	24700115		Operator
IA	24700116		Operator
	24700118		Operator
	24700120		Assistant Director
	24700121		Operator
	24700123		Work Order Coordinator
	24700124		Area Supervisor
	24700125		Instrumentation Specialist
	24700126		Program Manager, Operations
	24700128		Program Manager, Operations
	24700130		Administrative Assistant
	24700132		Operations Liaison
	2470015		Area Supervisor
	2470016		Operator
	2470017		Operator
	2470018		Operator
	2470019		Area Supervisor
	2470020		Operator
	2470021		Operator
LOA	2470022		Operator
	2470023		Area Supervisor
	2470025		Operator
	2470028		Skilled Laborer

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2470029		Operator
	2470032		Operations Supervisor
	2470033		Area Supervisor
	2470034		Operator
	2470035		Operator
	2470036		Operator
	2470044		Area Supervisor
	2470045		Headworks Operator
	2470047		Operator
IA	2470048		Operator
	2470052		Skilled Laborer
	2470055		Headworks Operator
	2470056		Headworks Manager
	2470057		Area Supervisor
	2470058		Headworks Operator
	2470059		Headworks Operator
	2470060		Operator
	2470061		Operator
	2470062		Operator
	2470064		Skilled Laborer
	2470065		Operator
	2470066		Skilled Laborer
	2470067		Headworks Operator
	2470069		Area Supervisor
	2470070		Headworks Operator
	2470071		Headworks Operator
	2470072		Operator
LOA	2470073		Operator
	2470074		Operator
	2470075		Operator
	2470079		Headworks Operator
	2470080		Headworks Operator
	2470081		Skilled Laborer
	2470082		Operations Supervisor
	2470083		Area Supervisor
	2470084		Area Supervisor
	2470085		Area Supervisor
	2470085A	8530009	Acting Area Supervisor
	2470086		Operator
	2470087		Operator
	2470089		Operator
	2470091		Building/Grounds Worker
IA	2470092		Building/Grounds Worker
	2470094		Skilled Laborer
	2470095		Operator
	2470096		Area Supervisor

Sub-Cost Center: Wastewater General

Total Positions: 84

Vacants: 2

Filled Positions: 82

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
Cost Center:	Wastewater Operations		Total Positions:	84	Vacants:	2 Filled Positions: 82
Department:	Wastewater Operations		Total Positions:	130	Vacants:	6 Filled Positions: 124
Water Operations & Maintenanc		Operations				
03380	33850	Metro Water General				
	3385001	Sr. Program Manager, Occ				
	3385002	Area Supervisor				
	3385003	Area Supervisor				
	3385004	Area Supervisor				
	3385005	Area Supervisor				
	3385006	Area Supervisor				
	3385007	Area Supervisor				
	3385008	Area Supervisor				
	3385012	Operator				
	3385016	Operator				
	3385021	Operator				
	3385022	Operator				
	3385023	Operator				
	3385025	Area Supervisor				
	3385029	Area Supervisor				
	3385031	Director, Metropolitan				
Sub-Cost Center:	Metro Water General		Total Positions:	16	Vacants:	0 Filled Positions: 16
Cost Center:	Metro Operations		Total Positions:	16	Vacants:	0 Filled Positions: 16
03390	33910	Western General				
	3391001	Director, Western Operations				
	3391003	Secretary I				
	3391004	Secretary II				
	3391005	Inventory Control Supervisor				
	3391006	Supervisor, Admin Support				
	3391007	Principal Storekeeper				
	3391009	Principal Storekeeper				
	3391011	Manager, Western Maintenance				
	3391014	Sr Program Mgr, Western Maint				
	3391015	Project Manager, Electrical				
	3391016	Project Manager, Mechanical				
	3391017	Project Manager, Facilities				
	3391019	Program Manager, Reservoir Ops				
Sub-Cost Center:	Western General		Total Positions:	13	Vacants:	1 Filled Positions: 12
03390	33920	Treatment & Transmission				
	3392001	Sr Trans/Treatment Operator				
	3392004	Transmission & Treatment Oper				
	3392006	Transmission & Treatment Oper				
	3392007	Transmission & Treatment Oper				
	3392008	Transmission & Treatment Oper				
	3392009	Transmission & Treatment Oper				
	3392010	Transmission & Treatment Oper				

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	3392012		Transmission & Treatment Oper
	3392013		Transmission & Treatment Oper
	3392014		Transmission & Treatment Oper
LOA	3392015		Transmission & Treatment Oper
	3392016		Transmission & Treatment Oper
	3392018		Transmission & Treatment Oper
	3392019		Sr Trans/Treatment Operator
	3392020		Transmission & Treatment Oper
	3392021		Manager, Trans/Treatment
	3392023		Supervisor, T&T Operations
	3392025		Sr Trans/Treatment Operator
	3392026		Transmission & Treatment Oper
	3392032		Supervisor, T&T Operations
	3392038		Sr Instrument Technician
	3392040		Sr Trans/Treatment Operator
	3392041		Sr Program Mgr, T&T Operations
	3392042		Instrument Technician
	3392043		Sr Prog Mgr, T&T Process Eng
	3392044		Sr Trans/Treatment Operator
	3392046		Sr Trans/Treatment Operator
	3392047		Sr Trans/Treatment Operator
	3392048		Sr Trans/Treatment Operator
	3392049		Sr Trans/Treatment Operator
	3392054		Transmission & Treatment Oper
	3392055		Project Engineer, I&C
	3392056		Unit Supervisor, Instrument
	3392057		Instrument Technician

Sub-Cost Center: Treatment & Transmission Total Positions: 34 Vacants: 2 Filled Positions: 32

03390 33930 Facility Maint.

