

# **MASSACHUSETTS WATER RESOURCES AUTHORITY**



---

## **Proposed Fiscal Year 2007 CURRENT EXPENSE BUDGET**

## **BOARD OF DIRECTORS**

Stephen R. Pritchard, Chairman

John J. Carroll, Vice Chairman

Joseph A. MacRitchie, Secretary

Rudolph H. Banks

Kevin L. Cotter

Joseph C. Foti

Lucile P. Hicks

James W. Hunt, III

Vincent G. Mannering

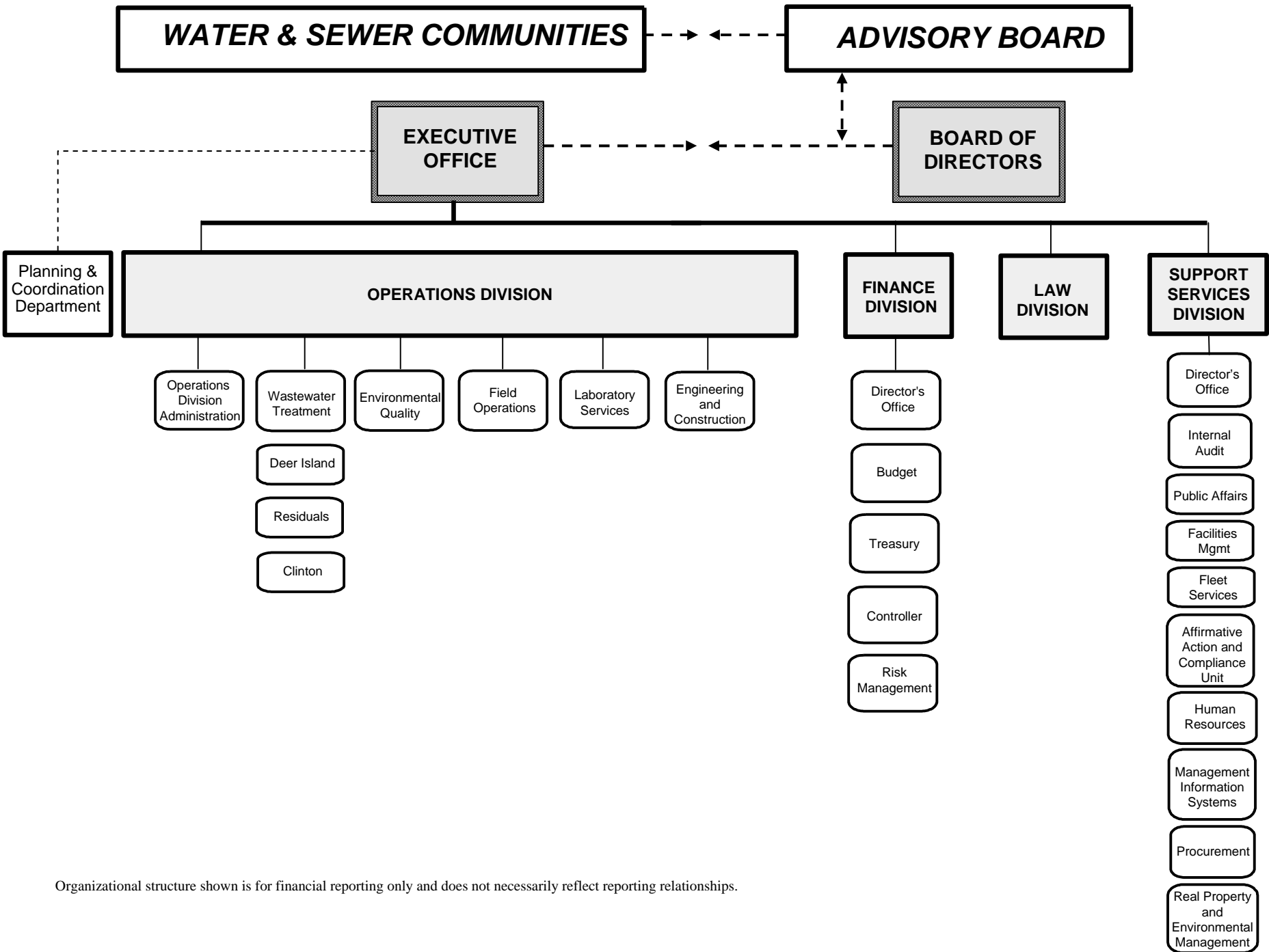
Andrew M. Pappastergion

Marie T. Turner

### **Prepared under the direction of**

Frederick A. Laskey, Executive Director  
Patricia A. Filippone, Acting Chief Financial Officer  
Michael J. Hornbrook, Chief Operating Officer

**together with the participation of MWRA staff.**



Organizational structure shown is for financial reporting only and does not necessarily reflect reporting relationships.



## Massachusetts Water Resources Authority

Charlestown Navy Yard  
100 First Avenue  
Boston, Massachusetts 02129

Frederick A. Laskey  
Executive Director

Telephone: (617) 242-6000  
[www.mwra.com](http://www.mwra.com)

March 15, 2006

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 2007. The MWRA Board of Directors approved the transmittal at its February 8, 2006 meeting.

The Proposed FY07 CEB recommends an increase in rates and charges of 9.8%. As you know, the single largest driver of the increase in the CEB continues to be the Authority's significant debt burden from the financing of the capital program, which is compounded this year by extraordinary increases in costs of energy, other utilities and health care. The Proposed FY07 CEB does not include an assumption for the receipt of any debt service assistance from the Commonwealth, which, if received, would be used to mitigate the increase to our customer communities.

Total proposed expenses are \$600.7 million, which represent an increase of \$56.8 million over FY06 expenses; \$36.1 million is attributable to debt service and \$20.7 million for direct and indirect operating expenses. Approximately 60%, or \$357 million of proposed expenses, excluding the use of bond redemption, is for debt service. The significant loss of debt service assistance from the Commonwealth has increased the burden to communities and we appreciate the efforts the Advisory Board is undertaking to have that funding restored.

The proposed rate revenue requirement for FY07 is \$518.5 million and includes the use of \$35.7 million from MWRA reserves to reduce the rate revenue requirement needed to be raised from member communities (\$16.6 million in Rate Stabilization funds to enhance revenue and \$19.1 million in Bond Redemption funds to reduce debt service costs).

The proposed FY07 budget includes \$202.8 million for direct expenses, which represents a \$17.1 million or 9.2% increase from the \$185.7 million in the FY06 CEB. An increase of \$5.9 million

or 23.4% in utilities is the largest change by line item. Indirect expenses total \$40.6 million, an increase of \$3.6 million or 9.6% over the FY06 budget. The increase includes an additional \$2.9 million to meet the Operating Reserve requirement.

Looking ahead, the proposed capital budget continues to address the reality that debt service costs associated with more than \$6.3 billion of capital improvements completed by MWRA are a significant burden to MWRA's ratepayers. By FY2011, MWRA's total indebtedness will begin to decline, as the amount of principal paid annually on outstanding debt will exceed new capital spending.

We look forward to working with the Advisory Board members and staff during your review of the proposed current expense budget. Please direct questions or comments on this document to the MWRA Budget Department.

Sincerely,

Frederick A. Laskey  
Executive Director

# TABLE OF CONTENTS

## **SECTION I: EXECUTIVE SUMMARY**

MWRA Mission.....	I- 1
Community Profile and Assessments.....	I-13
Revenue and Expenditure Trends.....	I-16
Capital Improvement Program.....	I-18
MWRA Organization and History.....	I-22
Statement of MWRA Financial Position.....	I-24

## **SECTION II: EXECUTIVE DIVISION**

Executive Office Budget Summary.....	II - 1
Office of Emergency Preparedness.....	II - 3
Planning and Coordination Department.....	II - 4

## **SECTION III: OPERATIONS DIVISION**

Operations Division Budget Summary.....	III- 1
Operations Administration.....	III- 6
Wastewater Treatment.....	III- 7
Deer Island.....	III- 8
Residuals.....	III- 11
Clinton.....	III- 13
Field Operations.....	III- 14
Laboratory Services.....	III- 17
Environmental Quality.....	III- 18
Engineering and Construction.....	III- 19

## **SECTION IV: LAW DIVISION**

Law Division Budget Summary.....	IV- 1
----------------------------------	-------

## **SECTION V: FINANCE DIVISION**

Finance Division Budget Summary.....	V-1
Division Director's Office.....	V-2
Rates and Budget.....	V-3
Treasury.....	V-4
Controller.....	V-5

**SECTION VI: SUPPORT SERVICES DIVISION**

Support Services Division Budget Summary.....VI- 1  
Division Director.....VI- 2  
Internal Audit .....VI- 3  
Public Affairs.....VI- 4  
Facilities Management.....VI- 6  
Fleet Services.....VI- 8  
Affirmative Action and Compliance Unit.....VI- 9  
Human Resources.....VI-10  
Management Information Systems.....VI-12  
Procurement.....VI-15  
Real Property and Environmental Management.....VI-16

**APPENDICES**

- A. Descriptions of Direct Expense Budget Line Items
- B. Budget Timetable
- C. Budget and Assessment Policies and Procedures
- D. Planning Estimates - Detail Presentation, FY08 - FY17
- E. Glossary of Terms
- F. Position Control Register (as of February 2006)



# Executive Summary



# **Executive Summary**

## **MWRA Mission**

The Massachusetts Water Resources Authority (MWRA) is an independent authority that provides wholesale water and sewer services to its member 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 by working in partnership with its member 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 budget that reflects the best available information about anticipated expenditures and revenues. MWRA transmits its budget to its Advisory Board in March. The Advisory Board then has sixty days to review and comment on MWRA's budget. MWRA hosts public hearings to solicit comments on the proposed budget and community assessments from citizens in its service area. 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 budget was developed. Staff incorporates the Board's decisions from the hearings and presents a final budget for approval in June.

Like the households in its member communities, MWRA is facing higher energy and utility costs to operate its facilities. In response to higher utility prices, the Authority filed an amendment in January 2006, requesting a \$5.4 million increase in the FY06 budget to \$530.3 million. Higher energy expenses are projected to continue and have had a significant impact on the proposed FY07 budget.

MWRA's proposed budget for fiscal year 2007 includes \$600.7 million in total expenses before debt service offsets of \$19.1 million, for a net expense total of \$581.7 million. The \$19.1 million in debt service offsets are projected use of \$19.1 million of bond redemption funds to defease debt due in FY07. This represents an increase of \$56.8 million over the FY06 budget.

Consistent with the Governor's FY07 budget submission, MWRA's proposed FY07 budget includes no debt service assistance (DSA) from the Commonwealth. If DSA is included in the Commonwealth's final budget, MWRA will reduce its rate revenue requirement by its DSA allocation. In FY06 debt service assistance totaled \$10.0 million which reduced the rate increase from 6.5% to 4.2%. The MWRA, the Advisory Board, and its member communities are actively lobbying the Legislature for a larger debt service allocation in FY07.

Total expenses include \$357.3 million or 59.5% for capital financing costs and \$243.4 million or 40.5% for operating expenses, of which \$202.8 million is for direct expenses and \$40.6 million is for indirect expenses. Total expenses increase by \$56.8 million over FY06 expenses, \$36.1 million or 64% for capital financing and \$20.7 million for operating expenses.

The \$20.7 million increase in operating expenses includes \$17.1 million for direct expenses and \$3.6 million for indirect expenses. The increase in direct expenses reflects significant increases in energy and utility costs, healthcare expenses, contractual labor agreements, maintenance, and chemicals.. The increase in indirect expenses includes \$3.3 million in additional funding for the operating reserve fund and watershed debt service.

The \$36.1 million increase in capital financing expenses reflects amounts due on outstanding indebtedness in addition to \$150 million in new borrowings in October 2006 and \$75 million borrowed from the state revolving fund (SRF) in FY07. In addition, debt service includes a full year of funding for the 2005 Series C, D, and E and 2006 Series A and B. It should be noted that \$10 million of this rise in capital costs reflects the assumption of no debt service assistance in FY07.

The rate revenue requirement for FY07 is \$518.5 million, an increase of 9.8% over the approved FY06 rate revenue requirement. The budget uses a combined \$35.7 million of reserves (\$16.6 million in rate stabilization and \$19.1 million of bond redemption).

FY07 non-rate revenue totals \$63.2 million, an increase of \$10.5 million over the FY06 non-rate revenue budget. The change, as indicated above, primarily results from using \$16.6 million in rate stabilization funds. The FY07 non-rate revenue budget includes \$33.9 million for investment income, of which \$1.4 million is from swap receipts, and \$12.7 million in other user charges and other revenue, including \$1.3 million from the sale of renewable energy portfolio credits and participation in energy load reduction programs.

Table I-1 shows MWRA's FY07 budget for revenue and expenses by line item and includes a comparison with FY05 actuals, FY06 approved, and FY07 proposed spending, respectively. Line item changes from FY06 to FY07 are described in the Revenue and Expense section of the Executive Summary and in more detail in the division sections of this document.

**Proposed FY07 Current Expense Budget**  
**EXPENSES and REVENUE**  
(\$ in Millions)

TOTAL MWRA	FY05 Actual	FY06 Approved	FY07 Proposed	Change	
				FY06 Approved to FY07 Proposed	
				\$	%
<b>EXPENSES</b>					
WAGES AND SALARIES	\$ 79,327,695	\$ 81,374,007	\$ 85,498,779	\$ 4,124,772	5.1%
OVERTIME	3,730,174	3,623,241	3,934,667	311,426	8.6%
FRINGE BENEFITS	12,275,777	13,681,934	15,914,022	2,232,088	16.3%
WORKERS' COMPENSATION	1,038,298	1,200,000	940,000	(260,000)	-21.7%
CHEMICALS	6,579,778	7,417,960	8,617,677	1,199,717	16.2%
ENERGY AND UTILITIES	21,373,207	25,338,635	31,267,267	5,928,632	23.4%
MAINTENANCE	20,169,014	20,491,588	24,196,620	3,705,032	18.1%
TRAINING AND MEETINGS	237,588	253,690	207,363	(46,327)	-18.3%
PROFESSIONAL SERVICES	6,211,464	7,021,597	7,462,937	441,340	6.3%
OTHER MATERIALS	4,175,229	3,781,117	4,210,905	429,788	11.4%
OTHER SERVICES	21,703,262	21,557,797	20,591,858	(965,939)	-4.5%
<b>TOTAL DIRECT EXPENSES</b>	<b>\$176,821,486</b>	<b>\$185,741,566</b>	<b>\$202,842,095</b>	<b>\$ 17,100,529</b>	<b>9.2%</b>
INSURANCE	\$ 1,071,215	\$ 2,350,000	\$ 2,500,000	\$ 150,000	6.4%
WATERSHED/PILOT	20,576,892	24,302,167	24,986,012	683,845	2.8%
BECo PAYMENT	4,826,510	4,547,350	4,681,380	134,030	2.9%
MITIGATION	2,334,330	1,380,000	1,386,250	6,250	0.5%
ADDITION TO RESERVES	1,000,000	866,000	2,977,490	2,111,490	243.8%
RETIREMENT FUND	3,407,532	3,578,000	4,053,207	475,207	13.3%
<b>TOTAL INDIRECT EXPENSES</b>	<b>\$ 33,216,479</b>	<b>\$ 37,023,517</b>	<b>\$ 40,584,339</b>	<b>\$ 3,560,822</b>	<b>9.6%</b>
<b>TOTAL OPERATING COSTS</b>	<b>\$210,037,965</b>	<b>\$222,765,083</b>	<b>\$243,426,434</b>	<b>\$ 20,661,351</b>	<b>9.3%</b>
CAPITAL FINANCING (before offsets)	\$296,666,145	\$326,579,194	\$357,310,117	\$ 30,730,923	9.4%
Offsets:					
Bond Redemption <sup>1</sup>	-	(14,430,000)	(19,060,141)	(4,630,141)	32.1%
Variable Rate Savings	(12,496,391)	-	-	-	-
Debt Service Assistance	(8,018,697)	(10,000,000)	-	10,000,000	-100.0%
<b>CAPITAL FINANCING (after offsets)</b>	<b>\$276,151,057</b>	<b>\$302,149,194</b>	<b>\$338,249,976</b>	<b>\$ 36,100,782</b>	<b>11.9%</b>
<b>TOTAL EXPENSES</b>	<b>\$486,189,022</b>	<b>\$524,914,277</b>	<b>\$581,676,410</b>	<b>\$ 56,762,133</b>	<b>10.8%</b>
<b>REVENUE &amp; INCOME</b>					
RATE REVENUE	\$444,268,646	\$472,219,800	\$518,497,238	\$ 46,277,438	9.8%
OTHER USER CHARGES	6,600,521	6,916,528	7,729,969	813,441	11.8%
OTHER REVENUE	5,725,377	4,959,994	4,965,000	5,006	0.1%
RATE STABILIZATION <sup>1</sup>	-	10,739,948	16,603,999	5,864,051	54.6%
INVESTMENT INCOME	34,926,970	30,078,007	33,880,204	3,802,197	12.6%
<b>TOTAL REVENUE &amp; INCOME</b>	<b>\$491,521,514</b>	<b>\$524,914,277</b>	<b>\$581,676,410</b>	<b>\$ 56,762,133</b>	<b>10.8%</b>
Rate Revenue Increase		4.2%	9.8%		
<b>TOTAL EXPENSES (before offsets)</b>	<b>\$506,704,110</b>	<b>\$549,344,277</b>	<b>\$600,736,551</b>		
<sup>1</sup> Combined Use of Reserves		\$ 25,169,948	\$ 35,664,140		

## **FY07 Initiatives and Highlights**

- Continue start-up operations and establish optimal operating parameters for the major new facilities: John J. Carroll Water Treatment Plant, (July 2005) Braintree- Weymouth Intermediate Pump Station, (December 2004) and Braintree-Weymouth Tunnel (April 2005).
- Finalize construction, commence testing of the new Braintree-Weymouth Replacement Pump Station and prepare for start-up (July 2007).
- Complete start-up operation of Union Park CSO facility in conjunction with the Boston Water and Sewer Commission as stipulated in the joint operating agreement.
- Competitively procure electricity for MWRA facilities, including the Deer Island Treatment Plant and John J. Carroll Water Treatment Plant.
- Implement, subject to completion, a new Deer Island Treatment Plant discharge permit to replace the permit that expired in August 2005.
- Year-end FY07 staffing target of 1,255 filled positions, fifteen less than the overall Black and Veatch target for FY06. 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 staffing level of 1,255 represents a decrease of more than 500 filled positions (or 29%) from peak staffing in 1997.

## 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 FY07 proposed budget.

Table I-2

<b>SOURCES &amp; USES OF FUNDS*</b>		
<b>\$ in Millions</b>		
<b>Sources of Funds</b>		
Other User Charges	\$7.7	1.3%
Other Revenue	5.0	0.9%
Investment Income	33.9	5.8%
Rate Revenue	518.5	89.1%
Rate Stabilization	16.6	2.9%
<b>Total Revenue</b>	<b>\$581.7</b>	<b>100.0%</b>
<b>Uses of Funds</b>		
<b>Total Expenses before Debt Service Offsets</b>	<b>\$600.7</b>	
Less:		
Debt Service Assistance	0.0	
Bond Redemption	(19.1)	
<b>Sub-Total Net Expenses</b>	<b>581.7</b>	
Capital Financing	338.2	58.2%
Direct Expenses	202.8	34.9%
Indirect Expenses	40.6	7.0%
<b>TOTAL EXPENSES</b>	<b>\$581.7</b>	<b>100.0%</b>

\*May not add due to rounding.

## 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 FY07 proposed budget, 92% of the revenue (including rate stabilization) is derived from rate revenue. The remaining 8% 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 FY07 proposed budget, MWRA will raise \$518.5 million of its total revenue requirements from water and sewer assessments to member communities. Of the \$518.5 million, \$350.3 million will fund the sewerage system, an increase of 11.0% as compared to the FY06 budget; and \$168.2 million will fund the water system, an increase of 7.4% as compared to the FY06 budget. The increase in the wastewater rate revenue requirement reflects increased debt service attributable to the Deer Island Treatment Plant.

### Non-Rate Revenue

#### **Other User Charges**

Other User Charges include revenues derived from the provision of water services to communities under special agreements. Other User Charges in FY07 proposed budget totals \$7.7 million and is composed of \$1.9 million in water revenue collected from sewer ratepayers to offset the cost of water used for operation of the DI Treatment

Plant, \$3.6 million paid by the CVA communities, \$1.4 million in water sales to contract communities, and \$805,000 in entrance fees paid by Stoughton, Reading, and the Dedham-Westwood Water District.

### **Other Revenue**

Other Revenue is budgeted at \$5.0 million. This includes permit fees, penalties, hydro-power revenues, State reimbursement, and other miscellaneous revenues.

#### *Permit Fees*

The FY07 proposed budget includes \$2.0 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.

#### *Reimbursements from the Commonwealth of Massachusetts*

The 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 FY07 proposed budget includes \$1.9 million in miscellaneous revenue: \$266,000 from hydropower generation at MWRA's Cosgrove facility; \$1.3 million from the sale of renewable portfolio credits from the use of digester gas to generate power on Deer Island.

### **Investment Income**

MWRA earns income by investing reserves and fund balances in a variety of interest-yielding securities. The FY07 proposed budget includes \$33.9 million in investment income, \$3.8 million above the FY06 budget, which reflects higher interest rate assumptions combined with higher fund balances.

### **Non-Recurring Revenue**

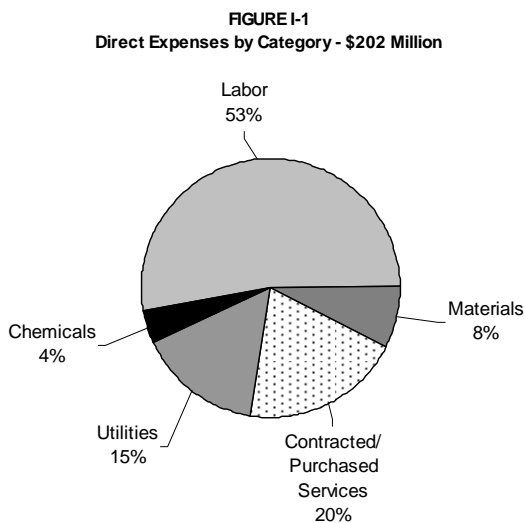
Non-Recurring Revenue is one-time revenue used in a given fiscal year to reduce assessments to member communities. In any fiscal year when annual revenues exceed expenses, MWRA transfers the unexpended amount to the rate stabilization reserve. Within certain limits, MWRA may use this money to reduce 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 FY07 proposed budget includes a withdrawal of \$16.6 million from MWRA's rate stabilization fund.

## Direct Program Expenses

The proposed FY07 direct program expense budget is \$202.8 million, an increase of \$17.1 million or 9.2% over the FY06 budget. The increase includes higher costs for energy and utilities, health insurance, maintenance, and chemicals. To address rising direct costs, the MWRA has actively moved to consolidate operation and maintenance facilities, reorganized and automated facilities, reduced leased space, sold surplus assets, negotiated competitive purchase agreements for energy and chemicals, increased self-generation and utilization of digester gas for energy production. Generally, the budget presents expenses by line item and program. The division sections of this document discuss program budget changes in greater detail.

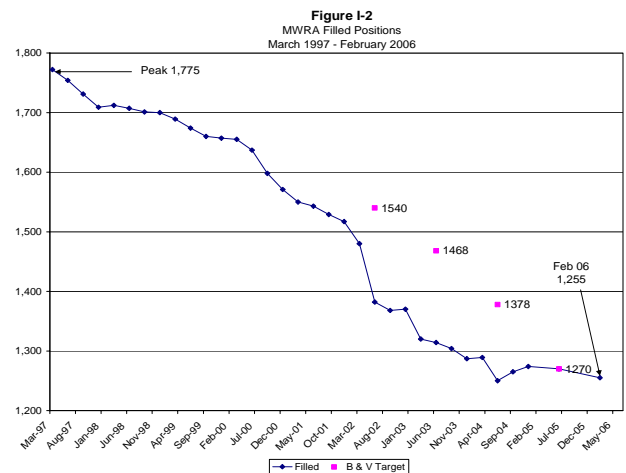
### Line Item Budget Summary

Figure I-1 combines related direct expense line items into general cost categories and shows that labor costs (Wages and Salaries, Overtime, Fringe Benefits, Workers' Compensation and Training and Meetings) are the largest component of the direct expense budget (52.5%). The second largest cost category is contracted and purchased services (20.2%), followed by chemicals and utilities (19.6%), and materials (7.7%).



- Within the labor cost category, wages and salaries account for \$85.5 million, 5.0% higher than the FY06 budget. Of the \$85.5 million, \$84.4 million is for regular pay. MWRA estimates that the regular pay budget of \$84.4 million will support the FY07 target of 1,255 filled positions. A staffing level of 1,255 in effect represents no net increase in the number of filled positions as of December 2005.

Figure I-2 shows how filled positions at MWRA have declined from a peak of 1,775 in March 1997 to the target staffing level of 1,255 for FY07. 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 FY07 proposed budget for contracted and purchased services is \$40.9 million, 4.4% above the FY06 budget.

Major components of this cost category include \$11.8 million for MWRA's residuals processing contract, \$3.3 million for lease payments, (consisting of \$2.1 million for the Charlestown Navy Yard facilities and \$1.2 million for the Chelsea facilities), \$12.9 million for maintenance services, \$3.3 million for harbor and outfall monitoring, \$1.3 million for telephone and lease line services, \$1.9 million for security, and \$1.1

million for grit and screenings removal. The FY07 proposed budget for energy and utilities is \$31.3 million, \$5.9 million more than the FY06 budget. The increase is primarily due to higher energy and utility prices.

