

PROPOSED Fiscal Year 2004

CURRENT EXPENSE BUDGET



MASSACHUSETTS WATER RESOURCES AUTHORITY

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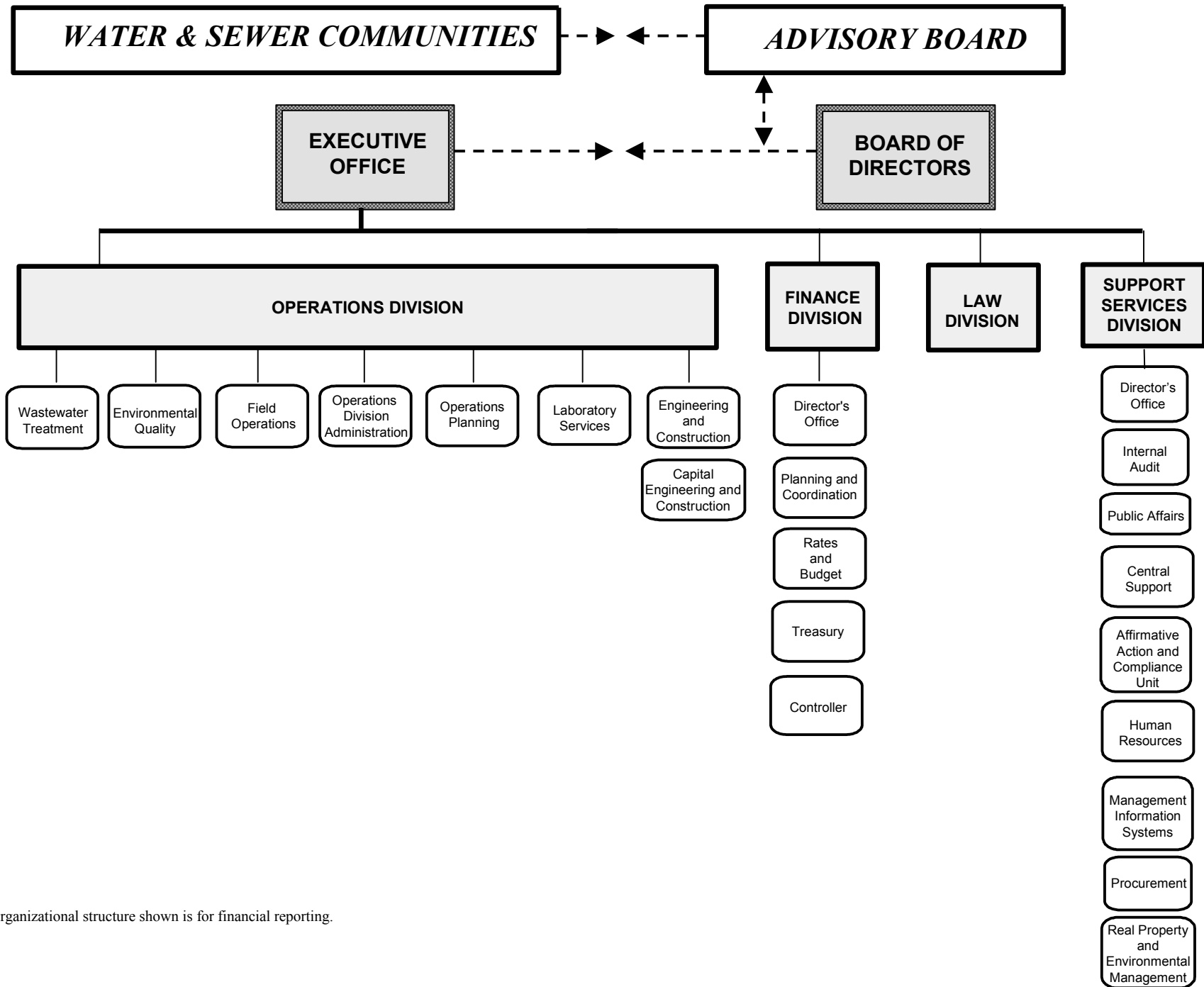
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Organizational structure shown is for financial reporting.

March 25, 2003

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

Dear Chairwoman Dunphy and Advisory Board Members:

This letter transmits to the Advisory Board MWRA's Proposed Current Expense Budget (CEB) for fiscal year 2004. In accordance with the MWRA Enabling Act, the Board of Directors approved transmittal of the proposed budget on March 12, 2003.

As you know, MWRA typically transmits the proposed CEB to the Advisory Board in February. This year, because of the impact of the elimination of Commonwealth debt service assistance in FY03 and the change in administration at the State House, release of the proposed budget was delayed until March.

In an effort to reduce costs and facilitate more timely distribution of information, this document is also available online at www.mwra.com.

Transmittal of the proposed budget marks the beginning of the public process for the FY04 CEB at a time when our customer communities are subject to ever increasing pressures on their limited resources because of the Commonwealth's financial difficulties. As you know, MWRA is well aware of and also subject to these same pressures. Hence we have crafted a fiscally conservative budget that builds on the steps we have already taken to control spending in FY03 and in prior years.

Specifically, the proposed CEB incorporates the staff reductions and other spending decreases implemented earlier this year to address the elimination of debt service assistance. As a result, proposed direct program expenses of \$173.9 million for FY04 are \$6.4 million less than MWRA spent in FY99.

However, because debt service payments to support the capital program (80% of which is mandated by court orders, consent agreements, and regulatory requirements) account for 60% of the overall proposed budget, total expenses and the rate revenue requirement continue to grow.

Consequently, we plan to continue our aggressive efforts to take advantage of opportunities to re-finance and re-structure outstanding debt.

The need to increase rate revenue in FY04 to offset the loss of debt service assistance was eased by the mid-year increase in FY03. As a result, we have been able to limit the proposed rate increase to 3.9%. Given the need to balance our resource needs with the constraints faced by our customer communities, we hope to maintain a pattern of moderate, but steady increases over the next several years.

Proposed FY04 CEB Summary

The proposed rate revenue requirement for FY04 is \$435.8 million. As noted above, this constitutes an increase of 3.9% from the final FY03 rate revenue requirement, including the \$15.7 million mid-year supplemental assessment required because of the elimination of debt service assistance.¹ To limit the increase to 3.9% the proposed budget includes the use of \$12.6 million in Rate Stabilization funds and \$20.6 million in debt service savings resulting from the debt escrow transaction completed in February.

The proposed CEB includes \$513.5 million in expenses before debt service offsets of \$26.6 million, for a net expense total of \$486.9 million. The debt service offsets include the \$20.6 million in debt escrow savings noted above and \$6 million in variable rate debt savings from FY03. Net expenses of \$486.9 million are offset by an equal amount of revenue, including the \$435.8 million in rate revenue noted above.

Total proposed expenses (before debt service offsets) include \$308.2 million in capital financing costs and \$205.3 million in operating expenses. The total represents an increase of \$6.5 million from the amended FY03 budget; comprised of a \$1.9 million increase in debt service and a \$4.6 million increase in operating expenses.