	3393001		Supervisor, Facility Maint
	3393009		Trades Foreman
	3393011		Facilities Specialist
LOA	3393014		Trades Foreman
	3393015		Facilities Specialist
	3393018		Facilities Specialist
	3393027		Facilities Specialist
	3393030		Facilities Specialist
	3393030A	3394062	Acting Facilities Specialist
IA	3393031		Facilities Specialist
LOA	3393045		Trades Foreman

Sub-Cost Center: Facility Maint. Total Positions: 10 Vacants: 2 Filled Positions: 8

03390 33940 Grounds Maint - West

	3394002		Supervisor, Ware River Intake
IA	3394004		WSS Foreman
	3394004A	3394067	Acting WSS Foreman
	3394010		OMC Laborer
	3394013		Skilled Laborer

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE				
	3396019		Electrician				
	3396023		Plumber/Pipefitter				
	3396023L	3396023	Acting LD Stock Clerk				
	3396025		M & O Specialist				
	3396026		Electrician				
	3396027		Electrician				
	3396028		Plumber/Pipefitter				
	3396029		Electrician				
	3396030		Machinist				
Sub-Cost Center:	Equipment Maintenance	Total Positions:	25	Vacants:	3	Filled Positions:	22
Cost Center:	Western Operations & Maint	Total Positions:	112	Vacants:	9	Filled Positions:	103
Department:	Water Operations & Maintenance	Total Positions:	128	Vacants:	9	Filled Positions:	119

Metro Maintenance	Operations
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05410 54100 Facility Maintenance Metro

	5410002	Facilities Specialist
	5410003	Facilities Specialist
	5410004	Facilities Specialist
	5410005	Facilities Specialist
	5410006	Trades Foreman
	5410007	Facilities Specialist
	5410008	Facilities Specialist
LOA	5410009	Facilities Specialist
	5410010	Facilities Specialist
	5410011	Trades Foreman
	5410012	Trades Foreman
	5410013	Facilities Specialist
	5410014	Facilities Specialist
	5410015	Facilities Specialist
	5410016	Facilities Specialist
	5410018	Facilities Manager
	5410019	Building & Facil Foreman
	5410021	Facilities Specialist
	5410022	Facilities Specialist

Sub-Cost Center:	Facility Maintenance Metro	Total Positions:	19	Vacants:	0	Filled Positions:	19
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05410 54110 Grounds Maintenance Metro

	5411003	Skilled Laborer
	5411004	WSS Foreman
	5411005	OMC Laborer
	5411006	Skilled Laborer
	5411007	Skilled Laborer
	5411008	WSS General Foreman
	5411009	WSS Foreman
	5411010	WSS Foreman
	5411013	OMC Laborer
	5411014	Skilled Laborer
	5411015	Skilled Laborer

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5411018		Skilled Laborer
	5411019		Skilled Laborer
	5411021		Heavy Equipment Operator
IA	5411022		Skilled Laborer
IA	5411023		OMC Laborer
Sub-Cost Center:	Grounds Maintenance Metro		Total Positions: 16
			Vacants: 1
			Filled Positions: 15
Cost Center:	Facility Maintenance		Total Positions: 35
			Vacants: 1
			Filled Positions: 34
05430	54310		Valve Maintenance - Water
	5431001		Specialty Valve Foreman
	5431002		Specialty Valve Installer
IA	5431003		Valve Maintenance Foreman
	5431004		Valve Maintenance Foreman
	5431005		Valve Maintenance Foreman
	5431006		OMC Laborer
	5431007		Sr Program Manager, Valves
	5431008		Skilled Laborer
	5431009		Skilled Laborer
	5431010		Valve Maintenance Foreman
LOA	5431012		OMC Laborer
	5431013		Skilled Laborer
	5431014		WDS General Foreman
Sub-Cost Center:	Valve Maintenance - Water		Total Positions: 13
			Vacants: 0
			Filled Positions: 13
05430	54320		Inspection - Water
	5432001		Skilled Laborer
	5432002		Supervisor, Inspection
	5432003		Sr General Const Inspector
	5432005		General Construction Inspector
	5432007		Sr Field Service Technician
	5432008		Sr Field Service Technician
LOA	5432010		Sr Field Service Technician
	5432011		Sr Field Service Technician
	5432012		Sr Field Service Technician
	5432014		Project Coord, Control Valves
	5432017		Skilled Laborer
Sub-Cost Center:	Inspection - Water		Total Positions: 11
			Vacants: 0
			Filled Positions: 11
05430	54330		Pipe Maintenance - Water
	5433001		Sr Program Manager, Pipelines
	5433002		WDS General Foreman
	5433003		Sr WDS Foreman
	5433004		Sr WDS Foreman
	5433007		Construction Pipelayer
	5433008		Heavy Equipment Operator
	5433009		Construction Pipelayer
	5433009L	5433009	LD Stock Clerk
	5433010		Heavy Equipment Operator
	5433011		Heavy Equipment Operator
	5433012		Heavy Equipment Operator

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5433013		Heavy Equipment Operator
	5433014		Facilities Specialist
	5433015		Facilities Specialist
	5433016		OMC Laborer
	5433017		OMC Laborer
IA	5433019		OMC Laborer
	5433021		Master Welder I
	5433023		Construction Pipelayer
	5433024		Construction Pipelayer
	5433025		Construction Pipelayer
	5433026		Construction Pipelayer
	5433027		WDS General Foreman
	5433029		Motor Equipment Repairman
	5433031		Sr WDS Foreman
	5433033		Metal Fabricator/Welder

Sub-Cost Center: Pipe Maintenance - Water Total Positions: 25 Vacants: 3 Filled Positions: 22