The FY07 proposed budget for chemicals is \$8.6 million, \$1.2 more than the FY06 budget, primarily due to new disinfection requirements anticipated to be incorporated in the renewal of the NPDES permit for Deer Plant and higher prices with impacts of \$480,000 and \$400,000, respectively.

The FY07 proposed budget for materials, which includes maintenance materials, laboratory equipment, vehicles, and computer hardware items is \$15.5 million, level funded with the FY06 Budget, but \$1.9 million more than the FY06 budget as plant material purchases increased by nearly \$2.7 million. While the overall material budget does not differ materially from FY05, noteworthy and offsetting changes in the FY06 budget include increases for materials to maintain Authority facilities and pipelines, offset by decreases for electrical materials and computer replacement.

**Functional Area Budget Summary**

For a broader perspective on MWRA's direct expense budget, Figure I-3 presents direct expenses by MWRA functional area and shows that 46% of the FY07 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-3**  
Direct Expenses by Functional Area - \$202 Million

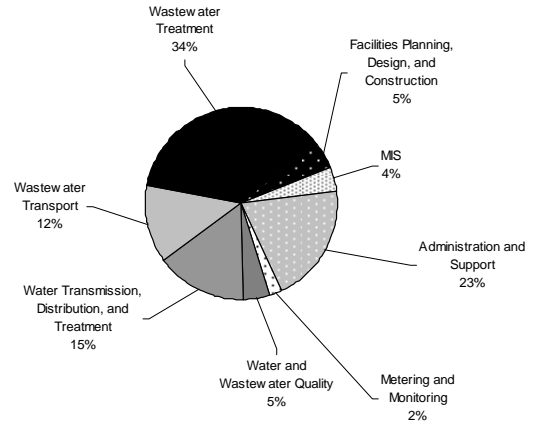
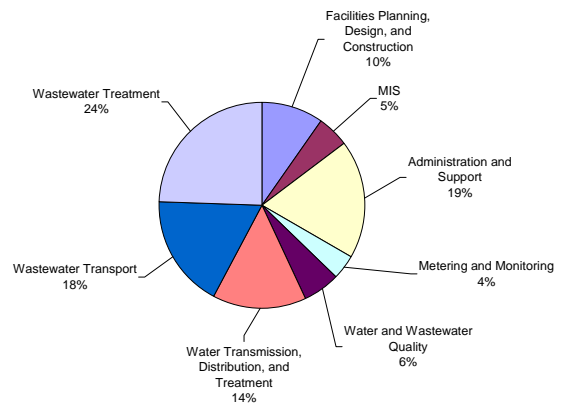


Figure I-4, Staffing by Functional Area as of June 2006 shows that of 1,255 filled positions, 56% are devoted to operating and maintaining the water and wastewater treatment and transport systems; 24% to administration and support and MIS functions, and 10% to facilities planning, design, and construction. Water and Wastewater Quality functions, and metering and monitoring, particularly Boston Harbor and Massachusetts Bay monitoring activities and industrial discharge and enforcement programs, account for 10% of all staff.

**FIGURE I-4**  
Staffing by Functional Area



**Capital Financing**

The FY07 capital financing budget, before debt



service offsets, is \$357.3 million or 59.5% of the total \$600.7 million budget. FY07 debt service offsets of \$19.1 million result in a net capital financing budget of \$338.2 million. Debt service offsets includes \$19.1 million in bond redemption savings. The budget assumes approximately a 4.75% interest rate for variable rate debt. If interest rates are less than budgeted in FY07, 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 \$5.6 billion as of June 30, 2006, including \$544 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 \$858 million as of the end of FY06, with outstanding commercial paper projected to total approximately \$164 million.

The three principal credit agencies have affirmed MWRA's ratings in connection with its March 1, 2006 General Revenue bond sales. The current ratings are: Fitch Ratings "AA", Standard and Poor's "AA", and Moody's Investors Service "Aa2." Moody's also upgraded the subordinate debt rating to "Aa3" from "A1." The firms all rated MWRA's outlook as Stable. According to Fitch, "The 'AA' rating is based on MWRA's sound financial operations and operating track record." They added that "Effective financial management is demonstrated by the Authority's ability to achieve favorable operating results despite significant declines in Commonwealth debt service assistance." The agencies each noted that the Authority's conservative financial management and long-term planning contribute to MWRA's strong financial position.

The FY07 capital financing budget, before offsets, increases by \$30.7 million or 9.4% compared to the FY06 budget. The budget includes:

- \$335.7 million in principal and interest payments on outstanding MWRA debt and SRF loans.
- \$10.5 million to fund ongoing capital projects with current revenue, interest on local water pipeline assistance loans, and Chelsea lease payments.
- \$11.1 million in debt service to support a \$150 million fixed rate issue in October 2006 and \$75 million in SRF borrowings.

The proposed FY07 debt service budget does not include any savings realized from the current refinancing of existing debt. Debt service savings achieved for the March 1, 2006 Series A and B bond sale will be included in the final FY07 debt service budget. Staff will continue to monitor the municipal bond market through out FY07 for any refunding opportunities. If MWRA is able to take advantage of any additional opportunities to refund outstanding debt during FY07, any savings will be used to reduce rate revenue requirements in future years.

Table I-3 provides detail on the FY07 capital financing line item. Table I-3 also illustrates how upgrading the sewerage system has dominated the capital program to date. Sixty-seven percent of the FY07 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 15% as new water facilities go on-line.

Table I-3  
FY07 Current Expense Budget - Capital Financing Detail (projected date 6/30/06)

	Total Principal Outstanding in Millions	Interest Rate	FY07 Debt Service	Water Share	Sewer Share
<b>SRF<sup>1</sup></b>					
Unrefunded	27		42,393	0	42,393
1999E Sewer	9		387,814	0	387,814
1999E Water	9		575,723	575,723	0
1999F	351		15,739,769	0	15,739,769
2000E Sewer	67		2,736,320	0	2,736,320
2000E Water	10		563,738	563,738	0
2001C Water	4		245,584	245,584	0
2001D Sewer	7		380,779	0	380,779
2001D Water	1		81,137	81,137	0
2002H Sewer	86		3,130,152	0	3,130,152
2002H Water	29		1,550,445	1,550,445	0
2002I Sewer	2		100,606	0	100,606
2002I Water	0.027		1,460	1,460	0
2003A	1		72,027	72,027	0
2003B	4		221,369	221,369	0
2003C Sewer	31		1,396,397	0	1,396,397
2003C Water	20		975,402	975,402	0
2004C Sewer	10		559,029	0	559,029
2004C Water	2		93,235	93,235	0
2004D Sewer	51		3,934,858	0	3,934,858
2004D Water	13		659,763	659,763	0
2005C Sewer	7		484,179	0	484,179
2005C Water	1		70,957	70,957	0
2005D Sewer	67		3,405,848	0	3,405,848
2005D Water	15		812,217	812,217	0
2005E Sewer	0.4		24,872	0	24,872
2005E Water	0.091		5,569	5,569	0
2006 SRF Sewer	60		2,662,310	0	2,662,310
2006 SRF Water	15		517,134	517,134	0
Interest on Pool 12 Interim Loan	20		86,000	86,000	0
<b>Total SRF Debt</b>	<b>\$920</b>		<b>\$41,517,084</b>	<b>\$6,531,759</b>	<b>\$34,985,325</b>
<b>MWRA Senior Debt</b>					
1992A (fixed)	388	6.98%	50,229,817	2,511,491	47,718,326
1993C Refunding/New (fixed)	153	5.66%	17,367,383	2,170,923	15,196,460
1995B (fixed)	164	5.34%	11,275,079	0	11,275,079
1996A (fixed)	3	5.78%	904,975	0	904,975
1997D Refunding (fixed)	131	5.40%	7,813,144	468,789	7,344,355
1998A (fixed)	157	5.04%	11,537,800	3,845,895	7,691,905
1998B Refunding (fixed)	104	5.04%	5,335,050	213,402	5,121,648
2000A Refunding/New (fixed)	29	6.11%	3,691,168	2,460,902	1,230,266
2002B (fixed)	89	5.23%	6,397,356	5,757,620	639,736
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 (FY04 New #1)	144	4.63%	8,634,119	5,756,367	2,877,752
2004A	119	5.00%	6,955,819	6,434,133	521,686
2004B	65	4.17%	3,262,750	407,844	2,854,906
2005A	416	4.49%	23,600,713	12,980,392	10,620,321
2005B	80	5.00%	4,014,500	2,676,467	1,338,033
FY06 New Fixed (Spring \$200M)	200		11,565,000	11,565,000	0
FY07 New Fixed (\$150)	150		7,808,333	5,205,816	2,602,517
<b>Total MWRA Senior Debt</b>	<b>\$2,983</b>		<b>\$211,241,406</b>	<b>\$69,539,880</b>	<b>\$141,701,526</b>
<b>MWRA Subordinate Debt</b>					
1997A (variable)	78		5,368,752	0	5,368,752
1997B (variable)	78		5,368,752	5,368,752	0
1998D Refunding (variable to fixed)	199		8,470,938	338,838	8,132,100
1999A (variable to fixed)	89		5,124,012	2,049,605	3,074,407
1999B (variable to fixed)	89		5,125,764	2,050,306	3,075,458
1999C (variable)	69		4,323,751	2,594,251	1,729,500
1999D (variable)	69		4,323,751	2,594,251	1,729,500
2000B Refunding (variable to fixed)	133		6,265,100	877,114	5,387,986
2000C Refunding (variable to fixed)	133		6,265,100	877,114	5,387,986
2000D (fixed to variable)	150		8,250,000	4,125,000	4,125,000
2001A (variable)	87		6,342,686	4,249,600	2,093,086
2001B (variable)	85		4,118,627	4,118,627	0
2002C Refunding (variable)	78		9,342,015	6,228,321	3,113,694
2002D-G Refunding (variable)	350		15,395,319	0	15,395,319
<b>Total Subordinate Debt</b>	<b>\$1,687</b>		<b>\$94,084,567</b>	<b>\$35,471,777</b>	<b>\$58,612,790</b>
<b>Total SRF &amp; MWRA</b>	<b>\$6,906</b>		<b>\$346,843,057</b>	<b>\$111,543,416</b>	<b>\$235,299,641</b>
Water Pipeline Commercial Paper			4,250,000	4,250,000	0
Current Revenue/Capital <sup>2</sup>			3,000,000	750,000	2,250,000
Capital Lease			3,217,060	1,093,801	2,123,259
<b>Total Capital Financing (before Debt Service Offsets)</b>			<b>\$357,310,117</b>	<b>\$117,637,217</b>	<b>\$239,672,900</b>
Debt Service Offsets					
Bond Redemption Savings			(19,060,141)	(10,165,409)	(8,894,732)
Debt Service Assistance					
<b>Total Capital Financing</b>			<b>\$338,249,976</b>	<b>\$107,471,808</b>	<b>\$230,778,168</b>

<sup>1</sup> SRF debt service payments reflect net MWRA obligations after state and federal subsidies

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

## **Indirect Expenses**

The FY07 proposed budget includes \$40.6 million for indirect expenses, an increase of \$3.6 million or 9.6% over the FY06 budget. The increase includes an additional \$1.2 million for watershed debt service and a \$2.1 million rise in payments to the operating reserve to meet bond resolution 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 FY07 proposed budget includes \$2.5 million for premiums and fees, an increase of \$150,000 based on estimates to procure an insurance renewal program similar to the existing program. New policies were procured in FY06 for coverage in FY07. The budget includes \$1.8 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 a recommended \$1 million, but in FY06, the MWRA deferred the next installment pending the triennial recommendation due in early FY07. In light of budgetary pressures, the Authority has deferred the FY07 installment.

## **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 Protection, and debt service costs for purchases of land around the supply reservoirs to protect the watersheds. The FY07 proposed budget includes \$6.6 million, \$11.9 million, and \$6.5 million respectively for these items. Collectively these represent a net increase of \$0.7 million over the FY06 budget. Watershed debt service increased \$1.2 million, reflecting increased funding for new land acquisition which is 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 budget includes \$4.7 million for the estimated FY07 payment, comprised of \$3.8 million for capacity charges and \$840,000 for maintenance expenses.

### **Mitigation**

MWRA disburses mitigation funds to communities affected by MWRA projects or facilities pursuant to MWRA's Statement of Mitigation Principles and/or specific agreements with communities. MWRA mitigation may include ameliorating direct

Construction impacts, meeting environmental and 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 impact of a project or facility 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 FY07 CEB includes \$1.4 million for community compensation for impacts, including \$720,000 for the City of Quincy and \$666,000 for the Town of Winthrop, based on Memoranda of Agreement with the communities.

### **Retirement System Contribution**

The Proposed FY07 budget includes a \$4.1 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 (January 2005) actuarial valuation report and is \$0.5 million greater than the FY06 budget contribution.

## **Community Profile and Assessments**

MWRA provides wholesale water and sewer services to 61 communities or local bodies. Forty-nine local bodies purchase water supply services, and 43 local bodies purchase wastewater transport and treatment services. Twenty-nine communities purchase both. FY07 Assessments include new members Dedham-Westwood Water District and the Town of Reading. Approximately 2.6 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 FY07 CEB, rate revenue from BWSC will account for 32% of MWRA's total rate revenue. Table I-4, on page I-15, lists MWRA communities, the services received, and MWRA preliminary assessments for FY07.

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-5 presents the calculation of MWRA's FY07 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 FY07 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 revenues 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 sewer assessments will be allocated in part on flow data from the Authority's new wastewater metering system. MWRA began using flow data from the new metering system in April 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-5**  
Calculation of the FY07 Rate Revenue Requirement  
(\$000)

	Sewer	Water	Total
Expenses:			
Operations and Maintenance Costs:			
Direct Sewer and Water Expenses	\$88,759	\$46,170	\$134,929
<b>PLUS</b>			
Other Costs:			
Allocated Direct Expenses	58,554	9,360	67,913
Allocated Indirect Expenses	12,503	28,081	40,584
<b>PLUS</b>			
Capital Costs:			
Debt Service (Less: Debt Offsets)	228,528	106,722	335,250
Current Revenue/Capital	2,250	750	3,000
<b>PLUS</b>			
Non-Rate Revenue:			
Investment Income	(23,225)	(10,655)	(33,880)
Fees and Other Revenue	(5,051)	(7,644)	(12,695)
Non-Recurring Revenue	(12,002)	(4,602)	(16,604)
<b>EQUALS</b>			
Rate Revenue Requirement	\$350,315	\$168,182	\$518,497

Table I-4

Massachusetts Water Resources Authority  
Preliminary FY07 Water and Sewer Assessments

1-Feb-06

MWRA Combined Water and Sewer Customers	Final FY06 Water Assessment	Preliminary FY07 Water Assessment	Percent Change from FY06	Final FY06 Sewer Assessment	Preliminary FY07 Sewer Assessment	Percent Change from FY06	Final FY06 Combined Assessment	Preliminary FY07 Combined Assessment	Percent Change from FY06
ARLINGTON	\$3,389,266	\$3,633,782	7.2%	\$5,863,185	\$6,496,799	10.8%	\$9,252,451	\$10,130,581	9.5%
BELMONT	1,697,163	1,876,847	10.6%	3,502,437	3,909,193	11.6%	5,199,599	5,786,040	11.3%
BOSTON	60,867,841	64,595,853	6.1%	90,597,554	98,990,648	9.3%	151,465,394	163,586,501	8.0%
BROOKLINE	4,557,527	4,834,029	6.1%	9,083,147	10,085,237	11.0%	13,640,674	14,919,266	9.4%
CHELSEA	2,713,184	2,737,607	0.9%	4,364,162	4,695,099	7.6%	7,077,346	7,432,706	5.0%
EVERETT	3,698,994	3,779,002	2.2%	5,616,895	6,124,099	9.0%	9,315,889	9,903,101	6.3%
FRAMINGHAM	5,988,784	6,292,387	5.1%	7,969,891	8,800,218	10.4%	13,958,675	15,092,605	8.1%
LEXINGTON	3,775,505	4,154,148	10.0%	5,257,126	5,910,874	12.4%	9,032,631	10,065,022	11.4%
MALDEN	4,894,929	5,081,802	3.8%	8,407,046	9,178,547	9.2%	13,301,975	14,260,349	7.2%
MEDFORD	4,267,816	4,514,710	5.8%	8,394,421	9,108,784	8.5%	12,662,237	13,623,494	7.6%
MELROSE	1,750,441	2,077,908	18.7%	4,244,637	4,781,952	12.7%	5,995,078	6,859,860	14.4%
MILTON	2,010,574	2,331,388	16.0%	3,912,142	4,368,502	11.7%	5,922,716	6,699,890	13.1%
NEWTON	7,383,431	7,850,390	6.3%	13,884,034	16,208,121	16.7%	21,267,465	24,058,511	13.1%
NORWOOD	2,493,692	2,658,835	6.6%	5,011,913	5,558,512	10.9%	7,505,605	8,217,348	9.5%
QUINCY	7,599,337	8,417,117	10.8%	13,214,808	15,166,915	14.8%	20,814,145	23,584,032	13.3%
REVERE	3,471,732	3,602,763	3.8%	6,801,118	7,302,452	7.4%	10,272,850	10,905,216	6.2%
SOMERVILLE	4,961,259	5,335,699	7.5%	10,325,026	11,450,879	10.9%	15,286,285	16,786,578	9.8%
STONEHAM	2,397,052	2,593,482	8.2%	3,206,627	3,568,020	11.3%	5,603,678	6,161,502	10.0%
WALTHAM	5,826,373	6,477,418	11.2%	9,260,965	10,376,003	12.0%	15,087,338	16,853,421	11.7%
WATERTOWN	2,565,976	2,522,208	-1.7%	4,185,181	4,682,339	11.9%	6,751,157	7,204,547	6.7%
WINTHROP	1,182,037	1,286,965	8.9%	2,231,158	2,401,375	7.6%	3,413,195	3,688,340	8.1%
<b>TOTAL</b>	<b>\$137,492,914</b>	<b>\$146,654,340</b>	<b>6.7%</b>	<b>\$225,333,471</b>	<b>\$249,164,570</b>	<b>10.6%</b>	<b>\$362,826,386</b>	<b>\$395,818,910</b>	<b>9.1%</b>

MWRA Sewer and Partial Water Customers	Final FY06 Water Assessment	Preliminary FY07 Water Assessment	Percent Change from FY06	Final FY06 Sewer Assessment	Preliminary FY07 Sewer Assessment	Percent Change from FY06	Final FY06 Combined Assessment	Preliminary FY07 Combined Assessment	Percent Change from FY06
CANTON	\$1,667,312	\$1,671,864	0.3%	\$2,881,231	\$3,209,248	11.4%	\$4,548,542	\$4,881,112	7.3%
NEEDHAM	351,877	830,009	135.9%	4,640,239	5,125,624	10.5%	4,992,116	5,955,633	19.3%
READING <sup>1</sup>	0	0	0.0%	2,980,493	3,364,700	12.9%	2,980,493	3,364,700	12.9%
STOUGHTON	312,178	412,219	32.0%	3,311,405	3,709,167	12.0%	3,623,583	4,121,386	13.7%
WAKEFIELD	1,438,399	1,581,111	9.9%	4,095,541	4,577,578	11.8%	5,533,940	6,158,689	11.3%
WELLESLEY	382,538	698,830	82.7%	4,006,430	4,572,655	14.1%	4,388,968	5,271,485	20.1%
WINCHESTER	827,854	917,132	10.8%	2,973,549	3,253,305	9.4%	3,801,403	4,170,437	9.7%
WOBURN	1,767,015	2,156,603	22.0%	7,814,649	8,901,380	13.9%	9,581,664	11,057,983	15.4%
<b>TOTAL</b>	<b>\$6,747,174</b>	<b>\$8,267,768</b>	<b>22.5%</b>	<b>\$32,703,536</b>	<b>\$36,713,658</b>	<b>12.3%</b>	<b>\$39,450,710</b>	<b>\$44,981,426</b>	<b>14.0%</b>

MWRA Sewer-only Customers	Final FY06 Water Assessment	Preliminary FY07 Water Assessment	Percent Change from FY06	Final FY06 Sewer Assessment	Preliminary FY07 Sewer Assessment	Percent Change from FY06	Final FY06 Combined Assessment	Preliminary FY07 Combined Assessment	Percent Change from FY06
ASHLAND				\$1,505,621	\$1,728,664	14.8%	\$1,505,621	\$1,728,664	14.8%
BEDFORD				2,379,363	2,678,662	12.6%	2,379,363	2,678,662	12.6%
BRAINTREE				5,890,315	6,533,085	10.9%	5,890,315	6,533,085	10.9%
BURLINGTON				3,440,952	3,849,037	11.9%	3,440,952	3,849,037	11.9%
CAMBRIDGE				15,774,594	17,678,616	12.1%	15,774,594	17,678,616	12.1%
DEDHAM				4,348,563	4,891,238	12.5%	4,348,563	4,891,238	12.5%
HINGHAM SEWER DISTRICT				1,155,018	1,326,803	14.9%	1,155,018	1,326,803	14.9%
HOLBROOK				1,119,106	1,241,326	10.9%	1,119,106	1,241,326	10.9%
NATICK				3,895,604	4,270,656	9.6%	3,895,604	4,270,656	9.6%
RANDOLPH				3,976,809	4,525,746	13.8%	3,976,809	4,525,746	13.8%
WALPOLE				2,396,186	2,742,556	14.5%	2,396,186	2,742,556	14.5%
WESTWOOD				1,872,424	2,088,009	11.5%	1,872,424	2,088,009	11.5%
WEYMOUTH				8,063,924	9,011,651	11.8%	8,063,924	9,011,651	11.8%
WILMINGTON				1,828,634	1,870,931	2.3%	1,828,634	1,870,931	2.3%
<b>TOTAL</b>				<b>\$57,647,112</b>	<b>\$64,436,982</b>	<b>11.8%</b>	<b>\$57,647,112</b>	<b>\$64,436,982</b>	<b>11.8%</b>

MWRA Water-only Customers	Final FY06 Water Assessment	Preliminary FY07 Water Assessment	Percent Change from FY06	Final FY06 Sewer Assessment	Preliminary FY07 Sewer Assessment	Percent Change from FY06	Final FY06 Combined Assessment	Preliminary FY07 Combined Assessment	Percent Change from FY06
LYNNFIELD WATER DISTRICT	\$357,721	\$375,522	5.0%				\$357,721	\$375,522	5.0%
MARBLEHEAD	1,525,030	1,680,694	10.2%				1,525,030	1,680,694	10.2%
NAHANT	295,158	323,014	9.4%				295,158	323,014	9.4%
SAUGUS	2,606,493	2,668,344	2.4%				2,606,493	2,668,344	2.4%
SOUTHBOROUGH	562,422	710,486	26.3%				562,422	710,486	26.3%
SWAMPSCOTT	1,501,614	1,682,392	12.0%				1,501,614	1,682,392	12.0%
WESTON	1,246,761	1,419,145	13.8%				1,246,761	1,419,145	13.8%
<b>TOTAL</b>	<b>\$8,095,198</b>	<b>\$8,859,597</b>	<b>9.4%</b>				<b>\$8,095,198</b>	<b>\$8,859,597</b>	<b>9.4%</b>

MWRA Partial Water-only Customers	Final FY06 Water Assessment	Preliminary FY07 Water Assessment	Percent Change from FY06	Final FY06 Sewer Assessment	Preliminary FY07 Sewer Assessment	Percent Change from FY06	Final FY06 Combined Assessment	Preliminary FY07 Combined Assessment	Percent Change from FY06
DEDHAM-WESTWOOD WATER DISTRICT <sup>1</sup>	\$0	\$0	0.0%				\$0	\$0	0.0%
LYNN	173,718	200,452	15.4%				173,718	200,452	15.4%
MARLBOROUGH	2,832,771	2,458,651	-13.2%				2,832,771	2,458,651	-13.2%
NORTHBOROUGH	691,108	785,160	13.6%				691,108	785,160	13.6%
PEABODY	502,797	956,060	90.1%				502,797	956,060	90.1%
<b>TOTAL</b>	<b>\$4,200,395</b>	<b>\$4,400,324</b>	<b>4.8%</b>				<b>\$4,200,395</b>	<b>\$4,400,324</b>	<b>4.8%</b>
<b>SYSTEMS TOTAL</b>	<b>\$156,535,681</b>	<b>\$168,182,028</b>	<b>7.4%</b>	<b>\$315,684,120</b>	<b>\$350,315,210</b>	<b>11.0%</b>	<b>\$472,219,801</b>	<b>\$518,497,238</b>	<b>9.8%</b>

<sup>1</sup> The Dedham-Westwood Water District and the Town of Reading will be MWRA water communities as of FY07.

## 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 FY08 through FY16.

	Estimates of Future Rate Revenue Requirements (millions)									
	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16
<b>Rate Revenue</b>	\$518.5	\$563.5	\$612.2	\$665.4	\$700.2	\$730.7	\$759.2	\$763.2	\$770.6	\$759.1
<b>Rate Revenue Change %</b>	9.8%	8.7%	8.7%	8.7%	5.2%	4.4%	3.9%	0.5%	1.0%	-1.5%

Increasing debt service to finance the Capital Improvement Program is the most important factor driving estimates of future budget increases. Over the past several 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 (e.g. 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 factor is projected growth of base operating costs. The estimated \$60.6 million increase in direct expenses from FY07 to FY16 is primarily the result of an assumed inflation rate of 2.5% annually. In addition, in order to account for anticipated increases in expenses for FY08, labor and fringe is projected to grow by 6.9%, while chemicals and maintenance and materials are forecast to rise by 8.3% and by 9.5%, respectively. Also, over the next ten years there will be an increase in direct expenses as a result of capital improvement projects. The largest increases will be for operation of new facilities.