Proposed operating expenses include \$173.9 million for direct expenses and \$31.4 million for indirect expenses. The proposed direct expense budget is an increase of \$3.2 million or 1.9% compared to the amended FY03 budget and a decrease of \$4.3 million or 2.4% compared to FY02 spending. The proposed budget incorporates the decreased staffing levels and other reductions implemented by the Board this year in response to the Commonwealth's elimination of debt service assistance.

Proposed FY04 non-rate revenue totals \$51 million. The non-rate revenue budget includes \$7.7 million in investment income (including swap receipts), \$12.6 million in use of rate stabilization funds, \$10.2 million in other user charges and other revenue, and \$0.6 million in entrance fees.

¹ In FY04 the towns of Marlborough and Southborough are becoming part of the MWRA rate revenue base. As result, the proposed rate revenue requirement is \$3.1 million greater than it would have been. In order to provide an accurate based for comparison, FY03 rate revenue has been re-stated to include \$2.8 million in FY03 Other User Charges revenue from Marlborough and Southborough.

The Future

MWRA continues to be committed to a multi-year rates management strategy and its mission to provide high quality, cost-effective water and sewer services to its customers. To that end staff continue to work to strengthen the connection between MWRA's mission, goals, and objectives, on the one hand, and the resources needed to achieve them on the other.

We look forward to working with you during the Advisory Board's independent budget review process. The Advisory Board's thoughtful consideration of the proposed CEB is critical to MWRA's effort to effectively balance operational needs and resource constraints, especially at a time when our customer communities are subject to ever increasing pressure on their limited resources.

Sincerely,

Frederick A. Laskey
Executive Director

Current Expense Budget

**Proposed
Fiscal Year 2004**

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Executive Summary

The Budget-in-Brief

Overview

MWRA Mission

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

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

MWRA measures its performance compared to prior years and current year targets in a variety of areas. Progress in achieving performance targets is reported monthly in the Yellow Notebook and quarterly in the Orange Notebook. Quarterly reports are now available on MWRA's website. MWRA reports on annual progress in reaching performance targets in the division and department sections of the final Current Expense Budget document each year. As a result, this proposed budget document does not include updates on performance measures.

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

Each year MWRA prepares a proposed budget that reflects the best available information about anticipated expenditures and revenues. Typically, MWRA transmits its proposed budget to its Advisory Board in February. This year, for two reasons, MWRA is releasing the proposed budget in March.

First, during the current fiscal year (FY03), the Commonwealth, because of its difficult financial situation, eliminated statewide debt service assistance (DSA). In response, in February the MWRA Board of Directors approved an amendment to the FY03 Current Expense Budget to address the \$47.2 million DSA shortfall. The amendment covered the shortfall through the balanced use of budget reductions, increased use of reserves, and a mid-year rate revenue increase.

Second, MWRA did not want to transmit the proposed budget to the Advisory Board before the new Governor released the proposed state budget for FY04 (House 1). Because of the change in administration, House 1 was not released until late February. Not unexpectedly, House 1 did not restore funding for debt service assistance in FY04.

MWRA's proposed budget for fiscal year 2004 includes \$513.5 million in expenses before debt service offsets of \$26.6 million, for a net expense total of \$486.9. Debt service offsets include \$20.6 million in savings resulting from a debt escrow transaction completed in February and \$6 million in variable rate debt savings rolled forward from FY03.

The proposed rate revenue requirement for FY04 is \$435.8, an increase of 3.9% over the final FY03 rate revenue requirement¹. To limit the increase to 3.9%

¹ In FY04 the towns of Marlborough and Southborough are becoming part of the MWRA rate revenue base, which makes the proposed rate revenue requirement \$3.1 million higher than it would have been. In order to provide an

the proposed budget includes the use of \$12.6 million in Rate Stabilization funds in addition to the \$26.6 million in debt service offsets noted above.

The proposed \$513.5 million expense total (before debt service offsets) is comprised of \$308.2 million in capital financing costs and \$205.3 million in operating expenses, of which \$173.9 is for direct expenses and \$31.4 million is for indirect expenses. The total represents an increase of \$6.5 million from the amended FY03 budget; comprised of a \$1.9 million increase in debt service and a \$4.6 million increase in operating expenses.

Proposed FY04 non-rate revenue totals \$51 million, a decrease of \$5.2 million from the amended FY03 budget. The non-rate revenue budget is comprised of \$27.7 million in investment income, including swap receipts, \$12.6 million in use of rate stabilization funds, \$10.2 million in other user charges and other revenue, and \$0.6 million in entrance fees.

Table I-1 shows MWRA's proposed FY04 budget for revenue and expenses by line item and includes a comparison with the amended FY03 budget. Variations in individual line item changes from FY03 to FY04 are described in the Revenue and Expense section of the Executive Summary and in more detail in the division sections of this document.

Proposed FY04 Initiatives and Highlights

Notable initiatives and highlights proposed for FY04 are summarized below.

- MWRA plans to end FY04 with 1,325 filled positions, despite the addition of 16 new staff to begin preparation for start-up of the Walnut Hill

Water Treatment Plant, the MetroWest Water Supply Tunnel, and the wastewater SCADA system.

- 1,325 filled positions at the end of the year is 53 positions less than the overall Black & Veatch target for FY04.
- The proposed budget includes funds to enhance technical training of MWRA staff to ensure that, where possible, existing personnel can staff the new Walnut Hill plant and other new facilities.
- Continued development and implementation of maintenance strategies for optimal protection of assets through the Facilities Asset Management Program, Reliability Centered Maintenance, and Maximo Maintenance Management software.
- The proposed FY04 budget includes \$3.9 million for harbor and outfall monitoring, a reduction of \$0.6 million compared to the amended FY03 budget. This decrease assumes a reduction in spending for some discretionary services and the completion of several research initiatives.

accurate basis for comparison, FY03 rate revenue has been re-stated to include \$2.8 million in FY03 Other User Charges revenue from Marlborough and Southborough. The re-stated total for FY03 rate revenue is \$419.5 million.