05430 54340 Pipe Maintenance - Wastewater

	5434001		Skilled Laborer
	5434002		District Supervisor
	5434004		Sewer Maint Foreman
	5434006		Sewer Maint Foreman
IA	5434006A	5434010	Acting Sewer Maint Foreman
IA	5434007		Sewer Maint Foreman
	5434008		Skilled Laborer
	5434009		Skilled Laborer
IA	5434010		Heavy Equipment Operator
	5434013		Facilities Specialist
	5434014		Facilities Specialist
	5434015		Chief Pipeline Maintenance
	5434017		Asst District Supervisor
	5434019		Sewer Maint Foreman
	5434021		Heavy Equipment Operator
	5434022		Skilled Laborer
	5434023		Heavy Equipment Operator
	5434024		Sewer Maint Foreman
	5434026		Facilities Specialist
	5434028		OMC Laborer
	5434029		OMC Laborer

Sub-Cost Center: Pipe Maintenance - Wastewater Total Positions: 20 Vacants: 1 Filled Positions: 19

05430 54350 TV Inspection - Wastewater

	5435002		Sr Program Manager
IA	5435003		Unit Supervisor, Maintenance
	5435004		Tele-Inspection Assistant
	5435006		Tele-Inspection Assistant
	5435007		Tele-Inspection Assistant
	5435008		Tele-Inspection Operator
	5435009		Tele-Inspection Foreman

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
	5435011		Tele-Inspection Operator			
	5435012		Sr Field Inspector			
	5435013		Field Supervisor			
	5435014		Tele-Inspection Foreman			
	5435015		Tele-Inspection Assistant			
	5435016		Tele-Inspection Operator			
	5435018		Staff Engineer			
Sub-Cost Center:	TV Inspection - Wastewater		Total Positions:	14	Vacants:	0 Filled Positions: 14
Cost Center:	Metro Pipe Maintenance		Total Positions:	83	Vacants:	4 Filled Positions: 79
05440	54400		Work Coordination			
	5440001		Work Order Coordinator			
	5440003		Materials Coordination Manager			
	5440005		Planning/Scheduling Coord			
	5440006		Heavy Equipment Operator			
	IA 5440007		Material & Equipment Super			
	5440008		Planning/Scheduling Coord			
	5440010		Planning/Scheduling Coord			
	5440011		Planning/Scheduling Coord			
	5440012		Planning/Scheduling Coord			
	5440013		Work Coordination Center Mgr			
	5440016		Supervisor, Logistics Unit			
	5440019		Planning/Scheduling Coord			
	5440020		Planning/Scheduling Coord			
	5440021		Planning/Scheduling Coord			
	5440022		Planning/Scheduling Coord			
	5440023		Planning/Scheduling Coord			
	5440024		Project Manager			
Sub-Cost Center:	Work Coordination		Total Positions:	17	Vacants:	0 Filled Positions: 17
Cost Center:	Work Coordination		Total Positions:	17	Vacants:	0 Filled Positions: 17
05450	54500		Metro Maintenance General			
	5450001		Sr Prog Mgr, Metro Trades			
	5450003		Program Mgr, Ops & Maint			
Sub-Cost Center:	Metro Maintenance General		Total Positions:	2	Vacants:	0 Filled Positions: 2
Cost Center:	Metro Maintenance General		Total Positions:	2	Vacants:	0 Filled Positions: 2
05470	54700		Equipment - General			
	5470001		Chief Facilities Maintenance			
	5470002		M & O Specialist			
	5470003		M & O Specialist			
	5470004		M & O Specialist			
	5470005		M & O Specialist			
	5470006		M & O Specialist			
	5470008		Diesel Engine Maint Foreman			
	5470009		M & O Specialist			
	5470010		M & O Specialist			
	5470011		M & O Specialist			
	5470014		Unit Supervisor, Maintenance			

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5470015		Machinist
	5470016		Metal Fabricator/Welder
	5470019		Unit Supervisor, Machinist
	5470020		Master Welder
	5470022		Metal Fabricator/Welder
	5470023		Electrician
	5470024		Electrician
	5470025		Electrician
	5470026		Electrician
	5470027		Electrician
	5470028		Unit Supervisor
	5470029		Plumber/Pipefitter
	5470030		Plumber/Pipefitter
	5470031		Plumber/Pipefitter
	5470032		Unit Supervisor
	5470033		Plumber/Pipefitter
	5470036		HVAC Specialist
	5470038		Unit Supervisor
	5470039		M & O Specialist
	5470040		Diesel Engine Maint Foreman
	5470041		Unit Supervisor
	5470042		Plumber/Pipefitter
	5470043		M & O Specialist
	5470044		Unit Supervisor
	5470045		Program Manager
	5470046		M & O Specialist
	5470047		Electrician
	5470048		Project Manager, Electrical
	5470050		Unit Supervisor
	5470051		Electrician
	5470052		Electrician
	5470053		Plumber/Pipefitter
	5470055		Electrician
	5470056		Unit Supervisor, HVAC
	5470057		HVAC Specialist
IA	5470058		Equipment Repair Foreman
	5470059		Skilled Laborer
IA	5470060		M & O Specialist
	5470062		Skilled Laborer
	5470063		Skilled Laborer
	5470064		OMC Laborer
	5470065		Equipment Repair Foreman
	5470066		HVAC Specialist

Sub-Cost Center:	Equipment - General	Total Positions:	54	Vacants:	4	Filled Positions:	50
Cost Center:	Equipment Maintenance	Total Positions:	54	Vacants:	4	Filled Positions:	50
Department:	Metro Maintenance	Total Positions:	191	Vacants:	9	Filled Positions:	182