Start-up and operation of the Union Park Detention and Treatment facility and the Braintree-Weymouth Relief Facilities will have incremental impacts between FY08 and FY12. The anticipated increases and decreases in costs associated with these capital improvements are shown on Page I-20.



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% (except as noted above).
- 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 help communities plan for future payments to MWRA.

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

- Changes in anticipated borrowing rates or 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. Increases in utilities, chemicals, maintenance and health care are reflected in the proposed FY07 budget as well as projected FY08 expenses. 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 may 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 with a 5-year spending cap. After review and comment by the Advisory Board, the Board approves the budget, which remains in effect for one year. MWRA divides the CIP into three program areas: Wastewater, Waterworks, and Business and Operations Support. Program categories are presented in greater detail within this document. MWRA's capital budget, including detailed expenditure forecasts and program descriptions, is available online at [www.mwra.com](http://www.mwra.com).

## Background

MWRA was created by the Massachusetts legislature in 1985 and since that time has invested over \$6.3 billion to modernize and improve the wastewater and waterworks systems serving its member communities. Of the total expenditures to date, nearly three-fourths have supported improvements to the wastewater treatment, interceptor, pumping, and combined sewer overflow systems. The remaining fourth has supported waterworks treatment, transmission, distribution, and water supply protection improvements.

MWRA's wastewater treatment system has undergone a nearly complete transformation under the federally mandated, 11-year, \$3.8 billion Boston Harbor Project. The project, now complete, included: a new Deer Island Treatment Plant with primary and secondary treatment capabilities; a new 5-mile Inter-Island Tunnel that combined two

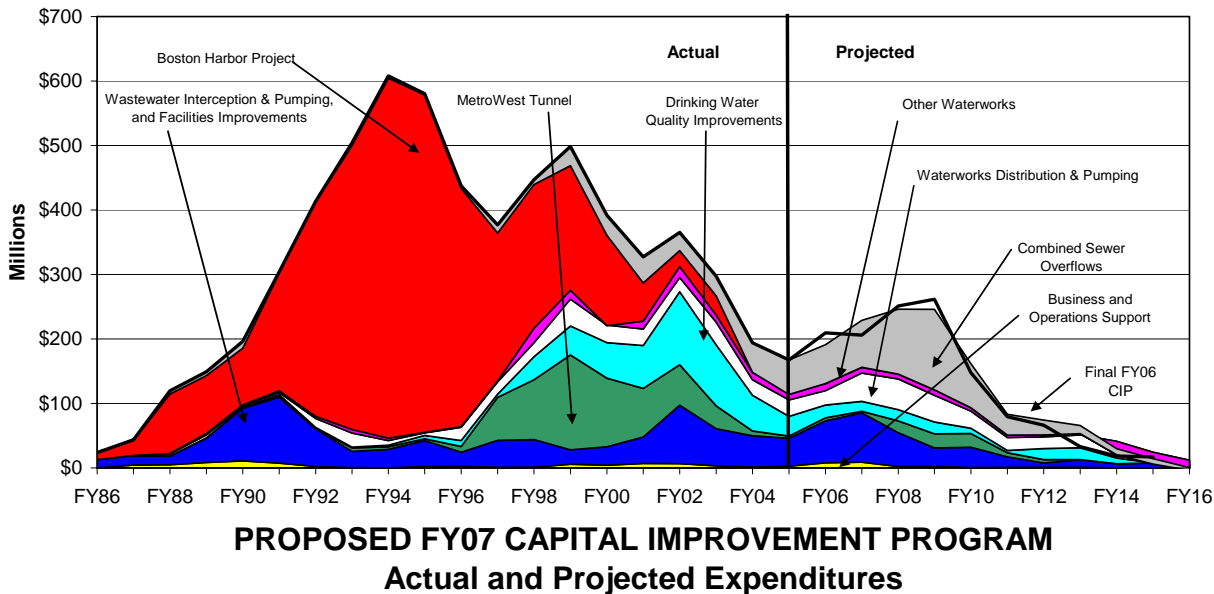
separate sewer systems (North and South) into one; a new sludge-to-fertilizer facility; and a new 9.5-mile Effluent Outfall Tunnel to discharge treated wastewater away from shallow Boston Harbor waters into deeper waters and the stronger currents of Massachusetts Bay.

MWRA's Integrated Water Supply Improvement program is a 10-year, \$1.7 billion series of projects that consists of aggressive watershed protection, modernized water treatment facilities and distribution system improvements that include construction of covered storage facilities and pipeline rehabilitation projects. This program includes the \$429 million John J. Carroll Water Treatment Plant, a state-of-the-art ozonation facility with capacity to treat 405 mgd of drinking water, which was completed in 2005 pursuant to the Safe Drinking Water Act (SDWA). The plant treats water delivered from the Wachusett Reservoir (including water transferred to the Wachusett Reservoir from the Quabbin Reservoir) with ozonation and chloramination.

The Proposed FY07 CIP includes 92 ongoing and new projects with estimated costs of approximately \$3.6 billion in FY06 dollars, of which approximately \$2.3 billion was expended through the end of FY05. Projected future expenditures are estimated to be approximately: \$1.0 billion during Fiscal Years 2004 through 2008; \$630.8 million for Fiscal Years 2009 through 2013, and -\$11.2 million (reflects loan repayments) beyond FY 2013.

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

### MWRA CAPITAL PROGRAM FY86-16



#### Overview

In June 2003, the Board of Directors adopted the Final FY04 Capital Improvement Program (CIP), which established a capital spending cap of \$1.1 billion for FY04-08 and identified planned spending of \$530 million for FY09-13. As seen in Table 1, for the 5-year cap period FY04-08, the Proposed FY07 CIP complies with both the total spending cap limit of \$1.1 billion, and the annual spending limits.

The Proposed FY07 cap, including contingency and inflation, totals \$1.0 billion for FY04-08 and \$653 million for FY09-13. This spending is based on a total CIP of \$3.6 billion, including contingency, of which \$2.3 billion has been spent through FY05. Proposed spending for the ten fiscal years 2004-2013 is \$1.68 billion, \$21.2

million greater than the spending forecasted in the Final FY04 CIP. This is due to the addition of the court-mandated Charles River Combined Sewer Overflow (CSO) projects that were added at a cost of \$21.6 million, including inflation. Excluding the Charles River CSO Controls, Brookline Sewer Separation and Bulfinch Triangle Sewer Separation projects, the ten-year spending is \$1.66 billion, just below the original spending forecast approved by the MWRA Board of Directors. The MWRA will seek to have these new court-mandated projects exempted from the cap. Additionally, this cap analysis does not include funding for Cambridge CSO projects because the MWRA’s share of these costs is yet to be negotiated with Cambridge. Both of these issues will be addressed prior to approval of the Final FY07 CIP.

### 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. From FY95-06, completion of the Deer Island Wastewater Treatment Plant, the Residuals Processing Facility in Quincy, and the John J. Carroll Water Treatment Plant resulted in significant increases to MWRA's operating expenses. Going forward, MWRA is projecting the addition of approximately \$1.2 million in operating costs for FY08-FY17 for capital projects scheduled to be completed during that period.

The table below summarizes, by program area, the estimated incremental costs and savings in MWRA's Current Expense Budget from FY08 through FY17 as a result of the capital program.

Incremental Costs and Savings from CIP Projects											
\$ in thousands											
	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	Cumulative
Wastewater	\$417	(\$63)	\$6	\$5	\$450	(\$52)	(\$6)	\$0	\$0	\$0	\$757
Waterworks	0	0	14	64	(44)	20	0	0	0	0	53
Business Operations & Support	141	141	82	0	0	0	0	0	0	0	364
Total (excluding inflation)	\$558	\$78	\$101	\$69	\$407	(\$33)	(\$6)	\$0	\$0	\$0	\$1,174
Inflation <sup>1</sup>	14	4	8	7	53	(5)	(1)	0	0	0	80
Total (including inflation)	\$572	\$82	\$109	\$76	\$460	(\$38)	(\$7)	\$0	\$0	\$0	\$1,254

The capital projects with the largest projected impact (in FY07 \$s) on operating costs are as follows:

- *Braintree-Weymouth Replacement Pump Station* – After start-up in FY08, the annual operating costs for this facility will increase by \$390,000 primarily for utilities and maintenance.
- *CSO Program* – In total, the completion of the CSO program will add a net \$370,000 in costs to the operating budget. The decommissioning of the Fox Point and Commercial Point facilities will result in annual cost reductions of \$135,000 by FY09. Start-up of the Union Park Pump Station in FY07 will result in

\$100,000 in operating costs in FY08. Start-up of the dewatering pump station and remote odor control facilities associated with the North Dorchester Bay projects will add \$400,000 in operating costs in FY2012.

- *Water Projects* – Projections assume that start-up in FY10 of the automated chemical dispensing system for algae control at the Wachusett Reservoir will add \$27,000 in annual costs and implementation in FY2012 of ultraviolet technology at the Quabbin Disinfection Facility will add \$26,000 to the annual CEB.

## **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 Massachusetts 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 \$721 million in capital projects in the following way: \$699 million will be financed using a combination of long-term debt, SRF loans, and commercial paper, and \$22 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.

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.

In 1987, the legislature transferred responsibility to operate and maintain the Clinton Wastewater Treatment Plant from the Commonwealth to MWRA.

### **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 an average of more than \$375 million per year between (FY90 to FY05). 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 was forced to have an unprecedented mid-year rate increase bringing the year's total to 6.9% as part of an overall strategy in response to the loss. The FY04 rate increase was 3.9% and the rate increase for FY05 was 3.9% (Subsequent to MWRA's approval of its budget for FY05, the Legislature overrode the veto for debt service

assistance. MWRA's share of the statewide appropriation was \$8.0 million, which reduced the FY05 rate increase from 3.9% to 1.9% compared to the FY04 budget.). The FY06 rate increase was 4.2%, including the assumption of the receipt of \$10 million of debt service assistance that was approved by the legislature and which the MWRA expects to receive in March 2006. Assuming no additional debt service assistance, the FY07 rate revenue requirement jumps to 9.8% and the planning estimates included with the proposed CEB, the rate revenue requirement increases by 8.7% annually for the next three years, 5.2% and 4.4% in 2011 and 2012, respectively. The MWRA, the Advisory Board, and its member communities are aggressively pursuing rate relief in the form of larger debt service assistance payments from the State Legislature.

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.

- MWRA continues to limit increases in ongoing operating costs. The FY07 direct expense budget only \$22.5 million more than spending in FY00. This represents annual increases of 1.7%, well below inflation. When adjusted for inflation, direct expenses have declined by more than \$57 million since FY00. Costs to operate new facilities, higher utility costs, healthcare costs and increased maintenance have not been offset by reduction in the workforce and controlling and optimizing chemical use.
- MWRA seeks to maximize savings in the deregulated electricity market, and now competitively procures most of its power needs.

- MWRA is working to reduce labor costs wherever appropriate. Consistent with the recommendations of the Black & Veatch study, the budget assumes a staffing level of 1,255 for fiscal year 2007. This staffing level represents a decrease of more than 500 filled positions (over 29%) from peak staffing in 1997.
- 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.
- 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 Office of Emergency Preparedness, the Board of Directors, the Advisory Board, and other advisory committees. The MWRA recently created the Office of Emergency Preparedness by

consolidating its security and emergency response functions throughout the agency.

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, occupational health and safety, internal audit, fleet services, computer system development and management, library and

records management, and mail and employee shuttle services.

## **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 Accounting Principles Generally Accepted in the United States of America (GAAP) and, commencing with the annual reports for 1986, audited by independent certified public accountants. MWRA's audited financial statements at June 30, 2005 and 2004 are available online at [www.mwra.com](http://www.mwra.com).





Executive Office  
Budget

**EXECUTIVE OFFICE**

Proposed Final FY07 Current Expense Budget EXECUTIVE DIVISION by Line Item							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
WAGES & SALARIES	\$ 443,803	\$ 401,698	\$ 447,203	\$ 627,452	\$ 180,249		40.3%
OVERTIME	-	15	-	-	-		-
ONGOING MAINTENANCE	-	-	-	350,000	350,000		-
TRAINING & MEETINGS	39	100	2,600	3,346	746		28.7%
PROFESSIONAL SERVICES	152,867	157,106	160,741	161,802	1,061		0.7%
OTHER MATERIALS	1,818	700	1,960	3,968	2,008		102.4%
OTHER SERVICES	470,137	449,321	430,952	440,468	9,516		2.2%
<b>TOTAL</b>	<b>\$ 1,068,664</b>	<b>\$ 1,008,940</b>	<b>\$ 1,043,456</b>	<b>\$ 1,587,036</b>	<b>\$ 543,580</b>		<b>52.1%</b>

Proposed FY07 Current Expense Budget EXECUTIVE DIVISION by Line Item							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
EXECUTIVE OFFICE / BOARD OF DIRECTORS	\$ 448,779	\$ 405,834	\$ 455,453	\$ 385,659	\$ (69,794)		-15.3%
ADVISORY BOARD / OTHER COMMITTEES	619,885	603,106	588,003	597,569	9,566		1.6%
OFFICE OF EMERGENCY PREPAREDNESS	-	-	-	603,808	603,808		-
<b>TOTAL</b>	<b>\$ 1,068,664</b>	<b>\$ 1,008,940</b>	<b>\$ 1,043,456</b>	<b>\$ 1,587,036</b>	<b>\$ 543,580</b>		<b>52.1%</b>

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 oversees a centralized MWRA-wide security program to preserve and protect MWRA facilities, systems and employees.

The Executive Office includes the Planning and Coordination Department, and has direct oversight of the Public Affairs, Internal Audit and AACU Department, which are funded as part of the Support Services budget.

The goals of the Executive Office 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), the MWRA Advisory Board and Advisory Committees cost centers and the Office of Emergency Preparedness 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. The Advisory Board has also, at various times, been charged by the Massachusetts State Legislature to advise the Legislature and the MWRA Board of Directors with policy initiatives relative to system expansion and rate methodology. In addition, the Advisory Board reviews and comments on MWRA reports, hold 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 FY07 direct expense budget.

### ***Budget Highlights***

- *Total Proposed FY07 budget of \$1,587,000, an increase of \$544,000 or 52% over FY06 budget, primarily due to the creation of Office of Emergency Preparedness, approved by the Board of Directors in November 2005.*
- *\$627,000 for **Wages and Salaries** represents 40% of the Executive Office budget. The proposed budget includes funding for seven positions, three more than funded in FY06.*
- *\$162,000 or 10% of the Executive Office budget is for **Professional Services** to fund the Water Supply Citizens' Advisory Committee and the Wastewater Advisory Committee.*
- *\$436,000 or 27% of the Executive Office budget is for the MWRA Advisory Board staff. The proposed budget supports its operating expenses, including wages and salaries, space rental and general administrative office materials and supplies.*

**OFFICE OF EMERGENCY PREPAREDNESS**

Proposed FY07 Current Expense Budget OFFICE OF EMERGENCY PREPAREDNESS						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ -	\$ -	\$ -	\$ 248,706	\$ 248,706	-
ONGOING MAINTENANCE	-	-	-	350,000	350,000	-
TRAINING & MEETINGS	-	-	-	1,249	1,249	-
OTHER MATERIALS	-	-	-	2,341	2,341	-
OTHER SERVICES	-	-	-	1,512	1,512	-
<b>TOTAL</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 603,808</b>	<b>\$ 603,808</b>	<b>0.0%</b>

The Office of Emergency Preparedness was created in November 2005. The creation of this department allows for the consolidation of authority-wide security and emergency response functions into one unit. It is responsible for oversight of MWRA’s security and emergency response policies and procedures; implementation and training for the Emergency Response Plan; and management, training, and outfitting of the Site Characterization Team, which will respond to any intentional or accidental contamination of the water supply.

The Director of Emergency Preparedness reports directly to the Executive Director with a matrix reporting relationship to the Chief Operating Officer and the Managing Director. The positions of Manager of Security and Emergency Planning and the Security Administrator have been transferred from the Support Services Division to this new Office and report to the Director of Emergency Preparedness. In addition, the Safety/Security Manager for Deer Island will continue to report to the Deer Island Director with a matrix reporting relationship to the Director of Emergency Preparedness to include this major facility in all authority-wide emergency planning efforts.

**The department’s goals are to:**

- Develop and implement policies and programs to ensure facility and water/wastewater system security, public health and staff safety.

**Budget Highlights**

- *Total Proposed FY07 budget of \$604,000, which represents 38% of the Executive Office budget, is primarily due to the creation of the new Office of Emergency Preparedness to consolidate oversight of authority-wide security and emergency response functions. The proposed budget is offset by corresponding decreases in the Support Services Division Director’s office and the Public Affairs department.*
- *The Proposed FY07 budget includes \$249,000 for **Wages and Salaries** to support 3 positions, one of which is transferred from Public Affairs and the other two from the Support Services Division Director’s office.*
- *Ongoing **Maintenance** includes \$350,000 for support and maintenance of MWRA’s electronic security systems. The Proposed FY07 budget includes \$100,000 for security systems maintenance service contracts, \$50,000 for replacements of existing equipment such as head-end systems, multi-plex routers, digital recorders and security monitors, and \$200,000 for purchase and installations of additional equipment such as cameras, intrusion detections, card access, motion sensors and cables.*

## PLANNING AND COORDINATION DEPARTMENT

Proposed FY07 Current Expense Budget PLANNING DIVISION by Line Item							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
WAGES & SALARIES	\$ 1,202,514	\$ 1,736,206	\$ 1,721,333	\$ 1,960,880	\$ 239,547		13.9%
OVERTIME	180	4	-	-	-		-
TRAINING & MEETINGS	4,183	9,833	18,304	18,178	(126)		-0.7%
PROFESSIONAL SERVICES	-	18,335	20,000	13,000	(7,000)		-35.0%
OTHER MATERIALS	1,348	22,102	148,475	141,967	(6,508)		-4.4%
OTHER SERVICES	251,692	246,248	145,236	164,807	19,571		13.5%
<b>TOTAL</b>	<b>\$ 1,459,917</b>	<b>\$ 2,032,728</b>	<b>\$ 2,053,348</b>	<b>\$ 2,298,832</b>	<b>\$ 245,484</b>		<b>12.0%</b>

The Planning and Coordination 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 and planning 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 cost-effective rule-setting that protects the environment and promotes public health. Senior staff members actively 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 conducts strategic policy research on a broad range of topics and staff conducts 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 report 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***

- \$2 million for **Wages and Salaries**, an increase of \$240,000 or 13.9% from the FY06 budget, reflecting the transfer of two positions from the CSO/Energy Department as well as annual wages and salaries adjustments. The Proposed FY07 budget includes funding for 25 positions.
- \$142,000 for **Other Materials**, a slight decrease of \$7,000 from the FY06 budget, due to increase use of web based applications for mapping. The proposed budget includes \$111,000 for postage for mailing the Consumer Confidence Report, \$18,000 for mapping supplies, and \$10,000 for water conservation kits.
- \$165,000 for **Other Services**, an increase of \$19,000 or 13.5% from the FY06 budget. The increase is primarily due to increased cost of printing and the inclusion of previously unbudgeted funds for printing the Monthly Water Quality Reports. The proposed budget includes \$134,000 for printing the CCR, \$11,000 for printing lead in tap water brochures, and \$10,000 for water conservation bill stuffers.



Operations Division  
Budget

## OPERATIONS DIVISION

Proposed FY07 Current Expense Budget OPERATIONS DIVISION by Line Item						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 58,432,405	\$ 59,227,760	\$ 60,871,110	\$ 64,298,517	\$ 3,427,407	5.6%
OVERTIME	3,631,487	3,672,896	3,561,638	3,889,313	327,675	9.2%
FRINGE BENEFITS	84,769	78,472	79,262	79,279	17	0.0%
WORKERS' COMPENSATION	(244)	-	-	-	-	-
CHEMICALS	6,190,167	6,579,778	7,417,960	8,617,677	1,199,717	16.2%
UTILITIES	17,337,465	20,397,582	24,499,466	31,144,154	6,644,688	27.1%
ONGOING MAINTENANCE	14,953,854	16,434,371	16,919,565	21,045,861	4,126,296	24.4%
TRAINING & MEETINGS	134,060	145,553	166,168	129,939	(36,229)	-21.8%
PROFESSIONAL SERVICES	4,797,618	4,491,663	5,124,882	6,219,374	1,094,492	21.4%
OTHER MATERIALS	3,852,233	3,704,188	2,819,687	3,010,102	190,415	6.8%
OTHER SERVICES	15,627,752	15,277,148	15,265,054	16,559,775	1,294,721	8.5%
<b>TOTAL</b>	<b>\$ 125,041,566</b>	<b>\$ 130,009,411</b>	<b>\$ 136,724,792</b>	<b>\$ 154,993,991</b>	<b>\$ 18,269,199</b>	<b>13.4%</b>

Proposed FY07 Current Expense Budget OPERATIONS DIVISION by Department						
DEPARTMENT	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
OPERATIONS ADMINISTRATION	\$ 4,388,375	\$ 3,892,261	\$ 3,146,243	\$ 3,479,643	\$ 333,400	10.6%
CSO PROGRAMS/ENERGY	1,401,931	890,734	956,268	-	(956,268)	-100.0%
WASTEWATER TREATMENT	55,923,448	58,795,533	60,281,041	69,071,993	8,790,952	14.6%
FIELD OPERATIONS	46,608,310	50,251,600	55,786,019	64,175,841	8,389,822	15.0%
LABORATORY SERVICES	4,724,112	4,779,422	5,164,650	5,489,857	325,207	6.3%
ENQUAD	4,740,856	4,413,216	4,600,696	4,705,761	105,065	2.3%
ENGINEERING & CONSTRUCTION	4,992,108	4,861,895	4,752,661	8,070,896	3,318,235	69.8%
CAPITAL ENG & CONSTR.	2,262,426	2,124,750	2,037,214	-	(2,037,214)	-100.0%
<b>TOTAL</b>	<b>\$ 125,041,566</b>	<b>\$ 130,009,411</b>	<b>\$ 136,724,792</b>	<b>\$ 154,993,991</b>	<b>\$ 18,269,199</b>	<b>13.4%</b>

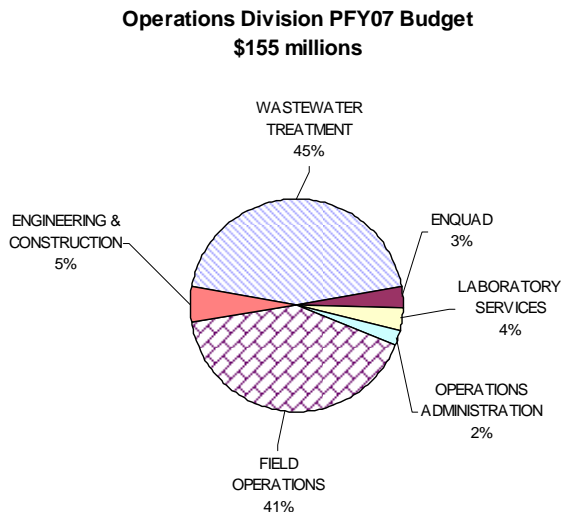
\* FY04 Actuals for the CSO Programs/Energy represent the spending for the former Operation Planning Department.

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 FY07 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 44.6% 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 41.4% 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.





During the past few years, there have been three departments in the Operations Division responsible for engineering and construction work including Capital Engineering and Construction, Engineering and Construction and the CSO/Energy departments. On November 16, 2005, MWRA consolidated these three departments into one department called Engineering and Construction under the direction of the Deputy Chief Operating Officer to provide in-house engineering, consultant management (during the facilities planning, environmental review, design, and engineering services during construction stages of capital projects), drafting, surveying, construction management, and other technical assistance required for the maintenance, repair, and rehabilitation of wastewater and waterworks systems.

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, energy-related issues, including procurement 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 FY06 Accomplishments Through December 2005**

### **Operations, Energy, and New Facilities Start-ups:**

- Started up the new John J. Carroll Water Treatment Plant (JJCWTP) on July 27, 2005.
- Completed relocation of the Somerville laboratory to the Chelsea facility.
- Full compliance with National Pollutant Discharge Elimination System (NPDES) permit since April 2004 for the Deer Island Wastewater Treatment Plant.
- Completed polymer system improvements at Deer Island resulted in polymer dosage reductions of 33% for the waste sludge operation.

- 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, and carbon dioxide.
- Residuals Management - Successfully negotiated termination of regulatory requirement to have back-up reservation landfill contract for disposal of sludge generated at Deer Island.
- Competitively procured and executed a five-month electricity contract for the JJCWTP starting 12/21/05.
- During FY06 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 \$1.3 million YTD December 2005.

### **Maintenance:**

- YTD December 2005 the Operations Division spent \$8.7 million on maintenance of which \$4.0 million was for services and \$4.8 million for materials.
- Completed some key repair projects including the Section 22 pipe break in Dorchester and both hydropower turbines at Deer Island.
- Procured and implemented numerous new service contracts at the JJCWTP.
- Continued expansion of the condition monitoring program at Deer Island. Staff was trained in advanced laser and precision belt alignment, infrared camera use, and vibration monitoring.