Table I-1

Proposed FY04 Current Expense Budget					
REVENUE AND EXPENSES					
	FY02 Actual	FY03 Amended ¹	FY04 Proposed	Change FY04 to FY03	
				\$	%
Operating Expenses					
Direct					
Wages and Salaries	\$ 86,141,497	\$ 80,517,841	\$ 79,896,296	\$ (621,545)	-0.8%
Overtime	4,133,505	3,721,593	3,597,195	(124,398)	-3.3%
Fringe Benefits	10,796,644	11,351,914	12,631,821	1,279,907	11.3%
Workers Compensation	1,363,113	1,836,700	2,100,000	263,300	14.3%
Chemicals	6,403,106	7,437,716	6,795,831	(641,885)	-8.6%
Utilities	16,379,257	15,121,438	16,179,409	1,057,971	7.0%
Maintenance	16,346,220	16,928,497	18,295,580	1,367,083	8.1%
Training & Meetings	305,613	261,631	257,631	(4,000)	-1.5%
Professional Services	7,675,781	7,515,545	6,785,222	(730,323)	-9.7%
Other Materials	4,519,555	3,309,976	4,339,673	1,029,697	31.1%
Other Services	24,144,281	22,710,149	23,032,158	322,009	1.4%
Sub-Total Direct	\$ 178,208,572	\$ 170,713,000	\$ 173,910,816	\$ 3,197,816	1.9%
Indirect					
Insurance	\$ 1,115,525	\$ 1,190,000	\$ 1,435,000	\$ 245,000	20.6%
Reimbursements	20,481,871	20,110,500	21,027,400	916,900	4.6%
Other	5,085,085	4,628,398	4,818,499	190,101	4.1%
Mitigation	2,838,118	1,495,996	1,400,000	(95,996)	-6.4%
Pension Expense	2,438,145	2,560,052	2,688,055	128,003	5.0%
Sub-Total Indirect	\$ 31,958,744	\$ 29,984,946	\$ 31,368,954	\$ 1,384,008	4.6%
Total Operating Expenses	\$ 210,167,316	\$ 200,697,946	\$ 205,279,770	\$ 4,581,824	2.3%
Debt Service					
Debt Service	\$ 285,415,238	\$ 306,270,225	\$ 308,180,296	\$ 1,910,071	0.6%
Offsets:					
Debt Service Assistance	(50,207,059)	-	-	-	0.0%
Bond Redemption Savings		(14,800,000)	(20,600,000)	(5,800,000)	39.2%
Variable Rate Savings		(16,422,756)	(5,989,000)	10,433,756	-63.5%
Sub-Total Net Debt Service	\$ 235,208,179	\$ 275,047,469	\$ 281,591,296	\$ 6,543,827	2.4%
Total Expenses	\$ 445,375,495	\$ 475,745,415	\$ 486,871,066	\$ 11,125,651	2.3%
Non-Rate Revenue & Income					
Other User Charges	9,931,377	5,873,865	6,222,529	348,664	5.9%
Other Revenue	4,031,977	3,799,480	3,966,109	166,629	4.4%
Swap Receipts		2,500,000	3,171,750	671,750	26.9%
Rate Stabilization	11,599,996	14,216,580	12,570,000	(1,646,580)	-11.6%
Investment Income	34,966,995	29,443,000	24,526,302	(4,916,698)	-16.7%
Entrance Fees	-	432,000	582,000	150,000	34.7%
Sub-Total Non-Rate Revenue & Income	\$ 60,530,345	\$ 56,264,925	\$ 51,038,690	\$ (5,226,235)	-9.3%
RATE REVENUE ²	\$ 389,518,470	\$ 419,480,490	\$ 435,832,376	\$ 16,351,886	3.9%
Total Revenue	\$ 450,048,815	\$ 475,745,415	\$ 486,871,066	\$ 11,125,651	2.3%
<p>¹ For comparison purposes, the final FY03 CEB (as amended) has been re-stated to be consistent with the proposed FY04 budget. The primary change is to treat the use of Rate Stabilization funds as an addition to revenue and to treat the use of Bond Redemption savings as an offset to debt service expense. In the FY03 CEB amendment the use of both Rate Stabilization funds and Bond Redemption savings were presented as enhancements to revenue partially offsetting the elimination of debt service assistance.</p> <p>² In FY04 the towns of Marlborough and Southborough are becoming part of the rate revenue base, which makes the proposed rate revenue requirement \$3.1 million higher than it would have been. In order to provide an accurate basis for comparison, FY03 rate revenue has been re-stated to include \$2.8 million in FY03 Other User Charges revenue from Marlborough and Southborough.</p>					

Sources and Uses of Funds

As shown below, the largest source of funds in the proposed budget is rate revenue from MWRA communities. Proposed FY04 rate revenue accounts for 90% of total revenue. Investment income accounts for 6% of revenue, use of rate stabilization funds totals 3%, and other revenue sources total 2% of the proposed budget.

SOURCES & USES of Funds		
\$ Millions		
Total Expenses		
before Debt Service Offsets	\$ 513.5	
Less:		
Bond Redemption Savings	(20.6)	
Variable Rate Savings	(6.0)	
Total Net Expenses	\$ 486.9	
Sources		
Other User Charges	\$ 6.2	1%
Other Revenue	4.6	1%
Rate Stabilization	12.6	3%
Investment Income	27.7	6%
Rate Revenue	435.8	90%
TOTAL REVENUE	\$ 486.9	100%
Uses		
Capital Financing	\$ 281.6	58%
Direct Expenses	173.9	36%
Indirect Expenses	31.4	6%
TOTAL EXPENSES	\$ 486.9	100%

Capital financing expenses after debt service offsets account for 58% of the proposed budget. Proposed capital financing costs (before debt service offsets) are \$308.2 million, an increase of \$1.9 million or less than 1% compared to the amended FY03 budget. The proposed budget incorporates savings from re-financing transactions completed in August and December of 2002. The proposed debt service budget does not include savings from new debt re-financing because no debt refunding or restructuring

is currently planned for FY04. If MWRA is able to take advantage of unforeseen opportunities during the year, savings will be used to reduce future rate revenue requirements. The proposed capital financing budget for FY04 includes:

- \$288.4 million in principal and interest payments on outstanding MWRA debt and SRF loans.
- \$10.1 million in debt service for two new bond issues to support the capital program (a \$165 million fixed rate issue in November 2003 and a \$150 million variable rate issue in May 2004 or a new SRF issue).
- \$5 million to fund ongoing capital projects with current revenue and to meet coverage requirements.
- \$1.6 million in interest payments related to the Local Water Pipeline Assistance Program.

Annual operating and maintenance expenses account for 36% of the proposed budget. Proposed operating and maintenance expenses increase by \$3.2 million compared to the FY03 amended budget. Significant changes include:

- *Fringe Benefits* - An increase of \$1.3 million from the amended FY03 budget. Premiums for health insurance, which account for more than 80% of the fringe benefits budget, are projected to increase by 15% in FY04.
- *Utilities* – The proposed budget includes \$1.3 million (10%) added because of the significant uncertainty about electricity, diesel fuel, and natural gas prices.
- *Maintenance* – Proposed maintenance expenses increase by \$1.4 million from the amended FY03 budget to support maintenance projects identified and planned for FY04. As portions of the Deer Island plant are nearing ten years old,

maintenance expenses are increasing. In Field Operations, increases are attributable to the inclusion of several rehabilitation projects planned for FY04 and additional services to cover upkeep of MWRA facilities in the western service area of the waterworks system.

- *Other Materials* – The proposed budget increases by \$1.1 million because of the need to purchase more replacement vehicles than in recent years. Other than one specialty vehicle, all vehicle replacements in FY03 were deferred. The average age of the fleet is increasing with 50% of the vehicles are now more than 7 years old. The amended FY03 budget includes \$120,000, and MWRA spent \$670,000 in FY02.