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE				
Operations Support		Operations					
05810	58110	Operations Engineering					
	5811003	Project Engineer					
	5811004	Project Engineer					
	5811008	Project Manager					
	5811009	Technical Assistant					
	5811010	Safety Program Coordinator					
	5811014	Prog Mgr, Monitor & Control					
	5811015	Sr Program Manager					
	5811017	Distribution System Liaison					
	5811018	Jr Civil Engineer					
	5811019	Program Manager, Scada					
	5811020	Sr Program Manager, Start-up					
	5811021	Project Manager					
	5811022	Sr. Engineer					
Sub-Cost Center:	Operations Engineering	Total Positions:	13	Vacants:	1	Filled Positions:	12
Cost Center:	Operations Engineering	Total Positions:	13	Vacants:	1	Filled Positions:	12
05820	58210	Quality Assurance					
	5821001	Sr Program Mgr, Quality Assura					
SHR	LOA	5821002	Lab Supervisor/Jobshre/WQCHM				
SHR		5821002	Lab Supervisor/Jobshre/WQCHM				
	5821003	Environmental Scientist					
	5821004	Program Manager, Water Quality					
	5821005	Program Manager, Chemistry					
	5821006	Project Manager					
	5821007	Sr Sanitary Engineering Aide					
	5821008	Sr Sanitary Engineering Aide					
	5821009	Sr Sanitary Engineering Aide					
	5821010	Project Manager, Tech Services					
	5821014	Jr Sanitary Engineer					
	5821016	Sr Instrument Technician					
Sub-Cost Center:	Quality Assurance	Total Positions:	12	Vacants:	1	Filled Positions:	11
Cost Center:	Quality Assurance	Total Positions:	12	Vacants:	1	Filled Positions:	11
05830	58310	Data Management					
	5831001	Technical Information Asst					
	5831003	Statistician					
	5831004	MIS Coordinator					
	5831005	Jr Civil Engineer					
	5831008	Project Manager, Operations In					
Sub-Cost Center:	Data Management	Total Positions:	5	Vacants:	0	Filled Positions:	5
Cost Center:	Data Management	Total Positions:	5	Vacants:	0	Filled Positions:	5
05840	58410	Scada Maintenance - Water					
	5841001	Program Manager, SCADA					
	5841002	Communication & Control Tech					
	5841003	Project Manager, SCADA					

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE				
	5841004		Communication & Control Tech				
	5841005		Communication & Control Tech				
	5841006		Sr SCADA Maint Technician				
	5841007		Sr SCADA Maint Technician				
	5841008		Sr SCADA Maint Technician				
	5841009		Communication & Control Tech				
LOA	5841010		Sr Program Manager,Scada				
	5841011		Program Manager, Scada				
	5841012		Sr SCADA Maint Technician				
	5841013		Sr SCADA Maint Technician				
	5841014		Sr SCADA Maint Technician				
	5841016		Communication & Control Tech				
	5841017		Communication & Control Tech				
	5841018		Project Manager, SCADA				
	5841019		Sr Monitoring & Control Eng				
	5841020		Sr Monitor & Control Engineer				
	5841023		Program Manager, SCADA				
	5841024		Sr Monitor & Control Engineer				
Sub-Cost Center:	Scada Maintenance - Water	Total Positions:	21	Vacants:	0	Filled Positions:	21
05840	58420	Scada Maintenance - Wastewater					
	5842001		Sr SCADA Technician				
	5842003		Sr SCADA Technician				
	5842004		Sr Monitoring & Control Eng				
	5842005		Project Manager, SCADA Eng				
	5842006		Communication & Control Tech				
	5842007		Communication & Control Tech				
Sub-Cost Center:	Scada Maintenance - Wastewater	Total Positions:	6	Vacants:	1	Filled Positions:	5
05840	58430	Meter Maintenance - Water					
	5843010		Program Mgr, Meter Data & Eng				
	5843012		Project Manager, Meter Data				
	5843015		Project Engineer, Meter Eng				
	5843017		Project Mgr, Meter Engineering				
	5843018		Data Analyst, Meter Data				
	5843019		Statistical Super, Meter Data				
Sub-Cost Center:	Meter Maintenance - Water	Total Positions:	6	Vacants:	0	Filled Positions:	6
05840	58440	Meter Maintenance - Wastewater					
	5844001		Jr Instrument Technician				
	5844002		Jr Instrument Technician				
	5844003		Jr Instrument Technician				
	5844004		Instrument Technician				
	5844005		Program Manager, Metering				
	5844007		Sr Instrument Technician				
	5844008		Instrument Technician				
	5844009		Sr Instrument Technician				
	5844011		Instrument Technician				
	5844012		Technical Assistant				
	5844018		Sr Instrument Technician				

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
	5844019		Jr Instrument Technician			
	IA 5844020		Jr Instrument Technician			
	5844023		Sr Instrument Technician			
	5844025		Instrument Technician			
	5844026		Sr Instrument Technician			
	5844027		Sup Water/Wastew Meter Maint			
Sub-Cost Center:	Meter Maintenance - Wastewater		Total Positions:	17	Vacants:	2 Filled Positions: 15
Cost Center:	Metering & Monitoring		Total Positions:	50	Vacants:	3 Filled Positions: 47
05850	58500		Operations Support General			
	5850001		Dep Dir, Oper & Dir Oper Supp			
	5850002		Manager, Metering & Monitoring			
Sub-Cost Center:	Operations Support General		Total Positions:	2	Vacants:	0 Filled Positions: 2
Cost Center:	Operations Support Admin		Total Positions:	2	Vacants:	0 Filled Positions: 2
Department:	Operations Support		Total Positions:	82	Vacants:	5 Filled Positions: 77

FOD Administration	Operations
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05910	59100	Policy & Administration				
	5910001	Director, Field Operations				
	5910003	Executive Secretary				
	5910004	Manager, Finance & Admin				
	5910006	Secretary I				
	5910008	Principal Clerk				
	5910009	Manager, Admin & Finance				
	5910010	Principal Clerk				
	5910011	Executive Secretary				
	5910012	File Clerk				
	5910013	Sr Clerk & Typist				
	5910014	Manager, Policy & Planning Sup				
	5910015	Sr Financial Analyst				
	5910016	Head Clerk				
	5910017	Administrative Systems Coord				
	5910018	Administrative Assistant I				
	LOA 5910020	Sr Clerk & Typist				
	5910021	Administrative Systems Coord				
	LOA 5910024	Executive Secretary				
Sub-Cost Center:	Policy & Administration		Total Positions:	18	Vacants:	0 Filled Positions: 18
Cost Center:	Admin/Mgt		Total Positions:	18	Vacants:	0 Filled Positions: 18
Department:	FOD Administration		Total Positions:	18	Vacants:	0 Filled Positions: 18