### **Engineering & Construction:**

- Awarded the following construction contracts: BSO019 CSO Storage Conduit, Pleasure Bay Drainage Improvements, CVA Pipeline Redundancy Construction Contract, Heath Hill Section 52 Phase 2 Rehabilitation, Oakdale Power Station Phase 1 Valve Rehab Construction Contract and Shaft E/Hultman Aqueduct Connection Construction Contract.
- Awarded the following professional services contracts: MWWST CP-6 Hultman Aqueduct Repair and Interconnections Design Contract, Technical Assistance Consulting Services Contract for Carroll WTP, and Quabbin and Wachusett Dam and Spillway Improvements Design Contract.
- Completed the following professional Services contracts: Quabbin Ultra Violet Disinfection Facility Demonstration Scale Operation and Concept Design project, and Chestnut Hill Connecting Mains Final Piping Connections Preliminary Design Contract.
- Achieved substantial completion of the following construction projects: Norumbega Covered Storage Tanks, Weston Aqueduct Supply Main 1 and 2, and Weston Aqueduct Supply Main 3 Section 12.

### **Environmental:**

- Environmental Quality Department staff assumed management of outfall monitoring database in lieu of contracting out work. During rebid of the contract, this allowed smaller firms to bid on the outfall monitoring contract, thus increasing competition and cutting the cost of a portion of the monitoring.
- Submission on time of all NPDES-required deliverables (DMRs, environmental monitoring reports).

## **FY07 Operations Division Budget Highlights:**

- The Total Operations Division FY07 Proposed budget is \$155.0 million, which is \$18.3 million or 11.8% higher than the FY06 budget. Of the \$18.3 million increase \$3.1 million or 17% is the result of shifting the majority of Facilities Management group from the Support Division to FOD in the Operations Division.
- Other significant increases affecting the Proposed FY07 budget include energy prices (+\$6 million), growing maintenance needs (+\$4.1 million), wage increases primarily due to collective bargaining agreements (+\$3.3 million), compliance with new enterococcus treatment requirements for Deer Island's NPDES permit (\$480,000 for 6 months in FY07), additional inflation adjustments per the residuals processing contract (+\$470,000), chemical price increases (\$400,000), and additional overtime to ensure power reliability at Deer Island during wet weather events (+\$225,000). New facilities related increases include +\$820,000 for chemicals and maintenance at the JJCWTP and +\$800,000 for operation of the Union Park CSO facility in (MWRA will share costs with BWSC). These increases are offset by an \$817,000 decrease due to the discontinuation of the landfill reservation fee.
- The Proposed FY07 budget, which is based on the lower end of cost estimates for several expense categories, is also subject to risk in the following areas; timing of the implementation of Deer Island's new NPDES permit (costs will increase if implemented at beginning of FY07), energy prices, and more than expected emergency-related maintenance and overtime needs.

## **Highlights of FY07 Initiatives**

### **Operations, Energy, and New Facilities Start-ups:**

- Start up the new Union Park CSO Detention/Treatment Facility by the end of 2006.
- First full year of operation for the JJCWTP.
- Deer Island will implement strategies for optimizing secondary treatment capacity pending agreement with the EPA.
- Commence new round of NPDES- required Local Limit testing in TRAC to reassess industrial discharge limits.
- Competitively procure electricity for MWRA facilities, including the Deer Island Treatment Plant, the JJCWTP and various accounts in Field Operations.
- Implement energy information system and support energy demand-side management initiatives in key Field Operations facilities.

### **Engineering & Construction:**

- Initiate several key contacts including the design phases for the Weston Aqueduct Supply Main 3 Rehabilitation, Section 28 and Lynnfield Water District Pipeline projects; design/build work for the Blue Hill Covered Storage; study phase for Cosgrove and Wachusett Aqueduct Redundancy; and construction phases for Section 160, Valve 6, Walnut Street Line, and Section 53 in Revere, Prison Point Intake Repair, and Shaft 8 Heating.
- Initiation of discussions with Massachusetts Department of Environmental Protection and the US EPA regarding supplementing the existing treatment for Wachusett and Quabbin Reservoir with ultra violet disinfection treatment to meet the new regulations.

- Commence the water pump station rehabilitation effort for: Spring Street, Brattle Court, Belmont, Hyde Park and Reservoir Road.

### **Maintenance:**

- Continue to manage and advance work on several critical headworks upgrade initiatives including heating system upgrades, screen replacement, grit collection system improvements, knife valve replacement, and facilities condition assessment.
- Complete repairs to the Rutland-Holden sewer line.
- Install a new soda ash system and replace the hypochlorite tank at the Clinton Wastewater Treatment Plant.
- Continue work on numerous major projects at Deer Island including the Liquified Oxygenation Catalyst system rehabilitation, South System Pump Station flow meter replacement, facility repainting, and building roof replacement.

### **Environmental:**

- Negotiate a new Deer Island Treatment Plant discharge permit. The current permit expired August 2005.
- Review and redesign harbor and outfall monitoring plan based on five years of post-outfall data.
- Ensure the permit-required outfall monitoring meets NPDES requirements, is scientifically credible, and is cost-effective.
- Finalize, with MIS the Harbor and Outfall Monitoring data management applications, and use them to manage consultant monitoring data.
- Implement new DEP air permit requirements for Deer Island.

## OPERATIONS ADMINISTRATION

Proposed FY07 Current Expense Budget OPERATIONS ADMINISTRATION						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 2,499,709	\$ 2,365,950	\$ 2,231,103	\$ 2,226,963	\$ (4,140)	-0.2%
OVERTIME	-	-	-	-	-	-
FRINGE BENEFITS	-	-	-	-	-	-
WORKERS' COMPENSATION	(244)	-	-	-	-	-
ONGOING MAINTENANCE	19,752	17,797	-	-	-	-
TRAINING & MEETINGS	1,803	6,708	4,000	4,016	16	0.4%
PROFESSIONAL SERVICES	4,088	-	-	30,000	30,000	-
OTHER MATERIALS	1,598,907	1,253,942	676,728	964,783	288,055	42.6%
OTHER SERVICES	264,360	247,864	234,412	253,881	19,469	8.3%
<b>TOTAL</b>	<b>\$ 4,388,375</b>	<b>\$ 3,892,261</b>	<b>\$ 3,146,243</b>	<b>\$ 3,479,643</b>	<b>\$ 333,400</b>	<b>10.6%</b>

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

### Budget Highlights

- \$2.2 million for **Wages and Salaries**, which represents 64% of the total Proposed FY07 budget. The proposed budget includes funding for 32 positions, one less than the FY06 CEB.
- \$30,000 for **Professional Services** for the transfer in of funds from the former CSO/Energy department to retain an energy consultant to assist MWRA staff in evaluating the marketplace and MWRA's energy demand, structuring procurements and evaluating bids.
- \$965,000 for **Other Materials**, an increase of \$288,000 or 43% as compared to the FY06 CEB. The majority of the expenses are for the Authority-wide vehicle replacement program (\$950,000), which is an increase of \$283,000 or 42% from the FY06 CEB. Actual spending for vehicle purchases for FY02-FY05 is as follows:

FY02:	\$ 622,000
FY03:	\$ 120,000
FY04:	\$1,580,000
FY05:	\$1,237,289
FY06 Projection:	\$ 667,500
Proposed FY07 CEB	\$ 950,000

From FY00 to FY03, MWRA limited replacement of vehicles pending completion of an extensive fleet review. In FY03 MWRA reduced the active fleet by more than 10% (from 561 to 496 vehicles) as a result of this initiative. For example, staff identified opportunities to meet the needs of the new waterworks system facilities through redeployment of existing vehicles rather than adding to the fleet. Analysis as of December 2005 indicates that assuming the completion of planned purchases in FY06, 55% of MWRA's active, operable fleet will be seven years or older as of the beginning of FY07.

- \$14,000 for **Vehicle Expense** an increase of \$6,000 or 67% from the FY06 CEB for CNY parking stickers and employee reimbursement for gas and tolls based on FY05 spending adjusted for price increases.
- \$254,000 for **Other Services** including \$253,000 for Authority-wide memberships. The increase of \$20,000 or 9% from the FY06 CEB covers the membership dues for the American Waterworks Research Foundation based on FY05 and FY06 actual spending.

## WASTEWATER TREATMENT

Proposed FY07 Current Expense Budget WASTEWATER TREATMENT						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 14,923,865	\$ 15,235,246	\$ 15,421,880	\$ 16,328,323	\$ 906,443	5.9%
OVERTIME	1,138,132	1,049,301	1,044,529	1,247,712	203,183	19.5%
FRINGE BENEFITS	27,844	22,279	20,093	22,284	2,191	10.9%
CHEMICALS	2,728,690	2,697,738	2,723,464	3,452,651	729,187	26.8%
UTILITIES	11,979,324	14,165,306	15,242,651	19,877,330	4,634,679	30.4%
ONGOING MAINTENANCE	9,601,769	10,284,866	10,618,412	12,904,175	2,285,763	21.5%
TRAINING & MEETINGS	38,346	66,280	52,100	59,875	7,775	14.9%
PROFESSIONAL SERVICES	1,001,608	1,001,047	1,105,188	1,307,660	202,472	18.3%
OTHER MATERIALS	398,500	470,153	322,755	363,274	40,519	12.6%
OTHER SERVICES	14,085,370	13,803,317	13,729,969	13,508,709	(221,260)	-1.6%
<b>TOTAL</b>	<b>\$ 55,923,448</b>	<b>\$ 58,795,533</b>	<b>\$ 60,281,041</b>	<b>\$ 69,071,993</b>	<b>\$ 8,790,952</b>	<b>14.6%</b>

Proposed FY07 Current Expense Budget WASTEWATER TREATMENT by Facility						
FACILITY	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
DEER ISLAND	\$ 40,325,656	\$ 43,523,952	\$ 45,117,162	\$ 53,040,789	\$ 7,923,627	17.6%
RESIDUALS	14,602,892	14,282,939	14,055,589	14,865,671	810,082	5.8%
CLINTON	994,900	988,643	1,108,289	1,165,533	57,244	5.2%
<b>TOTAL</b>	<b>\$ 55,923,448</b>	<b>\$ 58,795,534</b>	<b>\$ 60,281,040</b>	<b>\$ 69,071,993</b>	<b>\$ 8,790,953</b>	<b>14.6%</b>

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 44.6% of the Operations Division's Proposed FY07 budget and 34% of MWRA's FY07 direct expense budget.

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 was barged (through March 2004) and pumped through the Braintree-Weymouth tunnel (starting April 2005) 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.

## DEER ISLAND TREATMENT PLANT

Proposed FY07 Current Expense Budget DEER ISLAND TREATMENT PLANT by Line Item						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 14,376,220	\$ 14,731,138	\$ 14,862,090	\$ 15,782,537	\$ 920,447	6.2%
OVERTIME	1,075,572	991,988	999,503	1,190,687	191,184	19.1%
FRINGE BENEFITS	26,710	21,342	18,959	21,150	2,191	11.6%
CHEMICALS	2,625,205	2,590,624	2,594,528	3,323,343	728,815	28.1%
UTILITIES	11,775,945	13,934,125	15,026,497	19,599,867	4,573,370	30.4%
ONGOING MAINTENANCE	8,438,525	9,173,625	9,442,627	11,148,390	1,705,763	18.1%
TRAINING & MEETINGS	36,963	64,294	50,000	57,376	7,376	14.8%
PROFESSIONAL SERVICES	999,944	999,383	1,103,500	1,055,996	(47,504)	-4.3%
OTHER MATERIALS	347,682	436,359	296,057	334,981	38,924	13.1%
OTHER SERVICES	622,890	581,073	723,401	526,462	(196,939)	-27.2%
<b>TOTAL</b>	<b>\$ 40,325,656</b>	<b>\$ 43,523,951</b>	<b>\$ 45,117,162</b>	<b>\$ 53,040,789</b>	<b>\$ 7,923,627</b>	<b>17.6%</b>

### Program Description and Goals

The **Deer Island Treatment Plant** budget accounts for 34.2% of the Operations Division's Proposed FY07 budget. DITP has a primary treatment peak capacity of 1.27 billion gallons per day (bgd) and secondary treatment peak capacity of 540 million gallons per day (mgd).

Wastewater "influent" from MWRA customer communities arrives at the plant through four underground tunnels. Pumps then lift the influent 80 to 150 feet, depending on the tunnel, to the head of the plant. There are three pump stations. The pumping capacity at the Deer Island plant has dramatically increased the volume of wastewater that can be taken into the plant from the conveyance tunnels. This reduces back-ups and overflows throughout the system when wet weather causes peaking of system flows.

After pumping, north system flows pass through grit chambers that remove grit for disposal in an off-island landfill. South system flows are pre-treated for grit at the remote headworks on Nut Island. Flow is routed to primary treatment clarifiers, which remove about half of the pollutants brought to the plant in typical wastewater (50-60% of total suspended solids and up to 50% of pathogens and toxic contaminants are removed). In the clarifiers, gravity separates sludge and scum from the wastewater.

In secondary treatment, reactors and clarifiers remove non-settleable solids through biological and gravity treatment. The biological process is a pure oxygen-activated sludge system, using microorganisms to consume organic matter that remains in the wastewater flow. Secondary treatment raises the level of pollution removal to over 85%. Over one hundred tons of pure oxygen is manufactured each day at Deer Island's cryogenic facility to support the biological treatment process.

Sludge and scum from primary treatment are thickened in gravity thickeners. Sludge and scum from secondary treatment are thickened in centrifuges. Polymer is used in the secondary thickening process to increase its efficiency. Digestion occurs in 12 egg-shaped anaerobic digesters, each 90 feet in diameter and approximately 130 feet tall. Microorganisms naturally present in the sludge work to break sludge and scum down into methane gas, carbon dioxide, solid organic byproducts, and water. Digestion significantly reduces sludge quantity. The methane gas produced in the digesters is used in the plant's on-site power generating facility to save operating costs by reducing consumption of purchased energy. Digested sludge is pumped, through the inter-island Braintree-Weymouth tunnel directly to the MWRA's Pelletizing Facility at Fore River, where it is further processed into a fertilizer product.

## **Organizational Structure:**

The Deer Island Plant has six major functional areas: *Operations*, *Thermal Power Plant*, *Process Control*, *Maintenance*, *Capital Planning*, and *Operations and Maintenance (O&M) Support*.

- *Operations* manages the day-to-day operation of plant processing units, performs minor preventative maintenance activities, plant information systems, and oversee plant functions 24 hours per day, seven days per week.
- *Thermal Power Plant* staff manage and operate the Deer Island generation and thermal systems. Power Plant personnel provide twenty-four hour operation of the high-pressure, high temperature steam power plant. This facility is capable of producing up to 70 emergency megawatts of electrical power.
- *Process Control* manages and maintains the following programs in support of plant operations; real-time process instrumentation and control system (PICS), operational data system (OMS), plant performance monitoring and reporting programs, regulatory compliance programs including all plant permits, water quality, and air quality. The Process Control Unit provides the technical expertise for plant unit operations and routinely performs process optimization studies to help increase performance and reduce operating costs.
- *Maintenance* performs preventive and predictive maintenance and corrective repairs on all equipment, utilizing a computerized maintenance management system (CMMS) to coordinate scheduling with Operations. Staff has developed the Reliability Centered Maintenance (RCM) program, which has improved plant performance by applying maintenance resources where they are most effective. RCM analyzes the operating systems with the objective of ensuring that critical functions operate as required. Implementation of a preventive maintenance program using RCM may reduce the cost of maintaining the plant and improve efficiency by anticipating when maintenance will be required. An on-island warehouse, managed by Procurement Department staff, ensures that there is adequate stock for maintenance repairs and plant operations.
- *Capital Planning* provides technical support services for both the Operations and Maintenance Units. Staff is responsible for developing, procuring, and implementing all service contracts, consultant designs, and capital improvement projects at Deer Island. This group also manages the on-island Technical Information Center, which provides services to the DITP community and external constituents, and ensures quick access to plant drawings and technical information for operational and maintenance needs.
- *O&M Support Section* is responsible for supporting the business needs of the plant. The Administration and Finance Unit provides financial and administrative support to meet daily operational needs of the plant. The Safety/Security Unit is responsible for ensuring a safe and healthful work environment for employees and minimizing MWRA's exposure to liability and property loss or damage.

The Deer Island Director's Office provides overall policy direction and support in the areas of public access and community agreements.

## **Operating Assumptions**

Deer Island's Proposed FY07 CEB assumes treatment of an average flow of 359 mgd based on seven-years of historical data. Sludge production is projected to be an average of 98.3 TPD of digested sludge shipped to FRSA (TSS basis) through the Braintree-Weymouth tunnel. This estimate is based on seven-years of historical data adjusted to account for the discontinuation of the DSL centrifuges after start-up of the Braintree-Weymouth Tunnel.



In FY07 the amount of self-generation of electricity from the steam turbine generator, combustion turbine generators, and the hydroelectric facility will meet approximately 23.3 percent of the total energy requirements, resulting in an avoided cost savings of \$4.6 million.

### **Budget Highlights**

- *\$15.5 million for **Regular Pay**, an \$807,000 or 5.5 percent increase over the FY06 budget. The proposed budget covers 243 funded positions, two less than in the FY06 CEB.*
- *\$80,000 for temporary employees to meet temporary needs in areas such as process control and maintenance.*
- *\$1.2 million for **Overtime**, a \$191,000 or 19.1 percent increase over the FY06 budget. The Proposed FY07 Overtime budget includes \$225,000 for additional coverage to ensure power system reliability during high flow events.*
- *\$3.3 million for **Chemicals**, a \$729,000 or 28.1 percent increase over the FY06 budget. The proposed budget includes increases of \$411,000 for sodium hypochlorite and \$248,000 for sodium bisulfite primarily due to expected increases in usage to comply with changes to NPDES permit requirements. Regulatory revisions, which now require the treatment process to kill enterococcus in addition to fecal coliform, will go into effect at Deer Island upon renewal of the Plant's NPDES permit (expires in FY06).*
- *\$20 million for **Utilities**, a 4.6 million or 30.4 percent increase over the FY06 budget. The proposed budget includes \$15 million for electricity and \$2.6 million for diesel fuel. The Proposed FY07 budget assumes a full year of electricity unit pricing equivalent to the FY06 actual pricing under the spot market contract. In addition to the increase in the electricity budget, the Proposed FY07 budget reflects increases in diesel fuel and water. Diesel fuel increases by \$1.4 million or 800,000 gallons primarily due to the anticipated fuel usage during the estimated 350 hours of operations for price response. Water increases by \$652,000 over the FY06 budget primarily due to higher unit costs and volume adjustments to reflect the historical average usage based on three years of data.*
- *\$11.1 million for **Maintenance**, a \$1.7 million or 18.6 percent increase over the FY06 budget. The proposed budget includes \$4.7 million for materials and \$6.4 million for maintenance services. The proposed budget is \$1.7 million more than the projected FY06 budget, partly due to the addition of new service contracts (low voltage lighting, \$300,000, motor repairs, \$175,000, flare refractories, \$100,000) and new project materials (Locat system replacement, \$500,000). Staff is continuing review of service contracts to determine the appropriate level of funding and will incorporate changes in the final FY07 CEB.*
- *\$1.1 million for **Professional Services**, a \$48,000 or 4.3 percent decrease from the FY06 budget. Of this budget, \$916,000 is for security services. Increases of \$30,000 for engineering and \$69,000 for lab and other professional services are offset by a decrease of \$129,000 for security to reflect the actual contract terms.*
- *\$335,000 for **Other Materials**, a \$39,000 or 13.1 percent increase over the FY06 budget. The increase is primarily associated with computer hardware/software, which increased \$40,000 over the FY06 budget due to the purchase of Ethernet switches and PI software upgrades.*
- *\$526,000 for **Other Services**, a \$197,000 or 27.2 percent decrease from the FY06 budget. As compared to the FY06 budget, the proposed budget reductions are in other services – security upgrades (- \$140,000), telephone maintenance contracts (-\$13,000) and permitting fees (-\$13,000).*

## RESIDUALS MANAGEMENT

Proposed FY07 Current Expense Budget RESIDUALS by Line Item						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 130,793	\$ 92,622	\$ 94,919	\$ 100,303	\$ 5,384	5.7%
OVERTIME	534	-	-	-	-	-
ONGOING MAINTENANCE	1,024,448	984,682	969,000	1,549,000	580,000	59.9%
TRAINING & MEETINGS	1,383	1,986	2,000	2,410	410	20.5%
PROFESSIONAL SERVICES	-	-	-	250,000	250,000	-
OTHER MATERIALS	331	-	402	402	-	0.0%
OTHER SERVICES	13,445,403	13,203,649	12,989,268	12,963,556	(25,712)	-0.2%
<b>TOTAL</b>	<b>\$ 14,602,892</b>	<b>\$ 14,282,939</b>	<b>\$ 14,055,589</b>	<b>\$ 14,865,671</b>	<b>\$ 810,082</b>	<b>5.8%</b>

### Program Description and Goals

The **Residuals Management Program** manages the processing and disposal of approximately 100 dry tons per day of sludge from the anaerobic digestion process at Deer Island, as well as the disposal of grit and screenings from all MWRA facilities. MWRA seeks to dispose of all sludge and grit and screenings in a reliable, economical, and environmentally sensitive manner.

- MWRA contracts with the New England Fertilizer Company (NEFCo) to operate the sludge processing facility, market and distribute sludge products. A 15-year contract with NEFCo became effective March 1, 2001. Liquid sludge from Deer Island is pumped through the new Braintree Weymouth cross-harbor tunnel to the Fore River processing facility where it is dewatered, dried, and shipped by either rail or truck for use as fertilizer or to other appropriate disposal. MWRA is committed to the beneficial reuse of biosolids to the greatest extent practicable.

In FY05, major operational changes occurred regarding sludge processing at Deer Island. The new Braintree-Weymouth cross-harbor tunnel came on-line in April 2005. The previous practice of thickening and barging sludge from Deer Island to Fore River ceased. Deer Island began pumping a much lower concentration of sludge (about 2.0% average total suspended solids) from Deer Island to the Residuals Processing Facility.

- The average dry tons per day (TSS) is budgeted at 98.3 tons per day in the Proposed FY07 CEB vs 94.7 tons per day in FY06, based on Deer Island's projections.
- Grit and screenings (minor residuals) from MWRA's headworks and certain pump stations are collected and disposed of in landfills. MWRA contracts with a third party operator for this service. Minor residuals are by-products of wastewater pre-treatment and primary/secondary treatment processes and include grit, screenings and scum screenings. The current contract ends in May 2007.
- Historically MWRA had a long term (30 year) contract required by law to provide reserve landfill capacity for disposal of sludge as a back-up in the event of any problems with the primary disposal methods. During FY06 MWRA applied for and was granted permission by the Federal District Court to terminate this contract effective March 31, 2006 on the basis of demonstrated reliability of its primary residuals program. This will result in an \$817k annual savings for the Authority as of FY07. NEFCo remains contractually obligated to provide back-up disposal capability, and will meet this obligation by maintaining a list of disposal sites.

## **Budget Highlights**

- *\$100,000 for **Wages and Salaries**, which funds one position. This department also receives on-going management oversight and staff support from other departments of the MWRA including Deer Island, Treasury, and Operations Administration.*
- *\$1.5M or 10.4% of the Proposed FY07 budget is for **Maintenance**, in accordance with the NEFCo contract, which includes a specific level per year adjusted to account for inflation. FY07 costs are \$580,000 or 60% higher than the FY06 CEB of which \$119,000 is for inflation.*
- *\$250,000 or 1.7% of the Proposed FY07 budget is for **Professional Services** to cover an infrastructure reliability study at FRSA / NEFCo primarily to evaluate and enhance reliability of utility systems.*
- *\$11.8 million or 79.6% of the Proposed FY07 budget is for **Sludge Pelletization**. The \$768,000 or 6.9% increase from the FY06 CEB reflects an increase of \$464,000 for inflation mostly for gas and electric, \$258,000 for excess quantities (above the contractual 90 tons per day fixed pricing).*
- *\$1.1M or 7.3% of the Proposed FY07 budget is for **Grit and Screening** disposal, an increase of \$14,000 or 1.3% from the FY06 CEB due to higher quantities of 114 tons, (6,864 in FY07 vs 6,750 in FY06) associated with a 15% increase in scum quantities. The pricing is basically at FY06 levels.*
- *\$38,000 or .3% of the Proposed FY07 budget is for **Permits**, of which \$35,000 is for sludge dryer stack testing of two trains required by DEP to be performed in December 2006 (testing is scheduled every two years).*
- *The (\$817,000) decrease in **Landfill Reservation Fee** is based on a court order relieving the MWRA from its obligation to reserve space for the Deer Island Wastewater Treatment Plant's production of sludge at the East Carbon Development Corporation landfill in Utah.*

## CLINTON WASTEWATER TREATMENT PLANT

Proposed FY07 Current Expense Budget CLINTON WASTEWATER TREATMENT PLANT by Line Item							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
WAGES & SALARIES	\$ 416,852	\$ 411,487	\$ 464,871	\$ 445,483	\$ (19,388)	-4.2%	
OVERTIME	62,026	57,312	45,025	57,025	12,000	26.7%	
FRINGE BENEFITS	1,134	937	1,134	1,134	-	0.0%	
CHEMICALS	103,485	107,114	128,936	129,308	372	0.3%	
UTILITIES	203,379	231,182	216,154	277,463	61,309	28.4%	
ONGOING MAINTENANCE	138,796	126,559	206,785	206,785	-	0.0%	
TRAINING & MEETINGS	-	-	100	89	(11)	-11.0%	
PROFESSIONAL SERVICES	1,664	1,664	1,688	1,664	(24)	-1.4%	
OTHER MATERIALS	50,487	33,793	26,296	27,891	1,595	6.1%	
OTHER SERVICES	17,077	18,594	17,300	18,691	1,391	8.0%	
<b>TOTAL</b>	<b>\$ 994,900</b>	<b>\$ 988,642</b>	<b>\$ 1,108,289</b>	<b>\$ 1,165,533</b>	<b>\$ 57,244</b>	<b>5.2%</b>	

### Program Description and Goals

The Clinton Wastewater Treatment Program provides advanced sewage treatment services to the Town of Clinton and the Lancaster Sewer District. MWRA assumed formal operational responsibility for the Clinton plant in 1987. Since then MWRA has designed and constructed new primary, secondary, and advanced treatment facilities which incorporated rehabilitated portions of the existing plant with new construction. The new facilities, designed to meet all current and projected NPDES discharge standards, were completed in 1992.