The proposed direct expense budget is described further in the Direct Expenses section of the Executive Summary and in the division sections.

Indirect expenses account for the remaining 6% of the proposed budget. Proposed indirect expenses increase by \$1.4 million from the amended FY03 budget. The increase includes \$628,000 for debt service on new purchases of watershed land by MDC, \$240,000 for insurance, \$190,000 for payments on the cross harbor cable, and \$160,000 for Division of Watershed Management operations.

The proposed indirect expense budget is described further in the Indirect Expenses section of the Executive Summary.

Revenue and Expenses Summary

As stated previously, MWRA funds its operations primarily through member community assessments. No funds supporting the current expense budget are subject to appropriation, except minor reimbursements from the Commonwealth. As noted above, the proposed budget does not include any Commonwealth debt service assistance funds, which are subject to appropriation.

MWRA has only one operating fund. All operating fund expenses and revenues are allocated to water and sewer customers. As water and wastewater units have consolidated, MWRA has developed systems to ensure the appropriate allocation of expenses to its wastewater and water service customers.

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 sufficient funds to recover the cost of operations (excluding depreciation), maintenance and improvements, debt service, and reserves. MWRA derives approximately 90% of proposed FY04 revenue from rate revenue.

The remaining 10% of revenue in the proposed budget comes from interest on investments, charges to other water and sewer customers, use of rate stabilization reserve funds, annual charges to sewer system users with permits issued by MWRA, reimbursements from the Commonwealth, penalties assessed to holders of sewer use permits, and other miscellaneous sources.

Rate Revenue

Of the \$435.9 million in proposed rate revenue, \$312.1 million would fund the sewerage system and \$123.8 million would fund the water system.

Other User Charges

Other User Charges consist primarily of revenues derived from the provision of water services under special agreements or during community emergencies. In the proposed FY04 CEB payments based on these agreements provide approximately \$5.9 million, compared to \$6.2 million in the FY03 amended budget. Proposed Other User Charges also include approximately \$1.3 million in water revenue to be collected from sewer ratepayers to offset the cost of water used for operation of the Deer Island Treatment Plant. The proposed budget also reflects a \$500,000 appropriation by the Commonwealth for the Town of Clinton to enable the town to pay MWRA for part of the cost of operating and maintaining the Clinton Wastewater Treatment Plant.

Permit Fees

The proposed FY04 budget includes \$1.9 million in fees charged to industries that discharge toxic materials into the MWRA sewer system. These permit fees partially offset the annual costs of permitting, inspecting, and monitoring these industries.

Penalties

MWRA assesses fines as necessary to enforce its sewer use regulations. MWRA encourages violators to bring sewer discharges into compliance with their permits, and considers penalties and the lengthy adjudication process that follows as a last resort. Because actual income from penalties varies from year to year, MWRA budgets conservatively for this item, including \$250,000 in revenue from penalties in the proposed FY04 CEB.

Reimbursements from the Commonwealth of Massachusetts

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

Miscellaneous Revenue

The proposed FY04 budget includes \$790,000 in miscellaneous revenue MWRA expects to collect from hydropower generation, the sale of surplus equipment, licenses, leases, fuel excise tax refunds, and other sources. Of this total, \$200,000 is from the sale of renewable portfolio credits resulting from the use of digester gas to generate power on Deer Island.

Rehabilitation of the turbines at the Cosgrove hydropower generation facility will be completed in FY04. As a result, the proposed FY04 CEB includes \$159,000 from generation, to reflect periods when only one of the two turbines is operating.

Investment Income

MWRA earns income by investing reserves and fund balances in a variety of interest-yielding securities. The proposed FY04 budget includes \$27.6 million in investment income, including \$3.1 million generated as a result of interest rate swap agreements. Without the swap income, the proposed budget for investment income is \$24.5 million, a decrease of \$4.9 million from the amended FY03 budget primarily because of lower interest rate assumptions for short-term investments and lower estimates of fund balances available to invest.

Rate Stabilization

In any fiscal year when annual revenues exceed expenses, MWRA transfers the unexpended amount

to the rate stabilization reserve. Within certain limits, MWRA may use this money to reduce the rate revenue requirement in any subsequent year. Consistent with the requirements of its Enabling Act and its general bond resolution, MWRA treats transfers from rate stabilization as revenue in that fiscal year.

The proposed FY04 budget includes the use of \$12.6 million from MWRA's rate stabilization reserve.

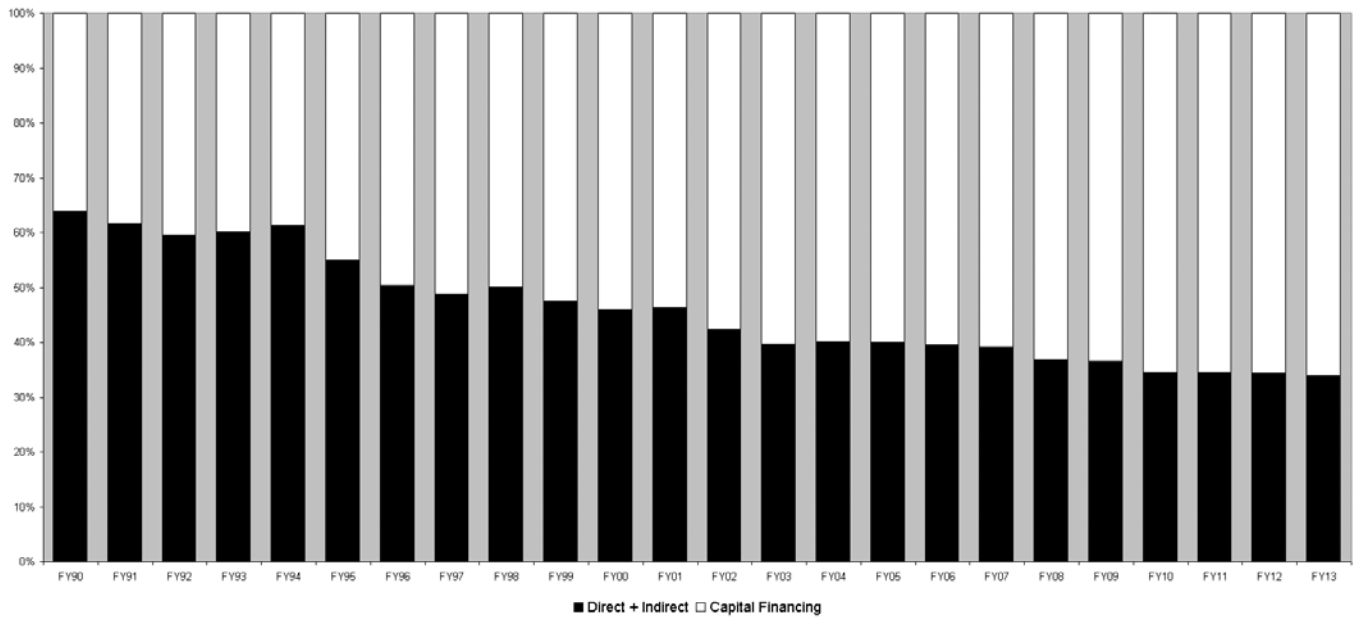
Expenses

MWRA's annual Current Expense Budget includes operating expenses and debt service. Operating expenses include direct program expenses and indirect or non-program costs. Direct expenses cover all costs which MWRA divisions incur, including personnel expenses, facility operating costs, and support functions. Indirect expenses include payments to the Commonwealth for expenses of the MDC Watershed Management Division and to support watershed land purchases, additions to MWRA's retirement fund, insurance, mitigation costs, and any additions to reserves. The debt service budget includes current debt service payments, debt service for planned new borrowing, and contributions from current revenues to fund capital expenditures. In the proposed FY04 budget, capital financing costs are offset by savings from a debt escrow transaction completed in February 2003 and savings on variable rate debt payments in FY03 because of lower than anticipated interest rates.