Capital Engineering & Const.	Operations
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03610	36100	Capital Engineering & Constr.			
	3610001	Director, Capital Engineering			
	3610007	Manager, Environ Compliance			
	3610013	Executive Secretary			
	3610014	Asst Director, Engineering			
	3610015	Project Manager			

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	3610017		Project Manager
	3610018		Project Engineer
	3610019		Design Manager
	3610020		Design Manager
	3610022		Design Manager
	3610023		Design Manager
	3610024		Design Manager
	3610025		Project Manager
	3610026		Sr Engineering Aide
	3610028		Design Manager
	3610029		Manager, QA/QC
	3610030		Deputy Director, Capital Const
	3610031		Sr Construction Manager
	3610032		Construction Coordinator
	3610036		Construction Coordinator
	3610038		Sr Construction Manager
	3610039		Construction Coordinator
	3610040		Construction Coordinator
	3610041		Project Manager

Sub-Cost Center:	Capital Engineering & Constr.	Total Positions:	24	Vacants:	1	Filled Positions:	23
Cost Center:	Capital Engineering & Const.	Total Positions:	24	Vacants:	1	Filled Positions:	23
Department:	Capital Engineering & Const.	Total Positions:	24	Vacants:	1	Filled Positions:	23

CSO Program/Energy	Operations
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05310

53100

CSO Program/Energy

	5310001	Manager, CSO Program/Energy
	5310004	Sr Program Manager
	5310005	Project Manager
	5310007	Project Manager
	5310008	Project Manager
	5310010	Program Manager, Geotech CSO
	5310013	Secretary I
	5310019	Project Engineer
LOA	5310020	Project Engineer
	5310027	Project Engineer
	5310029	Project Engineer
	5310052	Sr Program Manager

Sub-Cost Center:	CSO Program/Energy	Total Positions:	12	Vacants:	0	Filled Positions:	12
Cost Center:	CSO Program/Energy	Total Positions:	12	Vacants:	0	Filled Positions:	12
Department:	CSO Program/Energy	Total Positions:	12	Vacants:	0	Filled Positions:	12

Engineering & Construction	Operations
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05525

55250

Engineering & Construction

	5525002	Sr Program Manager
	5525003	Project Manager
	5525007	Sr Civil Engineer, Draftsman

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5525009		Sr Staff Engineer, Structural
	5525010		Sr Staff Engineer, Mechanical
	55250101		Sr Civil Engineer
	55250102		Sr Civil Engineer
	55250103		Assistant Civil Engineer
	55250104		Project Engineer
	55250105		Construction Coordinator
	55250106		Program Manager
	55250107		Principal Civil Engineer
	55250109		Asst Director, Construction
	55250109L	55250109	Acting Light Duty Asst Dir
	5525011		Principal Sanitary Engineer
	55250110		Construction Coordinator
	55250111		Secretary I
	55250112		Project Engineer
	5525017		Asst Director, Engineering
	5525019		Sr Staff Engineer, Electrical
SHR	5525020		Project Manager
SHR	5525020		Project Manager
	5525021		Sr Program Manager
	5525022		Project Manager
	5525024		Mechanical Designer
	5525026		Sr Engineer
	5525029		Sr Engineer
	5525030		Sr Staff Engineer, Structural
	5525031		Project Engineer
	5525032		Project Engineer
	5525034		Asst Director, Engineering
	5525036		Sr Engineer
	5525037		Project Manager
	5525039		Program Manager
	5525040		Sr Draftsperson
	5525041		Project Manager
	5525042		Sr Staff Engineer
	5525043		Project Engineer
	5525044		Program Manager
	5525045		CADD Drafting Manager
	5525048		Project Engineer
	5525053		Program Manager
	5525058		Project Engineer
	5525060		Project Engineer
	5525061		Sr Program Manager
	5525062		Sr Program Manager
	5525063		Program Manager
	5525066		TIC Clerk
	5525068		Director, Engineering & Constr
	5525069		Secretary I
	5525070		Administrative Systems Coord

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5525072		Construction Coordinator
	5525073		Sr Civil Engineer
	5525074		Assistant Civil Engineer
	5525075		Assistant Civil Engineer
	5525076		Sr Civil Engineer
	5525077		Assistant Civil Engineer
	5525078		Assistant Civil Engineer
	5525079		Assistant Civil Engineer
	5525081		Jr Civil Engineer
	5525082		Jr Civil Engineer
	5525084		Sr Civil Engineer
	5525085		Sr Civil Engineer
	5525088		Project Manager
	5525090		Construction Coordinator
	5525091		Sr Civil Engineer
	5525092		Principal Civil Engineer
	5525097		Assistant Civil Engineer

Sub-Cost Center:	Engineering & Construction	Total Positions:	66	Vacants:	2	Filled Positions:	64
Cost Center:	Engineering & Construction	Total Positions:	66	Vacants:	2	Filled Positions:	64
Department:	Engineering & Construction	Total Positions:	66	Vacants:	2	Filled Positions:	64