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 processes, trickling filters, aeration tanks, secondary tanks, and a chemical addition building. The plant discharges its effluent into the South Nashua River in accordance with the discharge limits of the facility's NPDES permit which limits effluent flow to 3.01 MGD. The plant has a potential peak flow rate of 12 MGD and a 6 MGD peak 24 hour rate. Residual materials are pressed and transported to an MWRA-owned landfill for disposal. Staff also performs regular monitoring of the landfill site.

### Budget Highlights

- \$445,000 for **Wages and Salaries** represents 38% of the Clinton Proposed FY07 budget. This funds six positions, one less position than was funded in FY06. The \$19,000 decrease from the FY06 budget is the result of one less position funded in FY07, offset by contractual increases.
- \$57,000 for **Overtime**, a \$12,000 or 27% increase compared to the FY06 budget. This is due to the need to meet the 24 hour, 7 day per week emergency coverage requirement with one less position.
- \$129,000 for **Chemicals** represents 11% of the Clinton Proposed FY07 budget, no change in total from the FY06 budget. The budget for sodium bisulfate has increased by \$8,000 due to a price increase offset by an \$8,000 decrease for soda ash due to lower historical usage.
- \$277,000 for **Utilities** represents 24% of the Clinton FY07 budget. This is \$61,000 or 28% greater than the FY06 budget. Electricity represents a \$46,000 or 26% increase and fuel oil represents an \$18,000 or 92% increase, both due to price increases.
- \$207,000 for **Maintenance** represents 18% of the Clinton FY07 budget, no change from the FY06 budget. The plant will be 15 years old in FY07; staff anticipates increased maintenance needs in the future.
- \$28,000 for **Other Materials**, including \$18,000 for clean fill for the landfill operation.

## FIELD OPERATIONS

Proposed FY07 Current Expense Budget FIELD OPERATIONS						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 28,261,648	\$ 29,575,047	\$ 31,126,769	\$ 32,852,147	\$ 1,725,378	5.5%
OVERTIME	2,372,201	2,479,307	2,383,564	2,493,775	110,211	4.6%
FRINGE BENEFITS	54,749	54,325	56,675	55,150	(1,525)	-2.7%
CHEMICALS	3,461,477	3,882,039	4,694,495	5,165,026	470,531	10.0%
UTILITIES	5,233,183	6,121,114	9,123,746	11,108,776	1,985,030	21.8%
ONGOING MAINTENANCE	4,931,775	5,714,598	5,666,215	7,611,812	1,945,597	34.3%
TRAINING & MEETINGS	75,224	54,659	82,213	48,778	(33,435)	-40.7%
PROFESSIONAL SERVICES	102,704	213,164	559,835	1,385,757	825,922	147.5%
OTHER MATERIALS	981,075	1,049,257	948,113	798,301	(149,812)	-15.8%
OTHER SERVICES	1,134,274	1,108,090	1,144,394	2,656,319	1,511,925	132.1%
<b>TOTAL</b>	<b>\$ 46,608,310</b>	<b>\$ 50,251,600</b>	<b>\$ 55,786,019</b>	<b>\$ 64,175,841</b>	<b>\$ 8,389,822</b>	<b>15.0%</b>

Proposed FY07 Current Expense Budget FIELD OPERATIONS by Program						
PROGRAM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WASTEWATER OPERATIONS	\$ 12,126,032	\$ 13,213,000	\$ 13,786,546	\$ 14,980,922	\$ 1,194,376	8.7%
WATER OPERATIONS & MAINT	12,981,667	14,183,116	18,529,362	21,184,016	2,654,654	14.3%
METRO MAINTENANCE	14,138,631	15,309,686	14,865,523	16,190,568	1,325,045	8.9%
OPERATIONS SUPPORT	6,055,558	6,414,840	6,744,355	7,093,493	349,138	5.2%
FOD ADMIN	1,306,422	1,130,959	1,860,233	4,726,842	2,866,609	154.1%
<b>TOTAL</b>	<b>\$ 46,608,310</b>	<b>\$ 50,251,601</b>	<b>\$ 55,786,019</b>	<b>\$ 64,175,841</b>	<b>\$ 8,389,822</b>	<b>15.0%</b>

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 Unit). 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, transport, and screening 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 FY06, the current Braintree-Weymouth facility will go off-line and all remaining staff will be transferred to the OCC in Chelsea while the new Braintree-Weymouth Replacement Pump Station is constructed. A contractor will provide by-pass pumping until the new facility is operational.

**Water Operations and Maintenance** is responsible for the treatment and delivery of approximately 230 mgd 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 and operates the MetroWest Tunnel and John J. Carroll Water Treatment Plant (JJCWTP) which came on line in July 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 moved to the JJCWTP in July 2005.

**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***

- *\$32.8 million or 51% of the total Proposed FY07 budget is for **Wages and Salaries** of which \$32.3 million or 98% is for Regular Pay, to fund approximately 520 positions, one less than funded in FY06. The proposed budget also includes \$268,000 for stand-by pay to support operational and maintenance needs and \$10,000 for interns for quality assurance support in Waterworks. The Wages and Salaries line item is \$1.7 million more compared with the FY06 budget due to wage increases.*
- *\$2.5 million is for **Overtime**, including \$1.2 million for operational coverage needs, \$793,000 for emergency related overtime, \$411,000 for planned overtime for scheduled maintenance and \$44,000 for planned training. Overtime is \$110,000 more than the FY06 CEB mainly due to wage increases.*
- *\$5.2 million or 8% of the total budget is for **Chemicals**, of which \$4.6 million is for water treatment and \$0.6 million, is for wastewater treatment. The proposed budget includes \$2.1 million for soda ash, \$1.3 million for sodium hypochlorite, \$558,000 for liquid oxygen for the JJCWTP ozone generation, \$316,000 for carbon dioxide to control the water alkalinity, \$334,000 for hydrofluosilicic acid, (fluoride) and \$199,000 for nitrazyme for Framingham Extension Relief Sewer odor and corrosion control.*

*Chemicals increase by \$471,000 compared to the FY06 CEB. Of this increase, \$198,000 is due to a change in dosing strategy at the JJCWTP for sodium hypochlorite and aqua ammonia to maintain chlorine residual in the Authority's water distribution system; \$120,000 is due to a recalculation of average water flows based on the most recent 5 year water history; and approximately \$153,000 is due to unit price increases for many chemicals, most notably hydroxide and bisulfite.*

- *\$11.1 million or 17% of the total Proposed FY07 budget is for **Utilities**, including \$7.4 million for electricity, \$2.2 million for diesel fuel, \$1.0 million for natural gas, and \$331,000 for water. Utilities increase \$2.0 million compared to the FY06 budget. Of the \$2.0 million increase, \$840,000 is for electricity of which \$150,000 is for Union Park operations, approximately \$240,000 is for unit pricing increases offset by decreased volume (mainly at IPS and JJCWTP based on actual usage data) and \$467,000 is for the transfer of Central Support*

*Facilities Management accounts to FOD. Also, \$575,000 of the increase is for diesel fuel due to price increases offset by volume decrease and \$523,000 is for natural gas of which \$290,000 is for the transfer of Central Support Facility Management accounts to FOD as well as unit price increases.*

- *\$7.6 million or 12% of the total Proposed FY07 budget is for **Maintenance**, including \$2.4 million for materials and \$5.2 million for services. Maintenance increases \$1.9 million compared to the FY06 CEB and is mainly due to more funding for grounds contracts of \$335,000, Union Park of \$316,000, division-wide service contracts of \$239,000, paving of \$100,000, Nut Island landscaping of \$25,000 and the inclusion of funding for JJCWTP as needed services of \$300,000. Additionally, FY07 projects include funding for Headworks initiatives of \$360,000, Nut Island projects of \$150,000 and Rutland Holden line cleaning initiatives of \$100,000.*
- *\$1.4 million is for **Professional Services**, including \$375,000 for engineering, \$55,000 for lab and testing, and \$955,000 for security. Professional Services increases \$826,000 in comparison with the FY06 CEB. Of this amount, \$300,000 pertains to funding to support technical assistance contracts for maintenance projects, \$50,000 supports a new round of Local Limits testing which is required every five years, \$25,000 for cryptosporidium testing, and \$569,000 supports the transfer of security costs for the Chelsea facility from Central Support to FOD offset by elimination of FY06 funding of \$100,000 for Wachusett hydrodynamic study schedule for completion in FY06.*
- *\$798,000 is for **Other Materials**, including \$303,000 for vehicle expenses for gas, mileage reimbursements and tolls, \$160,000 for work clothes, \$189,000 for health and safety supplies, and \$98,000 for lab and testing supplies. This \$150,000 decrease from the FY06 CEB and is primarily due to the shift of gasoline expense from FOD to VMM in conjunction with the operation of the Chelsea Fuel Facility.*
- *\$2.7 million is for **Other Services**, including \$1.3 million for Chelsea annual lease payments, \$542,000 for telephone and SCADA needs at various facilities, \$400,000 for required police details, and \$88,000 for permit fees. The Other Services line item increases by \$1.5 million from the FY06 CEB largely due to the shift of the Chelsea facility lease payment of \$1.3 million from Central Support to FOD and the increased scope of the Eurasian Milfoil initiative of \$175,000*

## LABORATORY SERVICES

Proposed FY07 Current Expense Budget LABORATORY SERVICES							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
WAGES & SALARIES	\$ 3,391,346	\$ 3,360,258	\$ 3,473,348	\$ 3,670,020	\$ 196,672	5.7%	
OVERTIME	61,066	62,265	74,107	84,577	10,470	14.1%	
FRINGE BENEFITS	1,213	1,128	1,200	1,200	-	0.0%	
UTILITIES	124,958	111,162	133,069	158,048	24,979	18.8%	
ONGOING MAINTENANCE	245,116	262,634	530,540	520,477	(10,063)	-1.9%	
TRAINING & MEETINGS	3,573	3,435	5,000	3,977	(1,023)	-20.5%	
PROFESSIONAL SERVICES	68,441	66,267	93,659	160,264	66,605	71.1%	
OTHER MATERIALS	736,653	820,128	744,196	785,792	41,596	5.6%	
OTHER SERVICES	91,746	92,145	109,531	105,502	(4,029)	-3.7%	
<b>TOTAL</b>	<b>\$ 4,724,112</b>	<b>\$ 4,779,422</b>	<b>\$ 5,164,650</b>	<b>\$ 5,489,857</b>	<b>\$ 325,207</b>	<b>6.3%</b>	

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 five locations: Chelsea, Southborough, 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. Laboratory staff track and analyze results and regularly prepare compliance reports for submission 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**

- \$3.7 million or 67% of the Proposed FY07 budget is for **Wages and Salaries**, of which \$3.5 million is Regular Pay for the funding of 54 positions, same level as FY06. The Regular Pay increase of \$191,000 is the result of contractual increases.
- \$520,000 is for **Maintenance** including \$235,000 for the HVAC humidity project, \$196,000 for equipment service contracts and \$59,000 for building and grounds services.
- \$160,000 is for lab and testing analysis, a \$67,000 or 72% increase from the FY06 budget in Professional Services. The increase is due to contracting out the low volume of fertilizer pellets testing that cannot be performed efficiently. Outside labs are used for emergencies, "second opinions", capacity constraints, unavailability of specialized equipment or economic justification.
- \$786,000 is for **Other Materials**, a \$42,000 or 5.6% increase as compared to the FY06 budget. The Proposed FY07 budget includes \$502,000 for laboratory supplies and \$235,000 for equipment replacement.



## ENVIRONMENTAL QUALITY

Proposed FY07 Current Expense Budget ENVIRONMENTAL QUALITY							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
WAGES & SALARIES	\$ 1,112,367	\$ 1,182,212	\$ 1,229,670	\$ 1,350,386	\$ 120,716	9.8%	
OVERTIME	421	6,404	625	4,879	4,254	680.6%	
FRINGE BENEFITS	-	-	20	-	(20)	-100.0%	
ONGOING MAINTENANCE	3,400	16,305	3,000	-	(3,000)	-100.0%	
TRAINING & MEETINGS	2,674	4,835	3,375	4,460	1,085	32.1%	
PROFESSIONAL SERVICES	3,602,861	3,195,096	3,336,200	3,335,693	(507)	0.0%	
OTHER MATERIALS	11,787	2,889	17,545	2,730	(14,815)	-84.4%	
OTHER SERVICES	7,346	5,475	10,261	7,613	(2,648)	-25.8%	
<b>TOTAL</b>	<b>\$ 4,740,856</b>	<b>\$ 4,413,216</b>	<b>\$ 4,600,696</b>	<b>\$ 4,705,761</b>	<b>\$ 105,065</b>	<b>2.3%</b>	

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; managing data and entering quality data; and complying with the reporting requirements of MWRA's NPDES permits. MWRA submits these permit reports to state and federal regulators, the Outfall Monitoring Science Advisory Panel and its sub-committees, and several libraries and as required by the permits, 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 periodic State of Boston Harbor Report.

### ***Budget Highlights***

- *\$1.4 million or 28% of the total Proposed FY07 budget is for **Wages and Salaries** for 17 positions, reflecting a transfer of the Executive Secretary from the Operations Administration budget to Enquad. A part-time intern assists with database management.*
- *\$3.3 million or 71% of the total Proposed FY07 budget is for **Professional Services** for outside laboratory testing and analysis. The monitoring budget is level-funded with FY06. The harbor and outfall monitoring is carried out by three contractors: Battelle, ENSR, and Normandeau for a total of \$2.8 million. The remaining funds are for Massachusetts Bay monitoring cost-shared with the U.S. Geological Survey, which ends in January 2007, and a smaller follow-on contract for required continuous monitoring; 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 FY07 Current Expense Budget ENGINEERING AND CONSTRUCTION						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 8,243,470	\$ 7,509,046	\$ 7,388,342	\$ 7,870,678	\$ 482,336	6.5%
OVERTIME	59,666	75,619	58,813	58,370	(443)	-0.8%
FRINGE BENEFITS	962	740	1,274	645	(629)	-49.4%
ONGOING MAINTENANCE	152,043	138,172	101,397	9,397	(92,000)	-90.7%
TRAINING & MEETINGS	12,441	9,636	19,480	8,833	(10,647)	-54.6%
PROFESSIONAL SERVICES	17,916	16,089	30,000	-	(30,000)	-100.0%
OTHER MATERIALS	125,314	107,819	110,350	95,222	(15,128)	-13.7%
OTHER SERVICES	44,655	20,259	36,487	27,751	(8,736)	-23.9%
<b>TOTAL</b>	<b>\$ * 8,656,467</b>	<b>\$ 7,877,380</b>	<b>\$ 7,746,143</b>	<b>\$ 8,070,896</b>	<b>\$ 324,753</b>	<b>4.2%</b>

\* FY04 Actual includes wages and salaries for a partial year from the former Operations Planning Department.

On November 16, 2005, MWRA reorganized staff from the Capital Engineering and Construction, Engineering and Construction, and CSO Program departments to form a new, consolidated Engineering and Construction Department under the direction of the Deputy Chief Operating Officer. Staff in the new department are organized into three units including Wastewater Engineering, Water Engineering, and Construction.

The new department provides in-house engineering, consultant management (during the facilities planning, environmental review, design, and engineering services during construction stages of capital projects), drafting, surveying, construction management, and other technical assistance required for the maintenance, repair, and rehabilitation of wastewater and waterworks systems. The **Wastewater Engineering Unit** manages all wastewater design and engineering projects including CSO engineering activities. The unit also maintains the Design Information Services Center (DISC), which provides computer-aided design and drafting (CADD) and services. The **Water Engineering Unit** manages all water design and engineering projects as well as specialized technical services in electrical, structural, mechanical, and civil engineering disciplines. The **Construction Unit** provides contract management and resident inspection on all MWRA water and wastewater construction and rehabilitation projects, with the exception of Deer Island.

### Budget Highlights

- \$7.8 million for **Regular Pay**, which represents 98% of the total Proposed FY07 department budget and funds 96 positions. The increase of \$482,000 is the result of funding the actual number of filled positions, (FY06 budget assumes three vacancies), contractual increases and leave balance accrual adjustments.
- \$58,000 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 Proposed FY07 is level funded from FY06.
- \$95,000 for **Other Materials**, a \$15,000 decrease compared with FY06. The budget includes \$72,000 for vehicle expense for staff traveling to construction sites and \$18,000 for office supplies. The decrease reflects the elimination of gas card fuel purchases due to staff using the Chelsea fuel depot.
- \$28,000 for **Other Services**, a \$9,000 decrease compared with the FY06. The budget includes \$10,000 for Memberships and Dues as well as \$8,000 for printing of in-house designed plans and specifications. The decrease is based on a reduction of printing and duplicating to reflect actual spending over the past few years.
- \$9,000 for **Maintenance**, a \$92,000 decrease compared with FY06. The FY06 budget included funds for decommissioning eight chloramination sites associated with the start-up of the JJCWTP which started up.
- **Professional Service** funding of \$30,000 for an energy consultant has been moved to the Operations Administration budget in FY07.



Law Division  
Budget

## LAW DIVISION

Proposed FY07 Current Expense Budget						
LAW DIVISION by Line Item						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 1,532,656	\$ 1,553,854	\$ 1,526,493	\$ 1,720,178	\$ 193,685	12.7%
OVERTIME	40	93	-	-	-	-
TRAINING & MEETINGS	5,200	4,390	4,000	3,748	(252)	-6.3%
PROFESSIONAL SERVICES	278,636	211,672	256,584	176,000	(80,584)	-31.4%
OTHER MATERIALS	3,208	4,140	5,539	5,539	-	0.0%
OTHER SERVICES	31,453	29,210	50,539	32,500	(18,039)	-35.7%
<b>TOTAL</b>	<b>\$ 1,851,193</b>	<b>\$ 1,803,359</b>	<b>\$ 1,843,155</b>	<b>\$ 1,937,965</b>	<b>\$ 94,810</b>	<b>5.1%</b>

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 FY07 direct expense budget.

Law Division staff, though usually representing MWRA in a defensive posture, is working with Operations Division staff to effectuate cost recovery claims for design errors and omissions by MWRA design. In addition, the Law Division assists in the early resolution of contractor and vendor claims prior to litigation so as to resolve same as favorably and early as possible thereby reducing or eliminating litigation costs and interest payable upon such claims were they to be litigated. Through January, 2006, Law Division has under spent its professional services line item (outside counsel/experts) as a result of efforts to keep more legal work in-house. While charges to this line item could pick up in the later part of the fiscal year, it still appears that there will be a \$70 - \$80K savings by year end, and that the reduction proposed for FY07 is at an appropriate level.

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***

- *\$1.72 million for **wages and salaries**, an increase of \$194,000 or 13% from the FY06 budget. The Proposed FY07 budget includes funding for 21 positions, one less than funded in FY06. The proposed budget also includes \$5,000, reduced from FY06 funding, for one intern position for three months to assist in legal research and litigation.*
- *\$176,000 for **Professional Services**, a decrease of \$81,000 or 31% from the FY06 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 proposed 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 handles 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.*



Finance Division  
Budget

## FINANCE DIVISION

Proposed FY07 Current Expense Budget FINANCE DIVISION by Line Item						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 2,652,874	\$ 2,672,016	\$ 2,658,987	\$ 2,894,871	\$ 235,884	8.9%
OVERTIME	50	63	-	-	-	-
TRAINING & MEETINGS	1,717	3,918	3,975	5,333	1,358	34.2%
PROFESSIONAL SERVICES	288,609	405,016	342,300	418,300	76,000	22.2%
OTHER MATERIALS	3,056	7,025	8,353	10,823	2,470	29.6%
OTHER SERVICES	25,481	22,563	22,435	28,075	5,640	25.1%
<b>TOTAL</b>	<b>\$ 2,971,787</b>	<b>\$ 3,110,601</b>	<b>\$ 3,036,050</b>	<b>\$ 3,357,402</b>	<b>\$ 321,352</b>	<b>10.6%</b>

Proposed FY07 Current Expense Budget FINANCE DIVISION by Department						
DEPARTMENT	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
DIVISION DIRECTOR'S OFFICE	\$ 227,366	\$ 214,455	\$ 195,818	\$ 237,803	\$ 41,985	21.4%
PLANNING/COORDINATION	45,140	500	-	-	-	-
BUDGET	479,092	382,787	313,711	432,996	119,285	38.0%
TREASURY	830,900	986,497	940,966	1,049,116	108,150	11.5%
CONTROLLER	1,389,289	1,526,362	1,585,555	1,637,487	51,932	3.3%
<b>TOTAL</b>	<b>\$ 2,971,787</b>	<b>\$ 3,110,601</b>	<b>\$ 3,036,050</b>	<b>\$ 3,357,402</b>	<b>\$ 321,352</b>	<b>10.6%</b>

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.

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 grants and loans in addition to debt issuance and investments. In FY05, 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 FY07 proposed budget for the Finance division accounts for less than 2% of MWRA's direct expense budget.

**DIVISION DIRECTOR’S OFFICE**

Proposed FY07 Current Expense Budget FINANCE DIVISION DIRECTOR'S OFFICE by Line Item							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
WAGES & SALARIES	\$ 227,356	\$ 213,547	\$ 193,336	\$ 235,244	\$ 41,908		21.7%
TRAINING & MEETINGS	-	898	1,500	1,339	(161)		-10.7%
OTHER MATERIALS	10	10	-	20	20		-
OTHER SERVICES	-	-	982	1,200	218		22.2%
<b>TOTAL</b>	<b>\$ 227,366</b>	<b>\$ 214,455</b>	<b>\$ 195,818</b>	<b>\$ 237,803</b>	<b>\$ 41,985</b>		<b>21.4%</b>

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 FY07 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:

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

***Budget Highlights***

- *Total Proposed FY07 budget of \$235,000 for **Wages and Salaries**, an increased \$42,000 from the FY06 budget due to the anticipation of full staffing levels. The proposed budget funds 3 positions*

## BUDGET

Proposed FY07 Current Expense Budget BUDGET by Line Item						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 463,610	\$ 371,573	\$ 304,393	\$ 419,944	\$ 115,551	38.0%
TRAINING & MEETINGS	-	262	450	402	(48)	-10.7%
OTHER MATERIALS	41	70	300	300	-	0.0%
OTHER SERVICES	15,441	10,882	8,568	12,350	3,782	44.1%
<b>TOTAL</b>	<b>\$ 479,092</b>	<b>\$ 382,787</b>	<b>\$ 313,711</b>	<b>\$ 432,996</b>	<b>\$ 119,285</b>	<b>38.0%</b>

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 Proposed FY07 budget of \$420,000 for **Wages and Salaries**, an increase of \$116,000 from the FY06 budget, due to the anticipation of full staffing levels. Budget department staff rely on and work in conjunction with division finance staff to support the annual budget development, monitoring and reporting. The proposed budget funds 5 positions.*
- ***Other Services** include \$5,700 for a WEFA membership for inflation projections and \$6,000 to cover the costs of printing a limited number of budget documents and reports.*



## TREASURY

Proposed FY07 Current Expense Budget TREASURY by Line Item							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
WAGES & SALARIES	\$ 634,667	\$ 754,298	\$ 754,669	\$ 811,909	\$ 57,240	7.6%	
OVERTIME	30	63	-	-	-	-	
TRAINING & MEETINGS	831	2,185	1,000	2,677	1,677	167.7%	
PROFESSIONAL SERVICES	184,282	215,016	172,300	218,300	46,000	26.7%	
OTHER MATERIALS	2,257	4,790	3,300	5,250	1,950	59.1%	
OTHER SERVICES	8,833	10,145	9,697	10,980	1,283	13.2%	
<b>TOTAL</b>	<b>\$ 830,900</b>	<b>\$ 986,497</b>	<b>\$ 940,966</b>	<b>\$ 1,049,116</b>	<b>\$ 108,150</b>	<b>11.5%</b>	

The Treasury Department secures funds for ongoing operations and capital programs in addition to processing cash disbursements. For budgeting purposes, the Risk Management Department is included in the Treasury Department. Department staff collect revenue, disburse funds, and manages grant and loan programs in addition to 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*

- \$812,000 for **Wages and Salaries**, an increase of \$57,000 from the FY06 budget, due to the addition of one position in the risk management department. The proposed budget funds 11 positions.
- \$218,000 for **Professional Services**, an increase of \$46,000 or 27% from FY06 budget. The proposed budget includes funds for trustee and bank deposit services and insurance consultant service.