As Figure I-2 illustrates, between FY90 and FY04, the share of MWRA expenses devoted to capital financing costs (without debt service offsets) has increased from 36% to 60%. The share devoted to operating expenses has declined from 64% in FY90 to 40% in the proposed FY04 budget. By FY10, based on MWRA's most recent planning estimates, it is expected that the capital financing share will exceed 65% and by FY13 will exceed 68%.

Figure I - 1

Direct and Indirect Expenses vs. Capital Financing



FY90-FY02 Actual; FY03 Budget; FY04 Proposed; FY05 - FY13 Planning Estimates
 For comparison purposes, Capital Financing does not include offsets.

Direct Program Expenses

The proposed FY04 direct program expense budget is \$173.9 million, an increase of \$3.2 million compared to the amended FY03 budget. The increase is the net of \$5.3 million in increases offset by \$2.1 million in decreases. Generally, the proposed budget presents expenses by line item and program. MWRA-wide changes in line items are highlighted briefly in this section. The division sections discuss program budget changes in greater detail.

Major increases include:

- *Fringe Benefits* - premiums for health insurance, which account for more than 80% of the fringe benefits budget, are projected to increase by 15% in FY04.
- *Utilities* - the proposed budget includes \$1.3 million added because of the significant uncertainty about electricity, diesel fuel, and natural gas prices.
- *Maintenance* - an increase of \$1.4 million supports maintenance projects identified and planned for FY04. As portions of the Deer Island plant are nearing ten years old, maintenance expenses are increasing. In Field Operations, the budget for building and ground materials and custodial services increases by \$1.2 million, as more of this work will now be contracted out as staff are utilized to meet other needs.

Major decreases include:

- *Chemicals* - a decrease of \$640,000 from the amended FY03 budget. The budgets for hydrogen peroxide and polymer decrease by \$238,000 and \$340,000, respectively.
- *Professional Services* - a decrease of \$725,000 from the amended FY03 budget. The decrease

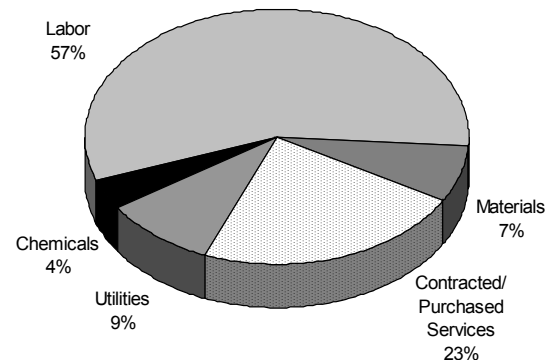
assumes a reduction in spending on outfall monitoring as a result of the elimination of some discretionary services and completion of some studies, and lower security costs because the FY03 budget funded several one-time improvements.

- *Temporary employees and interns* - a decrease of \$570,000 or 57% from the amended FY03 budget, and \$1.1 million or 72% less than FY02 actual spending.

Line Item Budget Summary

The chart below 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 proposed direct expense budget (57%). The second largest cost category is contracted and purchased services (23%), followed by chemicals and utilities (13%), and materials (7%).

Direct Expenses by Category - \$174 Million



Within the labor cost category, the proposed Wages and Salaries budget includes \$79.9 million for wages and salaries compared to \$80.5 million in the amended FY03 budget and \$86.1 million spent in FY02. Translating the regular pay budget into a number of funded positions is always an imprecise exercise. It must attempt to account for positions that are filled at salaries different

from the most recent incumbent, collective bargaining settlements that may differ from budgeted assumptions, and vacancy rates that vary from estimates. MWRA estimates, subject to these inherent limits on precision, that the regular pay budget of \$79.9 million will support approximately 1,325 filled positions. The proposed regular pay budget reflects several key assumptions:

- MWRA expects to end FY03 with 1,325 filled positions. (The overall Black & Veatch target for the end of FY03 is 1,469.)
- MWRA also expects to end FY04 with 1,325 filled positions, despite the need to add 16 new staff to begin preparation for start-up of the Walnut Hill Treatment Plant, the MetroWest Tunnel, and wastewater SCADA system. (The overall Black & Veatch target for the end of FY04 is 1,378.)
- 1,325 filled positions at the end of the year is 53 positions less than the overall Black & Veatch target for FY04. Moreover, the Black & Veatch target did not consider or include positions for operation of Walnut Hill. In fact, net of the 16 new positions, the projected FY04 year-end total of 1,309 is six positions less than Black & Veatch's overall target of 1,315 for the end of FY05.

Table I-2 shows filled positions by division and department as of February 2003. The number of filled positions at MWRA has declined from a peak of 1,775 in March 1997.

Contracted and purchased services, the second largest direct expense cost category, includes professional, maintenance, and other services. The proposed FY04 budget for contracted and purchased services is \$39.8 million or \$1.7 million more than the FY03 amended budget. The increase is primarily due to increases for specialized equipment services, \$1.4 million, plant and machinery services, \$0.6 million, grounds

Table I-2

Filled Position Summary February 2003	
Division Department	Filled Positions
BOARD OF DIRECTORS	1
DIRECTOR'S OFFICE	5
Executive Division	6
DIRECTOR'S OFFICE	4
PLANNING & COORDINATION	2
CONTROLLER	22
RATES & BUDGET	8
TREASURY	11
Finance Division	47
OPERATIONS ADMIN	41
ENQUAD	16
RESIDUALS MGT	3
DEER ISLAND	250
CLINTON	7
WASTEWATER OPERATIONS	141
WATER OPERATIONS	108
METRO MAINTENANCE	179
OPERATIONS SUPPORT	75
FOD ADMINISTRATION	19
CAP ENG & CONSTR	24
OPERATIONS PLANNING	33
ENG & CONSTR	69
LAB SERVICES	61
Operations Division	1,026
LAW	23
Law Division	23
DIVISION DIRECTOR	5
INTERNAL AUDIT	8
PUBLIC AFFAIRS	19
AFFIRMATIVE ACTION	9
HUMAN RESOURCES	21
MIS	72
CENTRAL SUPPORT	30
PROCUREMENT	51
REAL PROPERTY / ENV MGT	8
Support Services Division	223
TOTAL MWRA	1,325

services, \$0.5 million, and HVAC services, \$0.4 million, offset by a reduction in the proposed budget for professional services (\$0.7 million).