Laboratory Services	Operations
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05710	57100	Laboratory Services
	5710001	Director, Laboratory Services
	5710002	Laboratory Section Manager
	5710003	Laboratory Supervisor III
	5710004	IS Project Leader
	5710005	Secretary I
	5710006	Laboratory Manager
	5710007	Laboratory Manager
	5710008	Laboratory Supervisor III
	5710009	Chemist III
	5710010	Laboratory Supervisor III
	5710011	Laboratory Supervisor II
	5710012	Laboratory Supervisor II
	5710012A	5710033 Acting Lab Supervisor II
	5710013	Chemist III
	5710014	Chemist III
	5710015	Chemist I
	5710021	Quality Assurance Coordinator
	5710023	Administrative Systems Coord
	5710024	Chemist III
	5710025	Chemist III
	5710026	Chemist II
	5710027	Chemist I
	5710028	Chemist II
	5710029	Chemist II

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5710030		Microbiologist II
	5710031		Sr Laboratory Technician
	5710033		Client Services Coordinator
	5710035		Chemist II
	5710039		Chemist III
	5710040		Chemist I
	5710041		Chemist I
	5710043		Sr Laboratory Technician
	5710044		Biologist I
	5710045		Chemist III
	5710046		Chemist II
	5710047		Chemist I
	5710048		Chemist I
	5710049		Sr Laboratory Technician
	5710050		Sr Laboratory Technician
	5710051		Sr Laboratory Technician
	5710053		Chemist III
	5710055		Chemist II
	5710056		Biologist I
	5710057		Research Vessel Operator
	5710058		Chemist II
	5710059		Chemist III
	5710060		Microbiologist II
	5710062		Laboratory Supervisor I
	5710063		Sr Laboratory Technician
	5710064		Microbiologist I
	5710065		Microbiologist I
	5710066		Laboratory Supervisor III
	5710067		Project Manager
	5710068		Chemist III
	5710069		Laboratory Supervisor
	5710070		Microbiologist I
	5710071		Chemist I
	5710072		Chemist I
	5710073		Chemist I

Sub-Cost Center:	Laboratory Services	Total Positions:	58	Vacants:	7	Filled Positions:	51
Cost Center:	Laboratory Services	Total Positions:	58	Vacants:	7	Filled Positions:	51
Department:	Laboratory Services	Total Positions:	58	Vacants:	7	Filled Positions:	51
Division:	Operations	Total Positions:	1025	Vacants:	47	Filled Positions:	978

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
Law			Law
07110	71100		Law
	7110001		General Counsel
	7110002		Associate General Counsel
	7110003		Associate General Counsel
	7110003A	7110005	Acting Assoc General Counsel
	7110005		Sr Staff Counsel
	7110006		Sr Staff Counsel
	7110009		Legal Assistant
	7110011		Regulatory Compliance Coord
	7110014		Secretary I
	7110015		Administrative Coordinator
	7110016		Staff Counsel
	7110017		Sr Staff Counsel
	7110020		Sr Staff Counsel
	7110021		Legal Assistant
	7110023		Executive Secretary
	7110024		Sr Staff Counsel
	7110025		Sr Staff Counsel
	7110027		Associate General Counsel
	7110028		Sr Staff Counsel
	7110029		Sr Staff Counsel
	7110030		Legal Assistant
	7110034		Sr Staff Counsel
	7110035		Executive Secretary

Sub-Cost Center:	Law	Total Positions:	22	Vacants:	2	Filled Positions:	20
Cost Center:	Law	Total Positions:	22	Vacants:	2	Filled Positions:	20
Department:	Law	Total Positions:	22	Vacants:	2	Filled Positions:	20
Division:	Law	Total Positions:	22	Vacants:	2	Filled Positions:	20

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
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Division Director	Support Services
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08150	81500	Division Director
	8150001	Managing Director
	8150003	Tech Asst, Support Services
	8150004	Mgr, Security & Emerg Planning
	8150005	Administrative Systems Coord
	8150006	Security Administrator

Sub-Cost Center:	Division Director	Total Positions:	5	Vacants:	0	Filled Positions:	5
Cost Center:	Division Director	Total Positions:	5	Vacants:	0	Filled Positions:	5
Department:	Division Director	Total Positions:	5	Vacants:	0	Filled Positions:	5

Internal Audit	Support Services
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08210	82100	Internal Audit
	8210001	Director, Internal Audit
	8210003	Supervisory Auditor
	8210005	Sr Staff Auditor
	8210006	Administrative Coordinator
	8210007	Asst Director, Internal Audit
	8210008	Sr Staff Auditor
	8210013	Sr Supervisory Auditor, Cntrct
	8210014	Sr Staff Auditor, Contract Aud
	8210015	Sr Staff Auditor

Sub-Cost Center:	Internal Audit	Total Positions:	9	Vacants:	1	Filled Positions:	8
Cost Center:	Internal Audit	Total Positions:	9	Vacants:	1	Filled Positions:	8
Department:	Internal Audit	Total Positions:	9	Vacants:	1	Filled Positions:	8

Public Affairs	Support Services
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08250	82500	Public Affairs
	8250001	Deputy Director, Comm Relation
	8250002	Sr Community Relation Coord
LOA	8250004	Sr Community Relation Coord
LOA	8250006	Communications Manager
	8250007	Manager, Public Access
	8250013	Secretary I
	8250016	Project Mgr, Graphic Design
	8250017	Communications Specialist
	8250020	Director, Public Affairs
	8250022	Intergovernmental Affairs Mgr
	8250023	Administrative Systems Coord
	8250026	Dep Dir, Communications
	8250030	Communications Specialist
	8250031	Public Access Coordinator
	8250032	Public Access Coordinator
	8250035	File Clerk

Sub-Cost Center:	Public Affairs	Total Positions:	16	Vacants:	0	Filled Positions:	16
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DEPARTMENT	PCR #	Original PCR #	POSITION TITLE					
Cost Center:	Public Affairs		Total Positions:	16	Vacants:	0	Filled Positions:	16
	08260	82600	Education Program					
		8260001	Project Manager, School Ed					
		8260002	Administrative Coordinator					
Sub-Cost Center:	Education Program		Total Positions:	2	Vacants:	0	Filled Positions:	2
Cost Center:	Education Program		Total Positions:	2	Vacants:	0	Filled Positions:	2
Department:	Public Affairs		Total Positions:	18	Vacants:	0	Filled Positions:	18