## CONTROLLER

Proposed FY07 Current Expense Budget CONTROLLER by Line Item						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 1,282,234	\$ 1,332,597	\$ 1,406,589	\$ 1,427,774	\$ 21,185	1.5%
OVERTIME	19	-	-	-	-	-
TRAINING & MEETINGS	823	573	1,025	915	(110)	-10.7%
PROFESSIONAL SERVICES	104,327	190,000	170,000	200,000	30,000	17.6%
OTHER MATERIALS	679	1,656	4,753	5,253	500	10.5%
OTHER SERVICES	1,207	1,536	3,188	3,545	357	11.2%
<b>TOTAL</b>	<b>\$ 1,389,289</b>	<b>\$ 1,526,362</b>	<b>\$ 1,585,555</b>	<b>\$ 1,637,487</b>	<b>\$ 51,932</b>	<b>3.3%</b>

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 \$21,000 or 1.5% from the FY06 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. The proposed budget funds 21 positions.*
- *\$200,000 for audit services, \$30,000 above the FY6 budget reflecting higher anticipated costs for these services.*



Support Services Division  
Budget

## SUPPORT SERVICES DIVISION

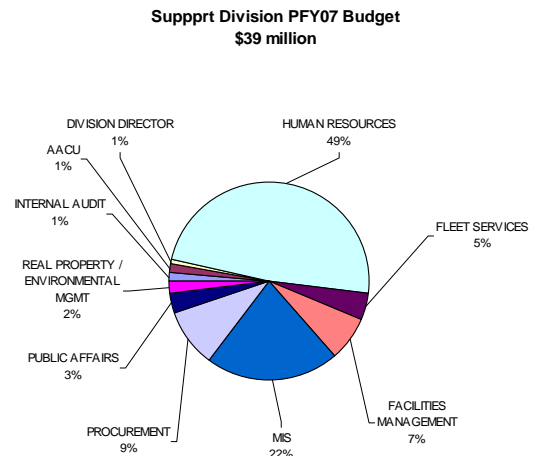
Proposed FY07 Current Expense Budget SUPPORT DIVISION by Line Item						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 14,092,833	\$ 13,736,162	\$ 14,148,873	\$ 13,996,879	\$ (151,994)	-1.1%
OVERTIME	50,779	57,103	61,603	45,354	(16,249)	-26.4%
FRINGE BENEFITS	10,771,098	12,197,305	13,602,672	15,834,743	2,232,071	16.4%
WORKERS' COMPENSATION	1,687,301	1,038,298	1,200,000	940,000	(260,000)	-21.7%
UTILITIES	1,039,882	975,625	839,169	123,112	(716,057)	-85.3%
ONGOING MAINTENANCE	3,657,632	3,734,642	3,572,023	2,800,759	(771,264)	-21.6%
TRAINING & MEETINGS	52,698	73,794	58,643	46,819	(11,824)	-20.2%
PROFESSIONAL SERVICES	812,896	927,672	1,117,090	474,462	(642,628)	-57.5%
OTHER MATERIALS	1,009,591	437,074	797,103	1,038,506	241,403	30.3%
OTHER SERVICES	5,941,170	5,678,773	5,643,581	3,366,233	(2,277,348)	-40.4%
<b>TOTAL</b>	<b>\$ 39,115,880</b>	<b>\$ 38,856,448</b>	<b>\$ 41,040,757</b>	<b>\$ 38,666,867</b>	<b>\$ (2,373,890)</b>	<b>-5.8%</b>

Proposed FY07 Current Expense Budget SUPPORT DIVISION by Department						
DEPARTMENT	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
DIVISION DIRECTOR	\$ 429,759	\$ 473,915	\$ 788,945	\$ 249,253	\$ (539,692)	-68.4%
INTERNAL AUDIT	500,572	525,367	540,670	558,182	17,512	3.2%
PUBLIC AFFAIRS	1,364,023	1,330,809	1,416,445	1,303,274	(113,171)	-8.0%
FACILITIES MANAGEMENT	7,915,969	7,375,557	7,286,444	2,775,235	(4,511,209)	-61.9%
FLEET SERVICES	1,144,995	1,211,148	1,614,598	1,771,373	156,775	9.7%
AACU	501,178	519,847	536,265	553,415	17,150	3.2%
HUMAN RESOURCES	14,289,480	14,949,227	16,784,059	18,719,966	1,935,907	11.5%
MIS	9,355,643	8,329,376	7,962,373	8,369,033	406,660	5.1%
PROCUREMENT	3,070,600	3,334,042	3,379,729	3,622,179	242,450	7.2%
REAL PROPERTY / ENVIRONMENTAL MGMT	602,800	807,160	731,229	744,957	13,728	1.9%
<b>TOTAL</b>	<b>\$ 39,175,019</b>	<b>\$ 38,856,448</b>	<b>\$ 41,040,757</b>	<b>\$ 38,666,867</b>	<b>\$ (2,373,890)</b>	<b>-5.8%</b>

<sup>1</sup>The 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, occupational health and safety, internal audit, fleet services, computer system development and management, library and records management, and mail and employee shuttle services. The division also manages the Charlestown Navy Yard headquarters.

The division budget includes ten departments: Division Director, Internal Audit, Public Affairs, Facilities Management, Fleet Services, Affirmative Action and Compliance Unit (AACU), Human Resources, Management Information Systems (MIS), Procurement, and Real Property and Environmental Management (RPEM). Internal Audit, Public Affairs, and AACU, funded as part of the Support Services budget, report to the MWRA's Executive Director. The \$39 million Proposed FY07 budget accounts for 19% of MWRA's direct expense budget. The division budget includes \$15.8 million for fringe benefits for all MWRA personnel; \$2.1 million for lease, taxes insurance, and operating and maintenance costs for the Charlestown Navy Yard (CNY) headquarters; and \$1 million for



workers' compensation claims and medical expenses. Net of these agency-wide expenses, the Support Services Division budget accounts for 10% of direct expenses.

**DIVISION DIRECTOR**

Proposed FY07 Current Expense Budget DIVISION DIRECTOR							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
WAGES & SALARIES	\$ 424,503	\$ 385,908	\$ 427,011	\$ 244,824	\$ (182,187)	-42.7%	
OVERTIME	522	1,579	-	-	-	-	
FRINGE BENEFITS	44	-	-	-	-	-	
ONGOING MAINTENANCE	24	81,062	350,000	-	(350,000)	-100.0%	
TRAINING & MEETINGS	49	834	1,300	-	(1,300)	-100.0%	
OTHER MATERIALS	1,693	1,948	7,827	3,525	(4,302)	-55.0%	
OTHER SERVICES	2,924	2,584	2,807	904	(1,903)	-67.8%	
<b>TOTAL</b>	<b>\$ 429,759</b>	<b>\$ 473,915</b>	<b>\$ 788,945</b>	<b>\$ 249,253</b>	<b>\$ (539,692)</b>	<b>-68.4%</b>	

The Division Director department consists of management and administrative staff. During FY06 staff and responsibilities related to the security function transitioned to the Executive Division as part of the Office of Emergency Preparedness (OEP).

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.
- Ensure proper and effective communication between MWRA and the communities served, other agencies, and state and local officials.

**Budget Highlights**

- Total Proposed FY07 budget of \$249,000, a decrease of \$540,000 or 68.4% from the FY06 budget. Reduction primarily due to the transfer of security staff and responsibilities to OEP. This proposed budget includes funding for 2 positions.

## INTERNAL AUDIT

Proposed FY07 Current Expense Budget INTERNAL AUDIT							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
WAGES & SALARIES	\$ 489,795	\$ 512,994	\$ 525,725	\$ 544,374	\$ 18,649	3.5%	
TRAINING & MEETINGS	8,038	9,903	11,975	10,348	(1,627)	-13.6%	
OTHER MATERIALS	889	1,455	2,100	2,400	300	14.3%	
OTHER SERVICES	1,850	1,015	870	1,060	190	21.8%	
<b>TOTAL</b>	<b>\$ 500,572</b>	<b>\$ 525,367</b>	<b>\$ 540,670</b>	<b>\$ 558,182</b>	<b>\$ 17,512</b>	<b>3.2%</b>	

The Internal Audit Department monitors the efficiency and integrity of MWRA operations 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 also monitors MWRA contracts through its contract audit program, including approval of provisional consultant indirect cost rates and subsequent audit of consultant billings; performs labor burden reviews, construction change orders and claim audits, and vendor audits. Internal Audit reports to the 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 mid-year FY06, Internal Audit has identified approximately \$432,000 in contract savings, including \$208,000 related to consultant billings to MWRA, \$128,000 related to vendor audits and contract negotiation support, and \$96,000 related to construction change orders and claims.

### ***Budget Highlights***

- *Total Proposed FY07 budget of \$558,182, an increase of \$18,000 or 3.0% over the FY06 budget.*
- *\$544,000 for **Wages and Salaries**, an increase of \$19,000 or 4% from the FY06 budget, primarily due to contractual adjustments to regular pay. The proposed budget supports 8 positions.*
- *\$10,000 for **Training and Meetings**, of which 52% is for travel to consultant offices to perform incurred cost audits of billings for design and engineering services.*

**PUBLIC AFFAIRS**

Proposed FY07 Current Expense Budget						
PUBLIC AFFAIRS						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 1,308,363	\$ 1,272,436	\$ 1,304,536	\$ 1,210,489	\$ (94,047)	-7.2%
OVERTIME	18	147	-	-	-	-
TRAINING & MEETINGS	4,561	2,651	3,550	2,320	(1,230)	-34.6%
PROFESSIONAL SERVICES	1,025	1,050	1,050	1,050	-	0.0%
OTHER MATERIALS	18,675	20,193	22,178	9,302	(12,876)	-58.1%
OTHER SERVICES	31,381	34,332	85,131	80,113	(5,018)	-5.9%
<b>TOTAL</b>	<b>\$ 1,364,023</b>	<b>\$ 1,330,809</b>	<b>\$ 1,416,445</b>	<b>\$ 1,303,274</b>	<b>\$ (113,171)</b>	<b>-8.0%</b>

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 and Coordination 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***

- *\$1.2 million for **Wages and Salaries**, a decrease of \$94,000 or 7% from the FY06 budget, reflecting the transfer of staff to the newly created Office of Emergency Preparedness Department. The proposed budget now supports 16 positions.*
- *\$89,000 for **Other Materials and Other Services**, including \$64,000 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, teachers and environmental organizations about Boston Harbor and other environmental matters.*



## FACILITIES MANAGEMENT

Proposed FY07 Current Expense Budget FACILITIES MANAGEMENT						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 971,144	\$ 995,985	\$ 1,010,094	\$ 376,893	\$ (633,201)	-62.7%
OVERTIME	25,466	25,059	28,488	12,239	(16,249)	-57.0%
FRINGE BENEFITS	549	253	50	300	250	500.0%
UTILITIES	1,039,111	974,175	837,669	121,612	(716,057)	-85.5%
ONGOING MAINTENANCE	370,028	312,151	345,450	37,300	(308,150)	-89.2%
TRAINING & MEETINGS	117	38	140	125	(15)	-10.7%
PROFESSIONAL SERVICES	399,908	586,796	638,446	-	(638,446)	-100.0%
OTHER MATERIALS	139,645	77,351	17,679	68,680	51,001	288.5%
OTHER SERVICES	4,970,001	4,403,749	4,408,428	2,158,086	(2,250,342)	-51.0%
<b>TOTAL</b>	<b>\$ 7,915,969</b>	<b>\$ 7,375,557</b>	<b>\$ 7,286,444</b>	<b>\$ 2,775,235</b>	<b>\$ (4,511,209)</b>	<b>-61.9%</b>

Proposed FY07 Current Expense Budget FACILITIES MANAGEMENT SUPPORT by Area						
AREA	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
FRSA	\$ 572,488	\$ 337,090	\$ 211,052	\$ -	\$ (211,052)	-100.0%
FACILITIES MANAGEMENT	6,622,895	6,022,429	6,063,865	2,385,023	(3,678,842)	-60.7%
ADMINISTRATIVE SERVICES	720,586	1,016,038	1,011,527	390,212	(621,315)	-61.4%
<b>TOTAL</b>	<b>\$ 7,915,969</b>	<b>\$ 7,375,557</b>	<b>\$ 7,286,444</b>	<b>\$ 2,775,235</b>	<b>\$ (4,511,209)</b>	<b>-61.9%</b>

The Facilities Management Department provides a wide range of support services to MWRA staff located at the Charlestown Navy Yard (CNY). During FY06 MWRA sold the remainder of the FRSA parcel and transferred management of the Chelsea facility to the Operations Division.

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

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.

The goals of the Facilities Management Department are to:

- Provide a safe and well-maintained working environment for all MWRA staff at CNY and provide appropriate space for staff by coordinating workspace planning, design, and furniture acquisitions.
- Maintain the CNY facilities to prevent loss or deterioration of MWRA assets.
- Support efforts to limit the fleet size while meeting operational needs by providing reliable motor pool and transportation services.

### **Budget Highlights**

- *Total Proposed FY07 budget of \$2.8 million, a decrease of \$4.5 million or 61.9% as compared to FY06 budget. Significant decreases reflect the closing of the FRSA facility and the transfer of expenses related to the Chelsea facility to the Operations Division.*
- *\$377,000 for **Wages and Salaries**, a decrease of \$633,000 or 63% from the FY06 budget, primarily due to the transfer of 7 staff to the Operations Division, and one staff to the Procurement Department. The proposed budget now supports 8 positions..*
- *\$12,000 for **Overtime** for coverage of facility maintenance and support services, a decrease of \$16,000 or 57.0% from FY06. Funds are used to provide coverage of daily services, such as shuttles, reception services and during vacations or other periods when staff are away.*
- *\$122,000 for **Utilities**, a decrease of \$716,000 or 85.0% from FY06 budget.*
- *\$37,000 for **Maintenance**, a decrease of \$308,000 or 89.2% over FY06 budget.*
- *\$2.2 million for **Other Services**, a decrease of \$2.2 million or 51.0%, as compared to FY06 budget. Savings of \$907,000 are the result of the renegotiation of CNY facility lease.*

## FLEET SERVICES

Proposed FY07 Current Expense Budget FLEET SERVICES							
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07		
WAGES & SALARIES	\$ 543,768	\$ 600,409	\$ 620,060	\$ 644,123	\$ 24,063		3.9%
OVERTIME	18,720	20,078	20,000	20,000	-		0.0%
FRINGE BENEFITS	768	1,044	-	1,050	1,050		-
UTILITIES	771	1,450	1,500	1,500	-		0.0%
ONGOING MAINTENANCE	454,673	506,201	510,500	528,518	18,018		3.5%
TRAINING & MEETINGS	(75)	-	-	-	-		-
OTHER MATERIALS	63,706	78,224	458,000	571,644	113,644		24.8%
OTHER SERVICES	3,525	3,742	4,538	4,538	-		0.0%
<b>TOTAL</b>	<b>\$ 1,085,856</b>	<b>\$ 1,211,148</b>	<b>\$ 1,614,598</b>	<b>\$ 1,771,373</b>	<b>\$ 156,775</b>		<b>9.7%</b>

Fleet Services manages and maintains MWRA's motor vehicle and equipment fleet. 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. During FY06 MWRA transferred the management of the radio communications network that provides communications and emergency support services to MWRA headquarters and field personnel to MIS. Fleet Services also manages the Chelsea fuel facility, the gas card program and development and processing of specifications for new vehicles and equipment.

### ***Budget Highlights***

- *Total Proposed FY07 budget of \$1.7 million, an increase of \$156,775 or 9.7% over the FY06 budget.*
- *\$644,000 for **Wages & Salaries**, an increase of \$24,000 or 3.9% over the FY06 budget, includes funds for 12 positions. The increase is attributed to settlement of the union contracts.*
- **Ongoing Maintenance** budget of \$528,518 and increase of \$18,018 or 3.5% over the FY06 budget. The proposed budget includes funds for automotive materials & services to maintain MWRA's vehicle fleet.
- *\$571,000 for **Other Materials**, an increase of \$113,000 or 24.8% over the FY06 budget. Fleet Services FY06 budget included vehicle/equipment fueling funds. The Proposed FY07 amount was calculated at 15% increase over the average price at the end of December.*

### **FY06 Accomplishments**

#### **Fleet Services**

- Fleet Services and Procurement have worked together to design and implement new two-year automotive materials contracts.
- Fleet Services developed specifications for the purchase of 19 new / replacement vehicles. The procurement process is underway.
- Fleet Services has begun work with MIS staff on the design and implementation of a Maximo system update which includes a transportation module specifically designed for a fleet environment.

## AFFIRMATIVE ACTION and COMPLIANCE

Proposed FY07 Current Expense Budget AFFIRMATIVE ACTION & COMPLIANCE UNIT						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 498,465	\$ 517,460	\$ 532,494	\$ 549,921	\$ 17,427	3.3%
OVERTIME	-	94	-	-	-	-
TRAINING & MEETINGS	1,400	1,345	1,450	1,294	(156)	-10.8%
OTHER MATERIALS	313	448	1,621	1,500	(121)	-7.5%
OTHER SERVICES	1,000	500	700	700	-	0.0%
<b>TOTAL</b>	<b>\$ 501,178</b>	<b>\$ 519,847</b>	<b>\$ 536,265</b>	<b>\$ 553,415</b>	<b>\$ 17,150</b>	<b>3.2%</b>

The Affirmative Action and Compliance Unit (AACU) develops, administers, and monitors compliance of Affirmative Action Plan programs and policies by ensuring equal opportunity and non-discrimination in employment and equitable access of Minority/Women Business Enterprises in Authority procurement activities.

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 of goal attainment in identified underutilization of minorities and female job groups.
- 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, and coordinate with other public entities regarding state and federal requirements.
- Assist divisions and departments in the understanding and implementation of MBE/WBE program policies and practices and monitor and report on contractor compliance and expenditures.

### ***Budget Highlights***

- *Total Proposed FY07 budget of \$553,000, an increase of \$17,000 or 3% over the FY06 budget, primarily due to contractual adjustments to regular pay. The proposed budget supports 8 positions.*

## HUMAN RESOURCES

Proposed FY07 Current Expense Budget HUMAN RESOURCES						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 1,362,099	\$ 1,320,455	\$ 1,437,636	\$ 1,397,388	\$ (40,248)	-2.8%
OVERTIME	138	344	437	437	-	0.0%
FRINGE BENEFITS	10,769,692	12,195,892	13,602,622	15,833,393	2,230,771	16.4%
WORKERS' COMPENSATION	1,687,301	1,038,298	1,200,000	940,000	(260,000)	-21.7%
ONGOING MAINTENANCE	-	52	1,200	1,000	(200)	-16.7%
TRAINING & MEETINGS	3,314	3,711	7,698	7,406	(292)	-3.8%
PROFESSIONAL SERVICES	411,681	338,911	467,594	472,911	5,317	1.1%
OTHER MATERIALS	19,842	22,312	25,760	25,585	(175)	-0.7%
OTHER SERVICES	35,413	29,252	41,112	41,846	734	1.8%
<b>TOTAL</b>	<b>\$ 14,289,480</b>	<b>\$ 14,949,227</b>	<b>\$ 16,784,059</b>	<b>\$ 18,719,966</b>	<b>\$ 1,935,907</b>	<b>11.5%</b>

Proposed FY07 Current Expense Budget HUMAN RESOURCES by Area						
AREA	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
EMPLOYEE/COMP/BEN	\$ 610,099	\$ 610,445	\$ 685,234	\$ 649,457	\$ (35,777)	-5.2%
LABOR RELATIONS	608,367	691,158	735,948	737,361	1,413	0.2%
TRAINING	585,776	388,832	527,569	526,164	(1,405)	-0.3%
CENTRALIZED FRINGE BENEFITS	12,485,238	13,258,792	14,835,308	16,806,984	1,971,676	13.3%
<b>TOTAL</b>	<b>\$ 14,289,480</b>	<b>\$ 14,949,227</b>	<b>\$ 16,784,059</b>	<b>\$ 18,719,966</b>	<b>\$ 1,935,907</b>	<b>11.5%</b>

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 designed to improve employee knowledge, skills, productivity, and the quality of workplace interaction. It is responsible for oversight and tracking of MWRA performance evaluation programs, 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.

### ***Budget Highlights***

- *\$1.4 million for **Wages and Salaries**, a decrease of \$40,000 or 2.8% under the FY06 budget, includes funding for 19 positions.*
- *\$15.8 million for **Fringe Benefits**, an increase of \$2.2 million or 16.4% over the FY06 budget. The proposed budget includes \$13.7 million for MWRA's share of health insurance costs, \$1.2 million for MWRA's share of Medicare taxes, \$826,000 for MWRA's share of dental insurance costs and union health and welfare fund contributions, \$70,000 for unemployment insurance payments, and \$31,000 for tuition reimbursement.*
- *\$940,000 for **Workers' Compensation** expenses, a decrease of \$260,000 or 21.7% under the FY06 budget. Human Resources is responsible for the management of this program and coordination with the third-party administrator.*
- *\$473,000 for **Professional Services**, includes \$219,000 for the professional development and technical training, \$25,500 for the Employee Assistance Program, and \$58,000 for specialized investigation services and medical evaluation services, \$115,000 for Workers Compensation claims administration and \$55,500 for arbitration expenses.*

### **FY06 Accomplishments**

#### **Human Resources**

In FY06, the accomplishments of the Human Resources Department included:

- Successfully negotiated one-year extensions with two collective bargaining units.
- Developed and implemented a process for collecting and tracking required licenses from employees in positions requiring licenses.
- Renewed and implemented an enhanced MWRA Dental Plan at no additional costs.
- Improved internal HR processing of personnel paperwork by automating the employee change of status form.
- Provided follow-up training for managers accountable for managing the Drug and Alcohol Testing Policy.

## MANAGEMENT INFORMATION SYSTEMS (MIS)

Proposed FY07 Current Expense Budget MIS						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 4,871,640	\$ 4,677,687	\$ 4,638,449	\$ 5,072,225	\$ 433,776	9.4%
OVERTIME	1,603	1,943	2,678	2,678	-	0.0%
FRINGE BENEFITS	-	4	-	-	-	-
ONGOING MAINTENANCE	3,027,277	2,636,929	2,364,873	2,233,941	(130,932)	-5.5%
TRAINING & MEETINGS	26,817	49,122	15,490	13,823	(1,667)	-10.8%
OTHER MATERIALS	658,762	133,109	164,787	250,031	85,244	51.7%
OTHER SERVICES	769,544	830,582	776,096	796,335	20,239	2.6%
<b>TOTAL</b>	<b>\$ 9,355,643</b>	<b>\$ 8,329,376</b>	<b>\$ 7,962,373</b>	<b>\$ 8,369,033</b>	<b>\$ 406,660</b>	<b>5.1%</b>

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 FY07 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 FY07.
- *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 FY07 include:

- Business continuity and disaster recovery services (planning, SOPs, drills, information security/document support for classified documents, new EOC applications and backup mini-computer center at CWTP).
- Development of a multi-year business systems plan.
- Improved cyber and network security with intrusion detection device appliance upgrades.
- Wireless network planning.
- PI enhancements for Water, Transport and Deer Island.
- Continuation of multi-year CIP projects including TRAC and LIMS system replacements and Lawson conversion to a new platform.
- Continuation of MAXIMO, TV Inspection software changes, GIS improvements, and metering improvements.
- 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.

### ***Budget Highlights***

- *Total Proposed FY07 budget of \$8.3 million, an increase of \$406,660 or 5.1% from FY06 budget, primarily in Wages and Salaries due to hiring a network program manager (offset by a \$92,000 decrease in network contract service), re-budgeting a position for a returnee from military service, union salary increases and leave balance adjustments. The other major increases were partial restoration of PC replacement funding and additional telecommunications costs. The proposed budget includes funding for 64 positions.*
- *\$2.2 million for **license and maintenance** fees to support administrative, operations, and database applications used by MWRA staff. This represents a decrease of 5.5% from FY06 budget while incorporating \$100,000 for 24 hour by 7 day intrusion protection services previously budgeted in the CIP (the decreases are due to service agreement consolidation, and reducing a number of non-critical business requests).*
- *\$250,000 for **Other Materials**, an increase of \$85,244 or 51.7% over FY06 budget, reflecting a partial restoration of PC and related hardware replacements.*
- *\$796,000 for **Other Services**, an increase of \$20,239 or 2.6% from FY06 budget, due to telecommunication cost increases resulting from business continuity requirements, network changes and the reconnection of the CSB at DITP for Records Center storage.*



## **FY06 YTD Accomplishments**

### **Management Information Systems (MIS)**

- **Business Continuity/Disaster Recovery:** Developed MWRA-wide communications, vital records and MIS mission critical system plans/SOPs. Configured a mini EOC for DITP. Implemented email, security restricted and data connectivity improvements to safeguard mission critical applications until a mini-computer center is completed at CWTP.
- **Cyber-Security:** No unplanned downtime was experienced. MWRA's email gateway received 1,478,567 email messages YTD, of which it blocked 381,831 due to blacklisted sources, virus and non-compliant email attachments. Additionally, 262,527 spam messages were quarantined (of which less than 1% were incorrectly categorized and sent on to their recipients). Staff pushed out monthly security updates/fixes to PCs/servers, replaced intrusion detection appliances, adopted new SOPs and responded immediately to several critical bulletins throughout the year.
- **SCADA, PICS & Metering:** Integrated numerous CWTP's SCADA tags into PI for management trending/reporting; assisted with CWTP's energy monitoring tool implementation; enhanced the DITP ISO New England 5 Minute Marginal Prices data transfer program; and expanded the OMMS Website for communities to provide near real-time sewer meter data including flow, level, and velocity (water flow, pressure and chlorine residual information is also available).
- **MAXIMO, LIMS, TRAC and ENQUAD:** Completed MAXIMO upgrade to version 5.2; completed LIMS and TRAC replacement system specifications; and initiated EQUAD harbor monitoring database project.
- **A&F applications:** Completed numerous reports, program changes, patches and upgraded XRT and Portia software; provided technical assistance with annual permit, W2 and 1099 productions; and implemented an Inventory and Purchase Order legacy data warehouse.
- **Infrastructure:** Supported the opening of CWTP with network, voice and data connectivity; replaced Nut Island aging PBS; moved Records Center to DITP; continued Microsoft XP upgrades; addressed 10,000 user calls within benchmark and completed a variety of server, switching and network improvements.