Major components of this cost category include the residuals processing contract, \$10.6 million, lease payments, \$5.8 million, maintenance services, \$10.0 million, harbor and outfall monitoring, \$3.7 million, telephones, \$1.3 million, grit and screenings removal, \$1.0 million, and security, \$1.4 million.

The \$10.6 million proposed budget for residuals processing is a \$260,000 increase, primarily because of uncertainty about utility prices. The \$5.8 million lease expense budget is an increase of \$269,000, primarily for increases in taxes and insurance for MWRA’s Chelsea facility and a surrender fee to vacate a portion of a leased building in the Charlestown Navy Yard. The \$3.7 million harbor and outfall monitoring budget is \$600,000 less than the amended FY03 budget, reflecting elimination of some discretionary services. The maintenance services budget of \$10 million increases by \$2.1 compared to the amended FY03 budget primarily due to the changes previously noted.

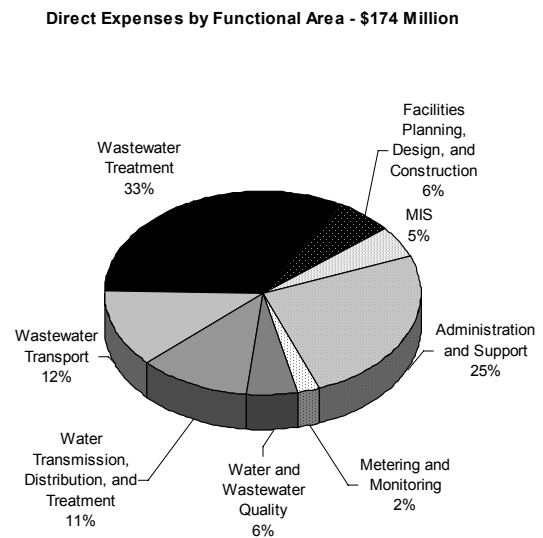
The proposed \$16.2 million utilities budget increases by \$1.1 million, primarily because of the significant uncertainty about electricity, diesel fuel, and natural gas prices. Without the adjustment for price uncertainty, the proposed budget for utilities would be \$244,000 or 2% less than the amended FY03 budget.

The proposed budget for chemicals decreases by \$640,000 from the amended FY03 budget. The budgets for hydrogen peroxide and polymer decrease by \$238,000 and \$340,000, respectively. The budget for ferrous chloride increases because of its use for struvite control. Nearly 55% of the chemical budget is for the treatment of wastewater, while approximately 45% supports water treatment.

The proposed \$12.7 million budget for materials, which accounts for 7% of the direct expense budget, includes maintenance materials, laboratory equipment, vehicles, and computer hardware items. The proposed FY04 materials budget is \$320,000 more than the FY03 amended budget.

Functional Area Budget Summary

For a broader perspective, the graph below presents direct expenses by MWRA functional area and shows that 45% of the proposed FY04 direct expense budget is for Wastewater Transport and Treatment costs, compared to 11% for Water Transmission, Treatment, and Distribution.



Appendix A describes each MWRA functional area.

Capital Financing

The proposed FY04 capital financing budget, before debt service offsets, is \$308.2 million or 60% of the total \$513.5 million budget. Debt service offsets of \$26.6 million result in a net capital financing budget of \$281.6 million. Debt service offsets include \$20.6 million in FY04 savings from a debt escrow transactions completed in February 2003 and \$6 million in savings from FY03 variable rate debt service payments because interest rates were less than expected. If interest rates are less than budgeted in FY04, 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. As of December 2002, MWRA's revenue bonds outstanding totaled \$4.2 billion, including \$719 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. As of December 2002 the gross amount of outstanding debt from the SRF was \$663 million. In FY95 MWRA initiated a tax-exempt commercial paper program to increase borrowing flexibility and reduce interest costs. As of December 2002, outstanding commercial paper totaled \$347 million.

In October 2000 MWRA's credit rating was upgraded by Standard & Poor's from A+ to AA and by Moody's Investors Service from A1 to Aa3. The rating agencies cited a number of accomplishments including continued progress in financing construction projects at lower-than-anticipated costs, continued ongoing regulatory compliance, the credit strength of the member communities, and substantial reserves. The Fitch rating, which had been upgraded to AA- in June

2000, was unchanged.

More recently, in February 2003, Fitch affirmed its rating of AA- for MWRA bonds and affirmed the outlook as stable. Fitch's credit review was undertaken in response to the elimination of debt service assistance (DSA) in FY03, which accounted for 10% of MWRA's projected revenues. The bond rating was affirmed in light of the actions taken by MWRA's Board of Director's in response to the DSA elimination.

The proposed FY04 capital financing budget increases by just \$1.9 million or less than 1% compared to the amended FY03 budget, primarily because re-financing transactions completed in August and December of 2002 decrease FY03 debt service payment requirements. The proposed capital financing budget for FY04 includes:

- \$288.4 million in principal and interest payments on outstanding MWRA debt and SRF loans.
- \$10.1 million in debt service for two new bond issues to support the capital program (a \$165 million fixed rate issue in November 2003 and a \$150 million variable rate issue in May 2004 or a new SRF issue).
- \$5 million to fund ongoing capital projects with current revenue and to meet coverage requirements.
- \$1.6 million in interest payments related to the Local Water Pipeline Assistance Program.

The proposed debt service budget does not include savings from future debt re-financing transactions because no debt refunding or restructuring is currently planned for FY04. If MWRA is able to take advantage of unforeseen opportunities during the year, any FY04 savings will be used to reduce rate revenue requirements in future years.

As previously noted, the Commonwealth eliminated debt service assistance in FY03 and it was not restored in the Governor's budget for FY04 released in February. MWRA's proposed FY04 budget and planning estimates assume that debt service assistance is not restored in FY04 or in future years. The Proposed FY04 Current Expense Budget is MWRA's first budget since FY94 that does not include debt service assistance.

The table below illustrates how upgrading the sewerage system has dominated the capital program to date. Seventy-four percent of proposed FY04 capital financing costs (before debt service offsets) is for wastewater improvements. Current and future borrowing increasingly supports improvements to the water system.