Facilities Management	Support Services
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08740	87400	Administrative Services
	8740004	Messenger/Courier
	8740007	Admin Services Manager
	8740010	Supervisor, Trans/Courier/Mail
	8740011	Messenger/Courier
	8740012	Motor Pool Coordinator
SHR	8740015	Secretary II
SHR	8740015	Secretary II
	8740016	Secretary I
	8740017	Secretary II
	8740019	Administrative Coordinator
	8740020	Administrative Coordinator
	8740023	Messenger/Courier
	8740024	Messenger/Courier
	8740025	Messenger/Courier
	8740026	Manager, Facility & Admin
	8740027	Supervisor, Facilities Mgmt
	8740029	Sr Fire & Safety Warden
	8740030	Sr Fire & Safety Warden
	8740031	OMC Laborer
	8740032	OMC Laborer
	8740033	Skilled Laborer
	8740034	Skilled Laborer
	8740035	Manager, Facilities Management

Sub-Cost Center:	Administrative Services	Total Positions:	22	Vacants:	2	Filled Positions:	20
Cost Center:	Administrative Services	Total Positions:	22	Vacants:	2	Filled Positions:	20
Department:	Facilities Management	Total Positions:	22	Vacants:	2	Filled Positions:	20

Fleet Services	Support Services
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08310	83100	Fleet Services
	8310001	Manager, Veh Maint/Data Supprt
	8310001A	8310006 Acting Mgr,Vehicle Maint/Data
	8310004	Administrative Systems Coord
	8310005	Vehicle Services Supervisor
	8310006	Vehicle Services Supervisor
	8310007	Motor Equipment Repairman
	8310008	Motor Equipment Repairman

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	8310009		Motor Equipment Repairman
	8310010		Motor Equipment Repairman
	8310011		Motor Equipment Repairman
	8310012		Administrative Systems Coord
	8310013		Automotive Repairman Assistant
	8310014		Motor Equipment Repairman
	8310016		Motor Equipment Repairman

Sub-Cost Center:	Fleet Services	Total Positions:	13	Vacants:	1	Filled Positions:	12
Cost Center:	Fleet Services	Total Positions:	13	Vacants:	1	Filled Positions:	12
Department:	Fleet Services	Total Positions:	13	Vacants:	1	Filled Positions:	12

Affirmative Action

Support Services

08410

84100

Affirmative Action

8410001	Special Asst For Affirm Action
8410002	MBE/WBE Program Manager
8410004	Compliance Monitor
8410005	Workforce Development Coord
8410006	Executive Secretary
8410008	Prog Mgr, Monitor & Compliance
8410009	Compliance Monitor
8410011	Sr Compliance Monitor

Sub-Cost Center:	Affirmative Action	Total Positions:	8	Vacants:	0	Filled Positions:	8
Cost Center:	Affirmative Action	Total Positions:	8	Vacants:	0	Filled Positions:	8
Department:	Affirmative Action	Total Positions:	8	Vacants:	0	Filled Positions:	8

Human Resources

Support Services

08510

85100

Employment/Comp/Benefits

8510001	Director, Human Resources
8510003	Employment Manager
8510006	Sr Benefits & HRIS Analyst
8510008	Secretary I
8510010	Sr Comp & Benefits Analyst
8510011	Manager, Compensation
8510012	Manager, Benefits & HRIS
8510014	Employee Benefits Assistant
8510015	Administrative Manager
8510016	Sr Comp & Benefits Analyst

Sub-Cost Center:	Employment/Comp/Benefits	Total Positions:	10	Vacants:	1	Filled Positions:	9
Cost Center:	Employment/Comp/Benefits	Total Positions:	10	Vacants:	1	Filled Positions:	9

08520

85200

Labor Relations

8520001	Manager, Labor Relations
8520002	Asst Manager, Labor Relations
8520003	Asst Manager, Workers Comp
8520004	Administrative Secretary
8520005	Sr Staff Counsel
8520007	Program Manager, Security/Safe

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
	8520008		Program Manager, Security/Safe			
	8520009		Program Manager, Security/Safe			
Sub-Cost Center:	Labor Relations		Total Positions:	8	Vacants:	1 Filled Positions: 7
Cost Center:	Labor Relations		Total Positions:	8	Vacants:	1 Filled Positions: 7
08530	85300		Training			
	8530001		Manager, Technical Training			
	8530003		Training Specialist			
	8530009		Training Specialist			
Sub-Cost Center:	Training		Total Positions:	3	Vacants:	0 Filled Positions: 3
Cost Center:	Training		Total Positions:	3	Vacants:	0 Filled Positions: 3
Department:	Human Resources		Total Positions:	21	Vacants:	2 Filled Positions: 19

MIS	Support Services
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08610	86100	MIS
	8610001	Director, MIS
	8610002	Information Center Manager
	8610003	Administrative Coordinator
	8610004	Sr Systems Analyst
	8610005	Program Mgr, Tech Services
	8610006	Technical Support Analyst
	8610007	Database Analyst/Programmer
	8610009	Sr Systems Analyst
	8610010	Database Analyst/Programmer
	8610011	Sr Systems Analyst
	8610012	IS Custom Support Manager
	8610013	Program Manager, MIS
	8610015	Sr Systems Analyst
	8610016	Sr Systems Analyst
	8610017	Secretary I
	8610019	Computer Operator II
	8610020	Technical Operations Manager
	8610024	Network & Systems Manager
SHR	8610025	IS Development Specialist
SHR	8610025	IS Development Specialist
	8610027	Hardware Maint Specialist
	8610028	IS Development Specialist
	8610030	Program Manager
	8610031	Sr CEB Analyst
	8610031A	8610025 Acting Sr CEB Analyst
	8610032	Security Monitor
	8610033	Data Resource Manager
	8610034	Programmer Analyst II
	8610035	LIMS Analyst
	8610036	Program Manager
	8610037	Sr Systems Manager
	8610038	Programmer Analyst II