## PROCUREMENT

Proposed FY07 Current Expense Budget						
PROCUREMENT						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 3,090,184	\$ 2,948,357	\$ 3,198,158	\$ 3,439,352	\$ 241,194	7.5%
OVERTIME	4,312	7,587	10,000	10,000	-	0.0%
FRINGE BENEFITS	45	112	-	-	-	-
ONGOING MAINTENANCE	(194,370)	198,247	-	-	-	-
TRAINING & MEETINGS	6,397	4,847	14,600	7,362	(7,238)	-49.6%
OTHER MATERIALS	105,077	101,093	95,112	103,875	8,763	9.2%
OTHER SERVICES	58,955	73,799	61,859	61,590	(269)	-0.4%
<b>TOTAL</b>	<b>\$ 3,070,600</b>	<b>\$ 3,334,042</b>	<b>\$ 3,379,729</b>	<b>\$ 3,622,179</b>	<b>\$ 242,450</b>	<b>7.2%</b>

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 manages three regional warehouses/distribution centers that support all MWRA activities.

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.

### ***Budget Highlights***

- *Total Proposed FY07 budget of \$3.6 million, represents a 7.2% increase over FY06 CEB; includes \$3.44 million to support Wages and Salaries for 50 positions. During FY06 three positions transferred to Procurement from Operations (Southborough warehouse) and one position transferred from the Facilities Management department (Admin. Services Manager).*

## REAL PROPERTY and ENVIRONMENTAL MANAGEMENT

Proposed FY07 Current Expense Budget REAL PROPERTY / ENVIRONMENTAL MANAGEMENT						
LINE ITEM	FY04 Actual	FY05 Actual	FY06 Budget	FY07 Proposed	Change FY06 to PFY07	
WAGES & SALARIES	\$ 532,870	\$ 504,471	\$ 454,711	\$ 517,291	\$ 62,580	13.8%
OVERTIME		271	-	-	-	-
TRAINING & MEETINGS	2,080	1,343	2,440	4,141	1,701	69.7%
PROFESSIONAL SERVICES	283	916	10,000	500	(9,500)	-95.0%
OTHER MATERIALS	989	942	2,038	1,964	(74)	-3.6%
OTHER SERVICES	66,578	299,217	262,040	221,061	(40,979)	-15.6%
<b>TOTAL</b>	<b>\$ 602,800</b>	<b>\$ 807,160</b>	<b>\$ 731,229</b>	<b>\$ 744,957</b>	<b>\$ 13,728</b>	<b>1.9%</b>

The Real Property and Environmental Management Department negotiates the purchase or lease of real estate and land necessary to support MWRA's capital projects and operations. 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 quarterly/annual 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; manage the disposition of surplus real property in an efficient manner; and 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; monitor and provide assistance in maintaining environmental regulatory compliance at MWRA facilities.

### ***Budget Highlights***

- *The total Proposed FY07 budget of \$745,000 represents an increase of 1.9% from the FY06 budget primarily, due to changes in Wages & Salaries due to staff classification and schedule changes and non-union and collective bargaining wage increases.*
- *Wages and Salaries budget of \$517,000 includes funding for 6 positions.*
- *Professional Services will decrease from \$10,000 to \$500. The goal of Real Property is to have the sewerage easements and land takings scanned and entered into the Real Property Database during FY07. This will mean the majority of the water and sewer systems will be maintained on the database.*
- *\$221,000 for Other Services, a decrease of \$40,979, or 15.6% from the FY06 Budget. The net decrease is due to completion of the Chestnut Hill Tank Vault cleanup, a decrease in projected spending on Lake Cochituate Groundwater Monitoring, and the addition of projected spending of \$86,000 for FRSA oil plume remediation. This project is a transfer from Facilities Management.*



## Appendices

## APPENDIX A

### 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, holiday pay, and standby pay for MWRA staff, as well as funds for interns and temporary staff.

**Overtime** - This line item includes funds for overtime related to operations, maintenance, 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, diesel 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 B

### **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.

<b>MONTH</b>	<b>ACTIVITY</b>
September – November	Divisions receive budget targets, guidelines, and manuals for the development of budget requests, and can begin to access MWRA’s interactive budgeting system.
December	After the divisions return their budget requests, Rates and Budget Department staff begin the financial management process by consolidating the authority-wide budgets, developing briefing materials for senior management and identifying major budget issues.
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.
March – May	MWRA hosts public hearings to solicit comments on the proposed budget community assessments from citizens in its service area. The Advisory Board reviews the proposed budget and transmits comments and recommendations to the MWRA.
June	The Board of Directors holds a hearing on the proposed budget and the Advisory Board’s comments and recommendations. The Board of Directors adopts a final Current Expense Budget and a schedule of final wholesale water and sewer assessments.

## APPENDIX C

### **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 affect 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 due 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 recommended an increase of \$3 million in the reserve's funding level between FY05 and FY07. Between FY2005 and FY2007, the budget included an increase of \$1 million to increase the reserve to \$19 million. The next consulting engineer or insurance consultant review should be done in FY07.

### **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. The most recent review by the consulting engineer was prepared in December 2005. The recommended reserve remained at \$35 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**

### **General Guidelines**

The Authority shall periodically adopt and revise capital facility programs for the Waterworks and Sewer Systems and capital budgets based on these programs. The Authority shall consult in the preparation of its capital facility programs for the Sewer and Waterworks Systems with the Authority's Advisory Board and the Executive Office of Environmental Affairs, and may consult with other agencies of federal, state and local government concerned with the programs of the Authority. Proposed capital facility programs and capital expenditure budgets for said systems shall be submitted to the Advisory Board for such consultation no less than sixty days prior to adoption or revision by the Authority. The Authority shall prepare a written response to reports submitted to it by the Advisory Board, which response shall state the basis for any substantial divergence between the actions of the Authority and the recommendations contained in such reports of the Advisory Board. The Authority shall capitalize expenditures in accordance with

generally accepted accounting principles. Capital expenditures will be planned in accordance with Authority financing agreements and policies for amortization of capital costs.

### **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.

### **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.

### **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.

### **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.

## APPENDIX D

MWRA Planning Estimates FY2008 to FY2016									
	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
<b>EXPENSES</b>									
Direct Expenses	\$215,570	\$221,049	\$226,691	\$232,438	\$238,740	\$244,668	\$250,777	\$257,046	\$263,471
Indirect Expenses	44,122	42,670	43,448	47,080	51,519	50,700	54,723	52,023	54,307
Capital Financing (before offsets)	380,034	396,931	443,378	463,714	483,646	507,730	501,821	505,715	485,522
Sub-Total Expenses	\$639,727	\$660,650	\$713,517	\$743,233	\$773,905	\$803,098	\$807,321	\$814,784	\$803,300
Debt Service Assistance	0	0	0	0	0	0	0	0	0
Bond Redemption Savings	(20,400)	(7,064)	(3,844)	0	0	0	0	0	0
Variable Rate Savings	0	0	0	0	0	0	0	0	0
Total Expenses	\$619,327	\$653,587	\$709,673	\$743,233	\$773,905	\$803,098	\$807,321	\$814,784	\$803,300
<b>REVENUE &amp; INCOME</b>									
Non-Rate Revenue & Income									
Interest Income/Other Charges	\$41,810	\$41,343	\$42,231	\$43,046	\$43,238	\$43,857	\$44,110	\$44,212	\$44,219
Rate Stabilization	14,022	0	2,079	0	0	0	0	0	0
Total Non-Rate Revenue	\$55,832	\$41,343	\$44,310	\$43,046	\$43,238	43,857	44,110	44,212	44,219
Total Rate Revenue	\$563,494	\$612,243	\$665,363	\$700,187	\$730,666	\$759,241	\$763,211	\$770,572	\$759,081
Rate Revenue Increase	8.7%	8.7%	8.7%	5.2%	4.4%	3.9%	0.5%	1.0%	-1.5%
Estimated Annual Household Charge **									
Charge based on DEP data (weighted)	\$726	\$780	\$840	\$883	\$923	\$962	\$1,012	\$1,035	\$1,041
Charge based on 90,000 gal. (weighted)	\$1,071	\$1,152	\$1,239	\$1,303	\$1,362	\$1,420	\$1,446	\$1,478	\$1,487
<b>WASTEWATER</b>									
<b>EXPENSES</b>									
Direct Expenses	\$155,254	\$159,096	\$163,073	\$166,741	\$171,126	\$175,466	\$179,441	\$184,430	\$188,814
Indirect Expenses	12,534	11,406	10,956	11,109	12,184	11,288	11,525	11,169	10,777
Capital Financing (before offsets)	261,204	264,858	308,766	317,532	343,288	363,519	352,263	351,391	329,031
Sub-Total Wastewater Expenses	\$428,992	\$435,360	\$482,795	\$495,382	\$526,598	\$550,274	\$543,229	\$546,990	\$528,622
Debt Service Assistance	0	0	0	0	0	0	0	0	0
Bond Redemption Savings	(12,600)	(5,560)	(3,844)	0	0	0	0	0	0
Variable Rate Savings	0	0	0	0	0	0	0	0	0
Total Wastewater Expenses	\$416,392	\$429,800	\$478,951	\$495,382	\$526,598	\$550,274	\$543,229	\$546,990	\$528,622
<b>REVENUE &amp; INCOME</b>									
Non-Rate Revenue & Income									
Interest Income/Other Charges	\$25,609	\$24,638	\$25,189	\$25,403	\$25,744	\$26,127	\$26,074	\$26,081	\$25,878
Rate Stabilization	8,143	0	0	0	0	0	0	0	0
Total Non-Rate Revenue	\$33,753	\$24,638	\$25,189	\$25,403	\$25,744	26,127	26,074	26,081	25,878
Wastewater Rate Revenue	\$382,640	\$405,162	\$453,762	\$469,980	\$500,853	\$524,147	\$517,154	\$520,909	\$502,744
Rate Revenue Increase	9.2%	5.9%	12.0%	3.6%	6.6%	4.7%	-1.3%	0.7%	-3.5%
Estimated Annual Household Sewer Charge **									
Charge based on DEP data (weighted)	\$446	\$471	\$520	\$540	\$574	\$601	\$621	\$632	\$623
Charge based on 90,000 gal. (weighted)	\$658	\$695	\$767	\$797	\$847	\$887	\$887	\$903	\$890
<b>WATER</b>									
<b>EXPENSES</b>									
Direct Expenses	\$60,316	\$61,953	\$63,618	\$65,697	\$67,614	\$69,202	\$71,336	\$72,616	\$74,657
Indirect Expenses	31,588	31,264	32,493	35,971	39,335	39,412	43,198	40,854	43,530
Capital Financing (before offsets)	118,831	132,073	134,611	146,182	140,358	144,211	149,559	154,324	156,491
Sub-Total Water Expenses	\$210,734	\$225,290	\$230,722	\$247,850	\$247,307	\$252,824	\$264,092	\$267,794	\$274,679
Debt Service Assistance	0	0	0	0	0	0	0	0	0
Bond Redemption Savings	(7,800)	(1,504)	0	0	0	0	0	0	0
Variable Rate Savings	0	0	0	0	0	0	0	0	0
Total Water Expenses	\$202,934	\$223,787	\$230,722	\$247,850	\$247,307	\$252,824	\$264,092	\$267,794	\$274,679
<b>REVENUE &amp; INCOME</b>									
Non-Rate Revenue & Income									
Interest Income/Other Charges	\$16,201	\$16,705	\$17,043	\$17,643	\$17,494	\$17,731	\$18,036	\$18,130	\$18,342
Rate Stabilization	5,879	0	2,079	0	0	0	0	0	0
Total Non-Rate Revenue	\$22,080	\$16,705	\$19,122	\$17,643	\$17,494	\$17,731	\$18,036	\$18,130	\$18,342
Water Rate Revenue	\$180,855	\$207,082	\$211,601	\$230,207	\$229,813	\$235,094	\$246,056	\$249,664	\$256,337
Rate Revenue Increase	7.5%	14.5%	2.2%	8.8%	-0.2%	2.3%	4.7%	1.5%	2.7%
Estimated Annual Household Water Charge **									
Charge based on DEP data (weighted)	\$280	\$309	\$320	\$343	\$349	\$361	\$391	\$403	\$417
Charge based on 90,000 gal. (weighted)	\$413	\$456	\$471	\$505	\$515	\$533	\$559	\$575	\$596

\*\* 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 33% local, 67% MWRA in FY06.

## APPENDIX E

### 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.

**John J. Carroll Water Treatment Plant (JJCWTP):** Water treatment facility for waters from Quabbin and Wachusett Reservoirs with capacity of 405 mgd using ozonation as a primary disinfectant.

**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 : 3/6/2006

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
<b>Board of Directors</b>		<b>Executive</b>				
	<b>01110</b>	<b>11100</b>	<b>Board of Directors</b>			
		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
<b>Executive Office</b>		<b>Executive</b>				
	<b>01210</b>	<b>12100</b>	<b>Executive Director's Office</b>			
		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:	1 Filled Positions: 3
Cost Center:	Executive Director's Office		Total Positions:	4	Vacants:	1 Filled Positions: 3
Department:	Executive Office		Total Positions:	4	Vacants:	1 Filled Positions: 3
<b>Office Of Emergency Prepare</b>		<b>Executive</b>				
	<b>01710</b>	<b>17100</b>	<b>Office Of Emergency Prepare</b>			
		1710001	Director, Emergency Preparednes			
		1710002	Mgr, Security & Emerg Planning			
		1710003	Security Administrator			
		1710004	Administrative Systems Coord			
Sub-Cost Center:	Office Of Emergency Prepare		Total Positions:	4	Vacants:	0 Filled Positions: 4
Cost Center:	Office Of Emergency Prepare		Total Positions:	4	Vacants:	0 Filled Positions: 4
Department:	Office Of Emergency Prepare		Total Positions:	4	Vacants:	0 Filled Positions: 4
Division:	Executive		Total Positions:	9	Vacants:	1 Filled Positions: 8

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
------------	-------	----------------	----------------

Planning Department	Planning Department
---------------------	---------------------

**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
LOA 1510021	Project Manager, Planning
1510022	Project Manager
1510023	Project Engineer
1510024	Programmer Analyst II
1510025	Project Manager, Public Health
1510028	Project Manager
1510032	Project Manager
1510033	Project Engineer

Sub-Cost Center:	Planning Department	Total Positions:	27	Vacants:	2	Filled Positions:	25
Cost Center:		Total Positions:	27	Vacants:	2	Filled Positions:	25
Department:	Planning Department	Total Positions:	27	Vacants:	2	Filled Positions:	25
Division:	Planning Department	Total Positions:	27	Vacants:	2	Filled Positions:	25

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE				
<b>Director's Office</b>		<b>Finance</b>					
<b>04110</b>	<b>41100</b>	<b>Director's Office</b>					
	4110001		Director of Finance				
	LOA 4110005		Administrative Manager				
	4110005A	4610011	Acting Administrative Manager				
	4110006		Executive Secretary				
Sub-Cost Center:	Director's Office	Total Positions:	3	Vacants:	1	Filled Positions:	2
Cost Center:	Director's Office	Total Positions:	3	Vacants:	1	Filled Positions:	2
Department:	Director's Office	Total Positions:	3	Vacants:	1	Filled Positions:	2

<b>Controller</b>		<b>Finance</b>					
<b>04310</b>	<b>43100</b>	<b>Controller</b>					
	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				
	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				
	4310031		Payroll Specialist				
	LOA 4310031A	4110005	Acting Payroll Specialist				
Sub-Cost Center:	Controller	Total Positions:	22	Vacants:	2	Filled Positions:	20
Cost Center:	Controller	Total Positions:	22	Vacants:	2	Filled Positions:	20
Department:	Controller	Total Positions:	22	Vacants:	2	Filled Positions:	20

<b>Rates &amp; Budget</b>		<b>Finance</b>	
<b>04410</b>	<b>44100</b>	<b>Rates &amp; Budget</b>	
	4410001		Budget Director
	4410004		Financial IS Project Leader
	4410007		Sr Financial Analyst

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	4410011		Budget Manager
	4410016		Sr Financial Analyst
	4410019		Document/Report Develop Spec

Sub-Cost Center:	Rates & Budget	Total Positions:	6	Vacants:	3	Filled Positions:	3
Cost Center:	Rates & Budget	Total Positions:	6	Vacants:	3	Filled Positions:	3
Department:	Rates & Budget	Total Positions:	6	Vacants:	3	Filled Positions:	3

<b>Treasury</b>	<b>Finance</b>
-----------------	----------------

04510	45100	Treasury
	4510001	Treasurer
	4510002	Project Manager, Debt&Finance
	4510004	Account Coordinator
	4510006	Cash Manager
LOA	4510009	Debt/Investment Analyst
	4510030	Account Coordinator
	4510038	Claims Coordinator
	4510041	Director, Adm & Fed/State Fin.
LOA	4510042	Asst Grants Manager
	4510045	Asst Mgr, Rates Revenue & Fina

Sub-Cost Center:	Treasury	Total Positions:	10	Vacants:	1	Filled Positions:	9
Cost Center:	Treasury	Total Positions:	10	Vacants:	1	Filled Positions:	9
Department:	Treasury	Total Positions:	10	Vacants:	1	Filled Positions:	9

<b>Risk Management</b>	<b>Finance</b>
------------------------	----------------

04610	46100	Risk Management
	4610010	Manager, Risk Management
	4610011	Risk Management Coordinator
	4610012	Claims Management Specialist
	4610013	Insurance Officer

Sub-Cost Center:	Risk Management	Total Positions:	4	Vacants:	0	Filled Positions:	4
Cost Center:	Risk Management	Total Positions:	4	Vacants:	0	Filled Positions:	4
Department:	Risk Management	Total Positions:	4	Vacants:	0	Filled Positions:	4
Division:	Finance	Total Positions:	45	Vacants:	7	Filled Positions:	38

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
------------	-------	----------------	----------------

<b>Operations Administration</b>	<b>Operations</b>
----------------------------------	-------------------

05210	52100	Operations Administration
	5210001	Chief Operating Officer
	5210003	Special Asst/Division Director
	5210004	Secretary I
	5210006	Head Administrative Assistant
	5210007	Manager, Contract Admin
	5210008	Asst Manager, Contract Admin
	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	Administrative Coordinator I
	5210036	Sr Financial Analyst
	5210037	Director, Coord & Control
	5210038	Sr Contract Administrator, Tun
	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
	5210059	Manager, Contract Admin
	5210063	Sr Contract Administrator
	5210065	Sr Program Manager
	5210066	Contract Administrator
	5210070	Executive Secretary
	5210071	Director, Operations Mgmt&Admin

Sub-Cost Center:	Operations Administration	Total Positions:	36	Vacants:	2	Filled Positions:	34
Cost Center:	Operations Administration	Total Positions:	36	Vacants:	2	Filled Positions:	34
Department:	Operations Administration	Total Positions:	36	Vacants:	2	Filled Positions:	34

<b>ENQUAD</b>	<b>Operations</b>
---------------	-------------------

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

<b>Residuals</b>	<b>Operations</b>
------------------	-------------------

<b>02150</b>	<b>21500</b>	<b>Operations &amp; Administration</b>
	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

<b>Deer Island</b>	<b>Operations</b>
--------------------	-------------------

<b>02915</b>	<b>29150</b>	<b>Senior Management</b>
	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

<b>02930</b>	<b>29310</b>	<b>Thermal</b>
	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

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2931017		Third Class Engineer
	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
IA	2937511		Area Supervisor
	2937511A	2937537	Acting 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
	2937527		Operator
	2937528		Area Supervisor
	2937529		Area Supervisor
LOA	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

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2937542		Area Supervisor
	2937543		Operator
	2937544		Area Supervisor
	2937545		Operator
LOA	2937546		Operator
	2937548		Operator
	2937551		Operator
	2937553		Operator
Sub-Cost Center:	DI Wastewater Operations		Total Positions: 47
			Vacants: 1
			Filled Positions: 46
<b>02930</b>	<b>29385</b>		<b>Process Control</b>
	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: 1
			Filled Positions: 20
Cost Center:	DI Operations		Total Positions: 80
			Vacants: 2
			Filled Positions: 78
<b>02940</b>	<b>29410</b>		<b>Safety</b>
	2941001		Manager, Safety & Security
	2941003		O&M Safety Specialist
	2941004		Secretary I
	2941006		O&M Safety Specialist
Sub-Cost Center:	Safety		Total Positions: 4
			Vacants: 0
			Filled Positions: 4
<b>02940</b>	<b>29450</b>		<b>DI Administration &amp; Finance</b>
SHR	2945004		Secretary II
	2945005		Financial Analyst
	2945011		Finance & Tech Support Analyst
	2945012		Secretary I
	2945014		Manager, DI Admin & Finance



DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
Sub-Cost Center:	DI Administration & Finance		Total Positions:	5	Vacants:	0 Filled Positions: 5
Cost Center:	DI O&M Support		Total Positions:	9	Vacants:	0 Filled Positions: 9
	<b>02970</b>	<b>29710</b>	<b>Technical Information</b>			
		2971001	Program Manager, Tech Info			
		2971003	TIC Clerk			
		2971004	O&M Systems Specialist			
		2971005	Project Engineer, CADD			
		2971006	CADD Coordinator			
		2971007	File Clerk			
		2971008	Sr Sanitary Engineer			
		2971009	Project Manager			
		2971010	Technical Support Specialist			
		2971011	Contract/Procurement Assistant			
		2971012	Administrative Manager			
		2971013	Construction Coordinator			
Sub-Cost Center:	Technical Information		Total Positions:	12	Vacants:	1 Filled Positions: 11
Cost Center:	DI Capital Program/Planning		Total Positions:	12	Vacants:	1 Filled Positions: 11
	<b>02980</b>	<b>29815</b>	<b>Plant Maintenance</b>			
		2981501	Project Manager, Mechanical			
		2981502	Sr 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
	<b>02980</b>	<b>29855</b>	<b>Work Coordination Maintenance</b>			
		2985501	Work Coordination Center Mgr			
		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	Work Order Coordinator			
Sub-Cost Center:	Work Coordination Maintenance		Total Positions:	11	Vacants:	0 Filled Positions: 11
	<b>02980</b>	<b>29865</b>	<b>Condition Monitoring Maint.</b>			
		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:	1 Filled Positions: 2
	<b>02980</b>	<b>29880</b>	<b>Trade Labor Maintenance</b>			
		2981506	Project Manager			

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2988001		Facilities Manager
	2988002		Secretary I
	2988003		Administrative Systems Coord
	2988004		Manager, Maintenance
	2988005		Assets Manager
	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
LOA	29880102		HVAC Specialist
	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
LOA	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
	29880136		M & O Specialist
	29880137		Building/Grounds Worker
	29880139		Building/Grounds Worker
	2988014		Building/Grounds Equip Oper
	29880143		Unit Supervisor
IA	2988015		Building/Grounds Worker

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2988016		Building/Grounds Worker
	2988017		Building/Grounds Worker
LOA	2988018		Equipment Repair Specialist
	2988019		Building/Grounds Equip Oper
	2988021		Building/Grounds Equip Oper
	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
LOA	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		Electrical Operations Super

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
LOA	2988065		Electrician
	2988066		Electrician
	2988067		Electrician
	2988068		Electrician
	2988069		Electrician
	2988070		Sr Med Elect Volt Specialist
	2988071		Area Manager, Elec/Piping
LOA	2988072		Electrician
	2988073		Electrician
	2988074		Medium Voltage Specialist
	2988075		Electrician
	2988076		Electrician
LOA	2988077		Electrician
	2988078		Medium Voltage Specialist
	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
IA	2988099		HVAC Specialist

Sub-Cost Center:	Trade Labor Maintenance	Total Positions:	128	Vacants:	8	Filled Positions:	120
Cost Center:	DI Maintenance	Total Positions:	147	Vacants:	9	Filled Positions:	138
Department:	Deer Island	Total Positions:	254	Vacants:	12	Filled Positions:	242

<b>Clinton</b>	<b>Operations</b>
----------------	-------------------

02910	29100	Clinton
	2910001	Superintendent, Clinton
	2910002	Area Supervisor
	2910005	Area Supervisor
	2910006	Operator
	2910010	Area Manager

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE		
	2910011		M & O Specialist		
	2910013		M & O Specialist		
Sub-Cost Center:	Clinton		Total Positions: 7	Vacants: 1	Filled Positions: 6
Cost Center:	Clinton		Total Positions: 7	Vacants: 1	Filled Positions: 6
Department:	Clinton		Total Positions: 7	Vacants: 1	Filled Positions: 6

<b>Wastewater Operations</b>	<b>Operations</b>
------------------------------	-------------------

**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
	2210022	Sampling Associate
	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
	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
	2210055	Program Manager, Compliance
	2210056	Industrial Coordinator
LOA	2210059	Industrial Coordinator
	2210060	Sr Sampling Associate

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2210061		Industrial Coordinator
	2210062		Sampling Associate
	2210063		Regional Manager
	2210064		Sampling Associate
	2210065		Data Tracker
	2210066		Source Coordinator
	2210067		Sampling Associate
	2210070		Administrative Systems Coord

Sub-Cost Center: TRAC Total Positions: 46 Vacants: 2 Filled Positions: 44

Cost Center: Toxic Reduction & Control Total Positions: 46 Vacants: 2 Filled Positions: 44

**02470 24700 Wastewater General**

	2470001		Director,Transport
	2470003		Program Manager, Process Cntrl
	2470004		Manager, Operations
	2470004A	24700126	Acting Manager,Operations
	2470006		Area Supervisor
	2470008		Area Supervisor
	2470009		Operator
IA	24700101		Operator
	24700102		Area Supervisor
	24700103		Operator
	24700104		Operator
	24700105		Operator
	24700108		Operator
	2470011		Operator
	24700111		Area Supervisor
	24700112		Area Supervisor
	24700113		Area Supervisor
	24700115		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
LOA	24700130		Administrative Assistant
	24700131		OMC Laborer
	24700132		Operations Liaison
	2470015		Area Supervisor
	2470016		Operator
	2470017		Operator
	2470018		Operator
	2470019		Area Supervisor
	2470020		Operator