Proposed FY04 Current Expense Budget - Capital Financing Detail			
	Total	Water	Sewer
SRF ¹			
Unrefunded	\$ 65,554	\$ -	\$ 65,554
1999E Pool Sewer	394,274	-	394,274
1999E Pool Water	581,322	581,322	-
1999F	15,978,347	-	15,978,347
2000E Pool Sewer	2,891,984	-	2,891,984
2000E Pool Water	574,633	574,633	-
2001C SRF Water	249,769	249,769	-
2001D SRF Sewer	386,482	-	386,482
2001D SRF Water	82,300	82,300	-
2002H	4,508,925	1,505,535	3,003,390
2002I	100,367	1,447	98,921
FY04 New Sewer	-	-	-
FY04 New Water	-	-	-
Sub-Total	\$ 25,813,957	\$ 2,995,006	\$ 22,818,952
MWRA Senior Debt			
1992A (fixed)	\$ 25,209,925	\$ 1,260,496	\$ 23,949,429
1993C (fixed)	32,854,724	4,106,841	28,747,884
1994A (fixed)	4,025,200	-	4,025,200
1995B (fixed)	16,824,613	-	16,824,613
1996A (fixed)	4,430,770	-	4,430,770
1997D (fixed)	7,811,419	468,685	7,342,734
1998A (fixed)	12,763,450	4,254,441	8,509,009
1998B Refunding (fixed)	5,017,300	200,692	4,816,608
2000A (fixed)	17,972,158	11,982,038	5,990,120
2002B (fixed)	11,010,531	9,909,478	1,101,053
2002J (fixed)	30,848,400	7,084,840	23,763,560
FY04 New #1 (fixed)	7,915,717	3,957,859	3,957,859
Sub-Total	\$ 176,684,207	\$ 43,225,369	\$ 133,458,838
MWRA Subordinate Debt			
1997A (variable)	\$ 4,452,496	\$ -	\$ 4,452,496
1997B (variable)	4,452,496	4,452,496	-
1998D Refunding (variable to fixed)	8,381,435	335,257	8,046,178
1999A (variable to fixed)	5,131,770	2,052,708	3,079,062
1999B (variable to fixed)	5,202,923	2,081,169	3,121,754
1999C (variable)	3,800,447	2,280,268	1,520,179
1999D (variable)	3,800,447	2,280,268	1,520,179
2000B Refunding (variable to fixed)	7,566,557	1,059,318	6,507,239
2000C Refunding (variable to fixed)	7,666,557	1,073,318	6,593,239
2000D (fixed to variable)	8,250,000	4,125,000	4,125,000
2001A (variable)	5,861,792	3,927,401	1,934,391
2001B (variable)	3,584,204	3,584,204	-
2002C-G (variable)	25,545,319	3,002,190	22,543,129
FY04 New #2 (variable)	2,168,629	542,157	1,626,472
Sub-Total	\$ 95,865,072	\$ 30,795,755	\$ 65,069,317
Total MWRA & SRF Debt Service	\$ 298,363,236	\$ 77,016,130	\$ 221,347,107
Water Pipeline Commercial Paper	\$ 1,600,000	\$ 1,600,000	\$ -
Current Revenue/Capital	5,000,000	1,250,000	3,750,000
Capital Lease	3,217,060	1,093,800	2,123,259
Sub-Total	\$ 9,817,060	\$ 3,943,800	\$ 5,873,259
Total Capital Financing (before Debt Service Offsets)	\$ 308,180,296	\$ 80,959,930	\$ 227,220,367
Bond Redemption Savings	(\$20,600,000)	(\$5,355,592)	(\$15,244,408)
Variable Rate Savings	(5,989,000)	(2,353,000)	(3,636,000)
Total Capital Financing	\$ 281,591,296	\$ 73,251,338	\$ 208,339,959

Indirect Expenses

The proposed FY04 budget includes \$31.4 million for indirect expenses, an increase of \$1.4 or 4.6% compared to the amended FY03 budget, but a decrease of \$600,000 from FY02 spending. The increase includes \$628,000 for debt service on new purchases of watershed land by MDC, \$240,000 for insurance, \$190,000 for payments on the cross harbor cable, and \$160,000 for Division of Watershed Management operations.

Insurance

MWRA purchases property and casualty insurance from external insurance carriers, and self-insures for the first \$2.5 million of property and general liability loss per occurrence. The proposed FY04 budget includes \$935,000 for premiums and fees and \$500,000 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, currently funded at \$18 million.

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 Watershed Management (DWM), and DWM's debt service costs for purchases of land around the supply reservoirs to protect the watersheds. The proposed FY04 budget includes \$6.4 million, \$9.4 million, and \$5.3 million respectively for these items. The increase of \$917,000 from the FY03 amended budget is largely comprised of \$628,000 for debt service on land purchases and \$160,000 for estimated DWM operational costs.

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 \$4.8 million for the estimated FY04 payment, comprised of \$4.5 million for capacity charges and \$355,000 for maintenance expenses. While more of the asset has been depreciated, the budget is \$190,000 more than the amended FY03 budget because of lower investment income earned on bond securities held by HEECo, which offset MWRA's costs.

Mitigation

MWRA disburses mitigation funds to communities affected by MWRA projects pursuant to MWRA's Statement of Mitigation Principles and/or specific agreements with communities. MWRA mitigation may include ameliorating direct construction impacts, meeting environmental/regulatory requirements, long-term operating agreements, or community compensation for impacts over and above those addressed by other mitigation. In rare situations, where the extent and duration of the impact of a project on a community is such that restoring the area to its pre-project state is insufficient to relieve the stress of MWRA's presence during the project, MWRA funds or contributes to improvements to affected areas.

Some mitigation is funded in the capital budget, while other mitigation is funded in the current expense budget. The proposed FY04 CEB includes \$1.4 million for community compensation for impacts. The proposed budget includes funds for the Town of the Winthrop, based on MWRA's Memorandum of Agreement with the town, as well as funds for the City of Quincy. Although many of MWRA's obligations under a 1988 Memorandum

of Understanding (MOU) with Quincy have terminated, and agreement on a successor MOU has not been reached, some obligations remain. MWRA pays Quincy \$250,000 annually, subject to inflation, for fire protection services for the FRSA, an obligation that will continue until MWRA ceases all residuals activities at the FRSA, establishes its own fire protection services, or the 1988 MOU is superceded.

Retirement System Contribution

MWRA has included \$2.7 million in the proposed FY04 budget for an addition to its Retirement Fund, commensurate with the goal to maintain a fully funded retirement system for employees, including approved cost-of-living increases. The Retirement System budget includes funds for the expenses of the Retirement Board. The \$2.7 million addition to the retirement fund is based on a recommendation from the Retirement Board that reflects an actuarial report completed after the early retirement incentive program offered in FY02.

Uncertainties

The proposed FY04 budget reflects the following assumptions that may result in spending that is different from budget:

- *Utilities* – Since November 2001, MWRA has purchased power for Deer Island through a competitive purchase agreement. The agreement provides for approximately two-thirds of power requirements at a fixed price. The balance is purchased at market rates that can fluctuate from month-to-month. The agreement expires at the end of March 2003. MWRA recently opened bids on a successor agreement, but rejected all bids and will return to "default service" while options to ensure a favorable contract structure for the future are considered. Prices for other utilities, such as diesel fuel and natural gas, may also change

between now and June. MWRA continues to monitor the utilities market and will reevaluate pricing assumptions this spring.