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	8610039		Technical Support Analyst
	8610040		Program Manager, MIS
	8610043		Database Analyst/Programmer
	8610044		Program Manager
	8610045		Database Analyst/Programmer
	8610046		Database Analyst/Programmer
	8610047		Technical Support Analyst
	8610048		Database Analyst/Programmer
	8610049		Database Analyst
	8610051		Technical Support Analyst
	8610052		File Clerk
	8610053		Program Manager, MIS
	8610054		Sr Systems Analyst
	8610055		Sr Program Mgr, IS Security
LOA	8610056		Sr Operator/E-Mail Administrat
	8610057		Computer Operator II
	8610058		Program Manager, Network Srv
LOA	8610059		IS Project Leader
	8610059A	8610068	Acting IS Project Leader
	8610060		Database Analyst/Programmer
	8610062		Helpline Coordinator
	8610063		Public Information Technician
	8610066		Helpline Coordinator
	8610067		Database Analyst/Programmer
	8610068		Technical Support Analyst
	8610071		Information Specialist
	8610072		Librarian/Records Manager
	8610073		Library Supervisor
	8610074		Information Specialist
	8610075		Sr Systems Analyst
	8610076		MIS Coordinator
	8610077		Sr Systems Manager
	8610078		Technical Support Analyst
	8610081		Sr Systems Analyst
	8610082		Application Support Supervisor
	8610083		Database Analyst/Programmer
	8610084		Sr Systems Analyst
	8610085		Sr Systems Manager
LOA	8610086		IS Project Leader
	8610089		Sr Systems Analyst

Sub-Cost Center:	MIS	Total Positions:	69	Vacants:	6	Filled Positions:	63
Cost Center:	MIS	Total Positions:	69	Vacants:	6	Filled Positions:	63
Department:	MIS	Total Positions:	69	Vacants:	6	Filled Positions:	63

Procurement	Support Services
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08810	88100	Procurement
	8810001	Director, Procurement

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE				
	8810002		Executive Secretary				
	8810003		Purchasing Manager				
	8810004		Sr Buyer				
LOA	8810006		Secretary I				
	8810007		Buyer				
	8810009		Buyer				
	8810012		Data Control Coordinator				
	8810013		Buyer				
	8810015		Deputy Purchasing Manager				
	8810016		Buyer				
	8810020		Buyer				
	8810021		Contracts Manager				
	8810022		Assistant Contracts Manager				
	8810025		Deputy Contracts Manager				
	8810028		Assistant Contracts Manager				
	8810031		Deputy Contracts Manager				
	8810032		Secretary I				
	8810033		Document Coordinator				
	8810034		Data & Information Coordinator				
	8810035		Assistant Contracts Manager				
	8810039		Assistant Contracts Manager				
	8810040		Deputy Contracts Manager				
	8810043		Secretary I				
	8810044		Assistant Contracts Manager				
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Sub-Cost Center:	Procurement	Total Positions:	25	Vacants:	2	Filled Positions:	23
Cost Center:	Procurement	Total Positions:	25	Vacants:	2	Filled Positions:	23
08820	88200	Materials Management					
	8820001		Materials Manager				
	8820002		Inventory Control Specialist				
	8820005		Regional Warehouse Manager				
	8820006		Shipping/Receiving Supervisor				
	8820007		Warehouse Materials Handler				
	8820008		Warehouse Materials Handler				
	8820009		Warehouse Manager				
	8820010		Inventory Control Specialist				
	8820012		Inventory Control Specialist				
	8820013		Inventory Control Specialist				
	8820015		Inventory Control Supervisor				
	8820016		Warehouse Materials Handler				
	8820017		Warehouse Materials Handler				
	8820018		Shipping/Receiving Supervisor				
	8820019		Inventory Control Specialist				
	8820023		Mgr, Analysis & Tech Support				
LOA	8820025		Warehouse Materials Handler				
	8820026		Shipping/Receiving Supervisor				
	8820027		Warehouse Manager				
	8820028		Warehouse Materials Handler				

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	8820029		Warehouse Materials Handler
	8820030		Inventory Control Specialist
	8820031		Warehouse Materials Handler
	8820032		Principal Clerk
	8820033		Inventory Control Specialist

Sub-Cost Center:	Materials Management	Total Positions:	25	Vacants:	0	Filled Positions:	25
Cost Center:	Materials Management	Total Positions:	25	Vacants:	0	Filled Positions:	25
Department:	Procurement	Total Positions:	50	Vacants:	2	Filled Positions:	48

Real Prop/Environmental Mgmt	Support Services
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08850	88500	Real Prop/Environmental Mgmt
SHR	8850001	Real Property Project Manager
LOA	8850002	Director, Real Property & Env
	8850003	Environmental Manager
	8850004	Program Manager, Environmental
	8850005	Program Manager, Permits
	8850006	Project Manager
	8850008	Administrative Systems Coord

Sub-Cost Center:	Real Prop/Environmental Mgmt	Total Positions:	7	Vacants:	1	Filled Positions:	6
Cost Center:	Real Prop/Environmental Mgmt	Total Positions:	7	Vacants:	1	Filled Positions:	6
Department:	Real Prop/Environmental Mgmt	Total Positions:	7	Vacants:	1	Filled Positions:	6
Division:	Support Services	Total Positions:	222	Vacants:	15	Filled Positions:	207

AUTHORITY	Total Positions:	1344	Vacants:	70	Filled Positions:	1274
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