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	2470021		Operator
	2470022		Operator
	2470023		Area Supervisor
	2470025		Operator
	2470028		Skilled Laborer
	2470029		Operator
	2470032		Operations Supervisor
	2470033		Area Supervisor
	2470034		Operator
	2470035		Operator
	2470036		Operator
	2470044		Area Supervisor
	2470045		Headworks Operator
	2470047		Operator
	2470048		Operator
	2470052		Skilled Laborer
	2470055		Headworks Operator
	2470056		Headworks Manager
	2470057		Area Supervisor
	2470058		Headworks Operator
	2470059		Headworks Operator
LOA	2470060		Operator
	2470061		Operator
	2470062		Operator
	2470064		Skilled Laborer
	2470065		Operator
	2470066		Skilled Laborer
LOA	2470067		Headworks Operator
LOA	2470069		Area Supervisor
	2470070		Headworks Operator
	2470071		Headworks Operator
	2470072		Operator
LOA	2470073		Operator
	2470074		Operator
	2470075		Operator
LOA	2470079		Headworks Operator
	2470080		Headworks Operator
	2470081		Skilled Laborer
	2470082		Operations Supervisor
	2470083		Area Supervisor
	2470084		Area Supervisor
	2470085		Area Supervisor
	2470086		Operator
	2470087		Operator
	2470089		Operator
LOA	2470091		Building/Grounds Worker

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	LOA 2470092		Building/Grounds Worker
	2470092A	2470064	Acting Buildings/Grounds Worke
	2470094		Skilled Laborer
	2470095		Operator
	2470096		Area Supervisor

Sub-Cost Center:	Wastewater General	Total Positions:	84	Vacants:	2	Filled Positions:	82
Cost Center:	Wastewater Operations	Total Positions:	84	Vacants:	2	Filled Positions:	82
Department:	Wastewater Operations	Total Positions:	130	Vacants:	4	Filled Positions:	126

<b>Water Operations &amp; Maintenanc</b>	<b>Operations</b>
--	-------------------

<b>03380</b>	<b>33850</b>	<b>Metro Water General</b>
--------------	--------------	----------------------------

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

<b>03390</b>	<b>33910</b>	<b>Western General</b>
--------------	--------------	------------------------

3391001	Director, Western Operations
3391003	Secretary I
LOA 3391004	Secretary II
3391006	Supervisor, Admin Support
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
3391020	Project Engineer,Reservoir Ops

Sub-Cost Center:	Western General	Total Positions:	11	Vacants:	1	Filled Positions:	10
------------------	-----------------	------------------	----	----------	---	-------------------	----

<b>03390</b>	<b>33920</b>	<b>Treatment &amp; Transmission</b>
--------------	--------------	-------------------------------------

3392001	Sr Trans/Treatment Operator
3392004	Transmission & Treatment Oper



DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	3392006		Transmission & Treatment Oper
	3392007		Transmission & Treatment Oper
	3392008		Transmission & Treatment Oper
	3392009		Transmission & Treatment Oper
	3392010		Transmission & Treatment Oper
	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: 0 Filled Positions: 34

**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
IA	3393031		Facilities Specialist
	3393045		Trades Foreman

Sub-Cost Center: Facility Maint. Total Positions: 10 Vacants: 0 Filled Positions: 10

**03390 33940 Grounds Maint - West**

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	3394002		Supervisor, Ware River Intake
IA	3394004		WSS Foreman
	3394004A	3394021	Acting WSS Foreman
LOA	3394010		OMC Laborer
	3394013		Skilled Laborer
LOA	3394015		WSS General Foreman
	3394016		WSS General Foreman
LOA	3394017		WSS Foreman
	3394019		WSS Foreman
	3394021		WSS Sub-Foreman
	3394023		WSS Sub-Foreman
	3394024		Fencing Foreman
	3394025		Heavy Equipment Operator
	3394030		OMC Laborer
	3394031		Skilled Laborer
	3394033		Heavy Equipment Operator
	3394034		OMC Laborer
	3394037		Heavy Equipment Operator
	3394038		OMC Laborer
LOA	3394039		Skilled Laborer
IA	3394053		OMC Laborer
	3394056		OMC Laborer
	3394058		Skilled Laborer
	3394062		OMC Laborer
	3394065		Valve Maintenance Foreman
	3394066		WSS Sub-Foreman
	3394067		OMC Laborer
	3394068		Skilled Laborer
	3394069		Valve Maintenance Foreman

Sub-Cost Center: Grounds Maint - West Total Positions: 28 Vacants: 4 Filled Positions: 24

**03390 33960 Equipment Maintenance**

	3396001		Asst Supervisor, Power Generat
	3396002		M & O Specialist
	3396003		M & O Specialist
	3396004		Machinist
	3396005		Electrician
IA	3396006		Plumber/Pipefitter
	3396007		Unit Supervisor
	3396008		Metal Fabricator/Welder
	3396009		Motor Equipment Repair Foreman
	3396010		Equipment Repair Specialist
	3396012		Electrical Operations Supervis
	3396012A	3396019	Acting Unit Supervisor
LOA	3396013		Machinist
	3396014		Unit Supervisor
	3396015		Supervisor, Equipment Maint

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE				
	3396016		M & O Specialist				
	3396017		M & O Specialist				
	3396018		Trades Foreman				
	3396019		Electrician				
	3396023		Plumber/Pipefitter				
	3396025		M & O Specialist				
	3396026		Electrician				
LOA	3396027		Electrician				
	3396028		Plumber/Pipefitter				
	3396029		Med Volt Electrical Specialist				
	3396030		Machinist				
	3396031		Equipment Repair Specialist				
Sub-Cost Center:	Equipment Maintenance	Total Positions:	26	Vacants:	3	Filled Positions:	23
Cost Center:	Western Operations & Maint	Total Positions:	109	Vacants:	8	Filled Positions:	101
Department:	Water Operations & Maintenance	Total Positions:	125	Vacants:	8	Filled Positions:	117

<b>Metro Maintenance</b>	<b>Operations</b>
--------------------------	-------------------

**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
5410009	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:	18	Vacants:	2	Filled Positions:	16
------------------	----------------------------	------------------	----	----------	---	-------------------	----

**05410                      54110                      Grounds Maintenance Metro**

5411003	Skilled Laborer
5411004	WSS Foreman
LOA 5411005	OMC Laborer
5411006	Skilled Laborer
LOA 5411007	Skilled Laborer
5411008	WSS General Foreman
LOA 5411009	WSS Foreman

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
	5411010		WSS Foreman			
	5411013		OMC Laborer			
	5411014		Skilled Laborer			
	5411015		Skilled Laborer			
	5411018		Skilled Laborer			
	5411019		Skilled Laborer			
	5411021		Heavy Equipment Operator			
	5411022		Skilled Laborer			
	5411022L	5411022	Acting LD Stock Clerk			
	5411023		OMC Laborer			
Sub-Cost Center:	Grounds Maintenance Metro		Total Positions:	16	Vacants:	0 Filled Positions: 16
Cost Center:	Facility Maintenance		Total Positions:	34	Vacants:	2 Filled Positions: 32
<b>05430</b>	<b>54310</b>		<b>Valve Maintenance - Water</b>			
	5431001		Specialty Valve Foreman			
	5431002		Specialty Valve Installer			
	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
<b>05430</b>	<b>54320</b>		<b>Inspection - Water</b>			
	5432001		Skilled Laborer			
	5432002		Supervisor, Inspection			
	5432003		Sr General Const Inspector			
	5432005		General Construction Inspector			
	IA 5432007		Sr Field Service Technician			
	5432008		Sr Field Service Technician			
	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
<b>05430</b>	<b>54330</b>		<b>Pipe Maintenance - Water</b>			
	5433001		Sr Program Manager, Pipelines			
	LOA 5433002		WDS General Foreman			
	5433003		Sr WDS Foreman			
	5433003L	5433003	Acting LD Stock Clerk			

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5433004		Sr WDS Foreman
	5433007		Construction Pipelayer
	5433008		Heavy Equipment Operator
	5433009		Construction Pipelayer
	5433010		Heavy Equipment Operator
	5433011		Heavy Equipment Operator
	5433012		Heavy Equipment Operator
	5433013		Heavy Equipment Operator
IA	5433015		Facilities Specialist
	5433016		OMC Laborer
	5433017		OMC Laborer
	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: 24 Vacants: 4 Filled Positions: 20

**05430 54340 Pipe Maintenance - Wastewater**

	5434001		Skilled Laborer
	5434002		District Supervisor
	5434004		Sewer Maint Foreman
	5434006		Sewer Maint Foreman
IA	5434007		Sewer Maint Foreman
	5434008		Skilled Laborer
	5434009		Skilled Laborer
	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: 3 Filled Positions: 17

**05430 54350 TV Inspection - Wastewater**

	5435002		Sr Program Manager
--	---------	--	--------------------

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
	5435004		Tele-Inspection Assistant			
	5435006		Tele-Inspection Assistant			
	5435007		OMC Laborer			
	5435008		Tele-Inspection Operator			
	5435009		Tele-Inspection Foreman			
	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:	13	Vacants:	1 Filled Positions: 12
Cost Center:	Metro Pipe Maintenance		Total Positions:	81	Vacants:	8 Filled Positions: 73
<b>05440</b>	<b>54400</b>		<b>Work Coordination</b>			
	5440001		Work Order Coordinator			
	5440003		Materials Coordination Manager			
	5440005		Planning/Scheduling Coord			
	5440006		Work Order Coordinator			
IA	5440007		Material & Equipment Super			
	5440008		Planning/Scheduling Coord			
IA	5440010		Planning/Scheduling Coord			
	5440010A	8820019	Acting Planning/Scheduling Co			
	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:	1 Filled Positions: 16
Cost Center:	Work Coordination		Total Positions:	17	Vacants:	1 Filled Positions: 16
<b>05450</b>	<b>54500</b>		<b>Metro Maintenance General</b>			
	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
<b>05470</b>	<b>54700</b>		<b>Equipment - General</b>			
	5470001		Chief Facilities Maintenance			
	5470002		M & O Specialist			
	5470003		M & O Specialist			
	5470004		M & O Specialist			

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5470005		M & O Specialist
	5470006		M & O Specialist
	5470008		Diesel Engine Maint Foreman
LOA	5470009		M & O Specialist
	5470010		M & O Specialist
LOA	5470011		M & O Specialist
	5470014		Unit Supervisor, Maintenance
	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
LOA	5470052		Electrician
	5470053		Plumber/Pipefitter
	5470055		Electrician
	5470056		Unit Supervisor, HVAC
	5470057		HVAC Specialist
	5470058		Equipment Repair Foreman
	5470059		Skilled Laborer
IA	5470060		M & O Specialist
	5470062		M & O Specialist
	5470063		Sup Water/WW Mechanical Maint

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	LOA	5470064	OMC Laborer
		5470065	Equipment Repair Foreman
		5470066	HVAC Specialist

Sub-Cost Center:	Equipment - General	Total Positions:	53	Vacants:	6	Filled Positions:	47
Cost Center:	Equipment Maintenance	Total Positions:	53	Vacants:	6	Filled Positions:	47
Department:	Metro Maintenance	Total Positions:	187	Vacants:	17	Filled Positions:	170

<b>Operations Support</b>	<b>Operations</b>
---------------------------	-------------------

<b>05810</b>	<b>58110</b>	<b>Operations Engineering</b>
--------------	--------------	-------------------------------

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	Sr 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

<b>05820</b>	<b>58210</b>	<b>Quality Assurance</b>
--------------	--------------	--------------------------

SHR	5821001	Sr Program Mgr, Quality Assura
SHR	5821002	Lab Supervisor/Jobshre/WQCHM
	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:	0	Filled Positions:	12
Cost Center:	Quality Assurance	Total Positions:	12	Vacants:	0	Filled Positions:	12

<b>05830</b>	<b>58310</b>	<b>Data Management</b>
--------------	--------------	------------------------

5831001	Technical Information Asst
5831003	Statistician
5831004	MIS Coordinator
5831005	Jr Civil Engineer



DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
	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	
<b>05840</b>	<b>58410</b>		<b>Scada Maintenance - Water</b>			
	5841001		Program Manager, SCADA			
	5841002		Communication & Control Tech			
	5841003		Project Manager, SCADA			
	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			
	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	
<b>05840</b>	<b>58420</b>		<b>Scada Maintenance - Wastewater</b>			
	5842001		Sr SCADA Maint Technician			
	5842003		Sr SCADA Maint 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: 0	Filled Positions: 6	
<b>05840</b>	<b>58430</b>		<b>Meter Maintenance - Water</b>			
	5843010		Program Mgr, Meter Data & Eng			
	5843012		Project Manager, Meter Data			
	5843015		Project Engineer, Meter Eng			
	LOA 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	
<b>05840</b>	<b>58440</b>		<b>Meter Maintenance - Wastewater</b>			
	5844001		Jr Instrument Technician			
	5844002		Sr Instrument Technician			

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5844003		Jr Instrument Technician
	5844004		Instrument Technician
	5844005		Program Manager, Metering
	5844007		Sr Instrument Technician
	5844008		Instrument Technician
LOA	5844009		Sr Instrument Technician
	5844011		Instrument Technician
	5844012		Technical Assistant
	5844012A	5844007	Acting Technical Assistant
	5844018		Sr Instrument Technician
	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:	2	Filled Positions:	48

**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:	3	Filled Positions:	79

<b>FOD Administration</b>	<b>Operations</b>
---------------------------	-------------------

**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	Administrative Coordinator I	
5910017	Administrative Systems Coord	
5910018	Administrative Assistant I	
LOA	5910020	Sr Clerk & Typist
	5910021	Administrative Systems Coord
LOA	5910024	Administrative Coordinator

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE				
	5910025		Manager, Facilities Mgmt				
SHR	5910026		Secretart II				
SHR	LOA	5910026	Secretart II				
	5910027		OMC Laborer				
	5910028		Manager, Facilities & Admin				
	5910029		Skilled Laborer				
	5910030		Administrative Coordinator				
Sub-Cost Center:	Policy & Administration	Total Positions:	24	Vacants:	1	Filled Positions:	23
Cost Center:	Admin/Mgt	Total Positions:	24	Vacants:	1	Filled Positions:	23
Department:	FOD Administration	Total Positions:	24	Vacants:	1	Filled Positions:	23

<b>Engineering &amp; Construction</b>	<b>Operations</b>
---------------------------------------	-------------------

05525	55250	Engineering & Construction
	5525002	Sr Program Manager
	5525003	Project Manager
	5525007	Sr Civil Engineer, Draftsman
	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
	55250113	Director, Water Engineering
	55250114	Senior Program Manager
	55250115	Sr Program Manager
	55250116	Program Manager, Geotech
	55250117	Design Manager
	55250118	Project Manager
	55250119	Design Manager
	55250120	Sr Engineering Aide
	55250121	Design Manager
	55250122	Manager, Envir Compliance
	55250123	Design Manager
	55250124	Project Manager
	55250125	Design Manager
	55250126	Project Manager
	55250127	Design Manager

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	55250128		Project Engineer
	55250129		Sr Program Manager
	55250130		Project Engineer
	55250131		Executive Secretary
	55250132		Sr Program Manager
	55250133		Project Manager
LOA	55250134		Project Manager
	55250135		Sectery I
LOA	55250136		Project Engineer
	55250137		Director, Construction
	55250138		Project Engineer
	55250139		Assist Director, Construction
	55250140		Deputy Chief Operating Officer
	55250141		Senior Construction Manager
	55250142		Construction Coordinator
	55250143		Construction Coordinator
	55250144		Construction Coordinator
	55250145		Project Manager
	55250146		Construction Coordinator
	5525017		Asst Director, WW Engineering
	5525019		Sr Staff Engineer, Electrical
SHR	5525020		Project Manager
SHR	5525020		Project Manager
	5525021		Sr Program Manager
	5525022		Project Manager
LOA	5525024		Mechanical Designer
	5525026		Sr Engineer
	5525029		Sr Engineer
	5525030		Sr Staff Engineer, Structural
	5525031		Project Engineer
	5525032		Project Engineer
	5525034		Asst Director,Water Engineerin
LOA	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
	5525053		Program Manager
	5525058		Project Engineer
	5525060		Project Engineer
	5525061		Sr Program Manager
	5525062		Sr Program Manager

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5525063		Program Manager
	5525066		Technical IS Administrator
	5525068		Director,Wastewater Engineerin
	5525069		Secretary I
	5525070		Administrative Systems Coord
	5525072		Construction Coordinator
LOA	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:	99	Vacants:	3	Filled Positions:	96
Cost Center:	Engineering & Construction	Total Positions:	99	Vacants:	3	Filled Positions:	96
Department:	Engineering & Construction	Total Positions:	99	Vacants:	3	Filled Positions:	96

<b>Laboratory Services</b>	<b>Operations</b>
----------------------------	-------------------

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	5710041	Acting Lab Supervisor II
	5710013		Chemist III
	5710014		Chemist III
	5710015		Chemist I
IA	5710017		Sr Laboratory Technician
	5710021		Quality Assurance Coordinator

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	5710023		Administrative Systems Coord
	5710024		Chemist III
	5710025		Chemist III
	5710026		Chemist II
	5710027		Chemist I
	5710028		Chemist II
	5710029		Chemist II
	5710030		Microbiologist II
	5710033		Client Services Coordinator
	5710035		Chemist II
	5710039		Chemist III
	5710040		Chemist I
	5710041		Chemist I
	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
LOA	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:	57	Vacants:	4	Filled Positions:	53
Cost Center:	Laboratory Services	Total Positions:	57	Vacants:	4	Filled Positions:	53
Department:	Laboratory Services	Total Positions:	57	Vacants:	4	Filled Positions:	53
Division:	Operations	Total Positions:	1018	Vacants:	55	Filled Positions:	963

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		Legal Coord, Labor & Employment
	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
	7110036		Sr Staff Counsel

Sub-Cost Center:	Law	Total Positions:	23	Vacants:	2	Filled Positions:	21
Cost Center:	Law	Total Positions:	23	Vacants:	2	Filled Positions:	21
Department:	Law	Total Positions:	23	Vacants:	2	Filled Positions:	21
Division:	Law	Total Positions:	23	Vacants:	2	Filled Positions:	21

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
<b>Division Director</b>		<b>Support Services</b>				
	<b>08150</b>	<b>81500</b>	<b>Division Director</b>			
		8150001	Managing Director			
		8150003	Tech Asst, Support Services			
Sub-Cost Center:	Division Director		Total Positions:	2	Vacants:	0 Filled Positions: 2
Cost Center:	Division Director		Total Positions:	2	Vacants:	0 Filled Positions: 2
Department:	Division Director		Total Positions:	2	Vacants:	0 Filled Positions: 2
<b>Internal Audit</b>		<b>Support Services</b>				
	<b>08210</b>	<b>82100</b>	<b>Internal Audit</b>			
		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
<b>Public Affairs</b>		<b>Support Services</b>				
	<b>08250</b>	<b>82500</b>	<b>Public Affairs</b>			
		8250001	Deputy Director, Comm Relation			
		8250002	Sr Community Relation Coord			
		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			
		8250032	Public Access Coordinator			
		8250035	File Clerk			
		8250036	Technical Assistance Manager			
Sub-Cost Center:	Public Affairs		Total Positions:	14	Vacants:	0 Filled Positions: 14
Cost Center:	Public Affairs		Total Positions:	14	Vacants:	0 Filled Positions: 14
	<b>08260</b>	<b>82600</b>	<b>Education Program</b>			
		8260001	Project Manager, School Ed			
		8260002	Administrative Coordinator			



DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
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:	16	Vacants:	0 Filled Positions: 16

<b>Facilities Management</b>	<b>Support Services</b>
------------------------------	-------------------------

08740	87400	Administrative Services
	8740004	Messenger/Courier
	8740010	Supervisor, Trans/Courier/Mail
	8740011	Messenger/Courier
	8740012	Motor Pool Coordinator
	8740017	Secretary II
	8740019	Administrative Coordinator
	8740023	Messenger/Courier
	8740024	Messenger/Courier
	8740027	Supervisor, Facilities Mgmt
	8740029	Sr Fire & Safety Warden
	8740030	Sr Fire & Safety Warden
	8740031	OMC Laborer
	8740036	OMC Laborer

Sub-Cost Center:	Administrative Services	Total Positions:	13	Vacants:	3 Filled Positions: 10
Cost Center:	Administrative Services	Total Positions:	13	Vacants:	3 Filled Positions: 10
Department:	Facilities Management	Total Positions:	13	Vacants:	3 Filled Positions: 10

<b>Fleet Services</b>	<b>Support Services</b>
-----------------------	-------------------------

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
	8310009	Motor Equipment Repairman
	8310010	Motor Equipment Repairman
	8310010A	8310010 Acting Motor Equip Repair Fore
	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

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE				
<b>Affirmative Action</b>		<b>Support Services</b>					
<b>08410</b>	<b>84100</b>	<b>Affirmative Action</b>					
	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
<b>Human Resources</b>		<b>Support Services</b>					
<b>08510</b>	<b>85100</b>	<b>Employment/Comp/Benefits</b>					
	8510001		Director, Human Resources				
	8510003		Employment Manager				
	8510006		Sr Benefits & HRIS Analyst				
	8510008		Secretary I				
	8510011		Manager, Compensation				
	8510011A	8510016	Acting Compensation Manager				
	8510012		Manager, Benefits & HRIS				
	8510014		Employee Benefits Assistant				
	8510015		Administrative Manager				
	8510016		Sr Comp & Benefits Analyst				
Sub-Cost Center:	Employment/Comp/Benefits	Total Positions:	9	Vacants:	1	Filled Positions:	8
Cost Center:	Employment/Comp/Benefits	Total Positions:	9	Vacants:	1	Filled Positions:	8
<b>08520</b>	<b>85200</b>	<b>Labor Relations</b>					
	8520001		Manager, Labor Relations				
	8520002		Asst Manager, Labor Relations				
	8520003		Asst Manager, Workers Comp				
	8520004		Administrative Secretary				
	8520007		Program Manager, Security/Safe				
	8520008		Program Manager, Security/Safe				
	8520009		Program Manager, Security/Safe				
Sub-Cost Center:	Labor Relations	Total Positions:	7	Vacants:	0	Filled Positions:	7
Cost Center:	Labor Relations	Total Positions:	7	Vacants:	0	Filled Positions:	7
<b>08530</b>	<b>85300</b>	<b>Training</b>					
	8530001		Program Manager, Training				
	85300010		Manager, Training and Developm				
	LOA 8530003		Training Specialist				
	8530003A	8410005	Acting Training Specialist				
	8530009		Training Specialist				

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
Sub-Cost Center:	Training		Total Positions:	4	Vacants:	0 Filled Positions: 4
Cost Center:	Training		Total Positions:	4	Vacants:	0 Filled Positions: 4
Department:	Human Resources		Total Positions:	20	Vacants:	1 Filled Positions: 19

<b>MIS</b>	<b>Support Services</b>
------------	-------------------------

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
LOA	8610028	IS Development Specialist
	8610030	Program Manager
	8610031	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
	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

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE
	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
	8610059		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
	8610077		Sr Systems Manager
LOA	8610078		IS Project Leader,DITP Systems
	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

Sub-Cost Center:	MIS	Total Positions:	66	Vacants:	2	Filled Positions:	64
Cost Center:	MIS	Total Positions:	66	Vacants:	2	Filled Positions:	64
Department:	MIS	Total Positions:	66	Vacants:	2	Filled Positions:	64

<b>Procurement</b>	<b>Support Services</b>
--------------------	-------------------------

**08810**

**88100**

**Procurement**

8810001	Director, Procurement
8810002	Executive Secretary
8810003	Purchasing Manager
8810004	Sr Buyer
8810006	Secretary I
8810007	Buyer
8810009	Buyer
8810012	Data Control Coordinator
8810013	Buyer
8810015	Deputy Purchasing Manager
8810016	Buyer
8810020	Buyer
8810021	Contracts Manager

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
	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			
	8810046		Deputy Contracts Manager			
Sub-Cost Center:	Procurement		Total Positions:	25	Vacants:	3 Filled Positions: 22
Cost Center:	Procurement		Total Positions:	25	Vacants:	3 Filled Positions: 22
<b>08820</b>	<b>88200</b>		<b>Materials Management</b>			
	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			
	8820029		Warehouse Materials Handler			
	8820030		Inventory Control Specialist			
	8820031		Warehouse Materials Handler			
	8820032		Principal Clerk			
	8820033		Inventory Control Supervisor			
	8820034		Warehouse Manager			
	8820035		Principal Storekeeper			
	8820036		Principal Storekeeper			
	8820037		Administrative Services Manage			
Sub-Cost Center:	Materials Management		Total Positions:	29	Vacants:	1 Filled Positions: 28

DEPARTMENT	PCR #	Original PCR #	POSITION TITLE			
Cost Center:	Materials Management		Total Positions:	29	Vacants:	1 Filled Positions: 28
Department:	Procurement		Total Positions:	54	Vacants:	4 Filled Positions: 50
<b>Real Prop/Environmental Mgmt</b>		<b>Support Services</b>				
<b>08850</b>	<b>88500</b>	<b>Real Prop/Environmental Mgmt</b>				
SHR	8850001	Real Property Project Manager				
	8850002	Director, Real Property & Env				
	8850003	Environmental Manager				
	8850004	Program Manager, Environmental				
	8850005	Program Manager, Permits				
	8850006	Program Manager, Environmental				
	8850008	Admin, Real Property /Env Mgmt				
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:	208	Vacants:	13 Filled Positions: 195
<b>AUTHORITY</b>			Total Positions:	1330	Vacants:	80 Filled Positions: 1250