- *Interest Rates* – Changes in interest rates affect MWRA earnings on short-term investments, MWRA debt service payments on variable rate debt, and swap receipts. In FY04 a 1% difference between assumed and actual rates will change investment income by \pm \$3 million, variable rate debt service payments by \pm \$7 million, and swap receipts by \pm \$1.5 million.
- *Security* - The risk of war in the Middle East and other world events may present the need for new security measures to protect MWRA facilities.

Community Profile and Assessments

MWRA provides wholesale water and sewer services to 61 communities. Forty-seven communities purchase water supply services, and 45 communities purchase wastewater transport and treatment services. Thirty-one communities purchase both. Approximately 2.5 million people, or 43% of the population of Massachusetts, live and work in the communities that purchase water and/or wastewater services from MWRA.

MWRA's largest single customer is the Boston Water and Sewer Commission (BWSC), which provides retail services in the City of Boston. In the proposed FY04 CEB, rate revenue from BWSC accounts for 31% of MWRA's total rate revenue. Table I-3, on page I-19, lists MWRA communities, the services received and preliminary MWRA assessments for FY04.

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-4 presents the calculation of MWRA's preliminary FY04 rate revenue requirement. The tables show that most of MWRA's current expenses are directly attributable to either water or sewer service costs, or to investment in the water or sewer systems. Expenses that support both systems are allocated to water or sewer assessments based on generally accepted cost allocation principles. The allocation methodology used in preparing the proposed FY04 budget was revised prior to FY02 to more accurately estimate the division of support costs between the water and sewer programs. Investment income and other revenue offset

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

Wholesale Assessment Methodology

MWRA calculates separate user assessments for water and sewer services. Budgeted water operating and capital costs are allocated based on each community's share of total water use for the most recent calendar year. The sewer assessment methodology allocates budgeted operating and maintenance costs based on share of wastewater flow and strength parameters, and capital costs based on proportion of flow, strength, and population. Beginning in FY02, MWRA started using 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.

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.

TABLE I-4
Calculation of the Preliminary FY04 Rate Revenue Requirement
(\$000s)

	Sewer	Water	Total
Expenses			
Operations and Maintenance Costs:			
Direct Sewer and Water Expenses	\$72,067	\$36,430	\$108,497
PLUS			
Other Costs:			
Allocated Direct Expenses	\$55,675	\$9,738	\$65,413
Allocated Indirect Expenses	9,074	22,295	31,369
PLUS			
Capital Costs:			
Debt Service (Less: Debt Offsets)	\$204,590	\$72,001	\$276,591
Current Revenue/Capital	3,750	1,250	5,000
LESS			
Non-Rate Revenue:			
Investment Income	(\$18,282)	(\$6,245)	(\$24,527)
Fees and Other Revenue	(5,524)	(8,421)	(13,945)
Non-Recurring Revenue	(9,302)	(3,268)	(12,570)
EQUALS			
Rate Revenue Requirement	\$312,048	\$123,780	\$435,828

Table I-1

MWRA Preliminary FY04 Water and Sewer Assessments

Combined Water and Sewer Customers	WATER		SEWER		COMBINED	
	Preliminary FY04	% Change from FY03	Preliminary FY04	% Change from FY03	Preliminary FY04	% Change from FY03
ARLINGTON	\$ 2,585,547	8.8%	\$ 5,803,643	2.6%	\$ 8,389,190	4.4%
BELMONT	1,430,721	4.7%	3,567,581	-0.7%	4,998,302	0.8%
BOSTON	47,749,450	5.7%	88,516,802	5.0%	136,266,252	5.2%
BROOKLINE	3,615,947	7.9%	9,074,936	0.2%	12,690,883	2.3%
CHELSEA	2,057,295	10.7%	4,589,504	1.1%	6,646,799	3.9%
EVERETT	2,850,132	10.8%	5,687,920	2.6%	8,538,052	5.2%
FRAMINGHAM	4,656,346	5.5%	8,156,357	2.0%	12,812,703	3.3%
LEXINGTON	3,204,632	14.3%	4,855,103	2.4%	8,059,735	6.8%
MALDEN	3,437,025	7.1%	8,312,379	5.3%	11,749,404	5.8%
MEDFORD	3,135,950	5.5%	8,412,270	3.5%	11,548,220	4.0%
MELROSE	1,707,000	12.4%	3,962,252	4.3%	5,669,252	6.6%
MILTON	1,544,161	7.7%	3,920,272	0.2%	5,464,433	2.2%
NEWTON	5,942,412	8.5%	13,872,407	-1.1%	19,814,819	1.6%
NORWOOD	1,957,247	9.2%	4,750,822	1.2%	6,708,070	3.4%
QUINCY	5,585,863	8.9%	13,285,162	0.4%	18,871,025	2.8%
REVERE	2,633,987	10.7%	6,721,102	2.9%	9,355,089	5.0%
SOMERVILLE	3,890,690	3.3%	10,679,039	1.9%	14,569,729	2.3%
STONEHAM	2,117,184	8.6%	3,393,321	-1.6%	5,510,505	2.1%
WALTHAM	4,582,457	12.4%	9,411,352	1.6%	13,993,810	4.9%
WATERTOWN	1,812,186	7.8%	4,297,740	0.6%	6,109,926	2.6%
WINTHROP	911,120	10.4%	2,217,766	3.3%	3,128,886	5.3%
TOTAL	\$ 107,407,348	7.3%	\$ 223,487,732	2.9%	\$ 330,895,081	4.3%
MWRA Sewer and Partial Water Customers						
CANTON	\$ 1,237,559	6.3%	\$ 2,898,443	0.8%	\$ 4,136,003	2.4%
NEEDHAM	1,065,819	46.0%	4,693,488	0.3%	5,759,307	6.5%
STOUGHTON	266,016	100.0%	3,204,398	0.1%	3,470,414	8.4%
WAKEFIELD	1,200,646	0.4%	4,240,917	1.9%	5,441,563	1.5%
WELLESLEY	234,211	-49.4%	3,809,713	2.0%	4,043,924	-3.7%
WINCHESTER	812,590	37.3%	2,953,247	3.2%	3,765,837	9.1%
WOBURN	1,617,494	-18.5%	7,498,034	1.7%	9,115,528	-2.6%
TOTAL	\$ 6,434,335	5.0%	\$ 29,298,241	1.4%	\$ 35,732,576	2.0%
MWRA Sewer-only Customers						
ASHLAND			\$ 1,343,550	6.8%	\$ 1,343,550	6.8%
BEDFORD			2,313,373	1.6%	2,313,373	1.6%
BRAINTREE			5,745,795	2.9%	5,745,795	2.9%
BURLINGTON			3,315,462	3.6%	3,315,462	3.6%
CAMBRIDGE			15,895,397	3.1%	15,895,397	3.1%
DEDHAM			4,172,574	-1.4%	4,172,574	-1.4%
HINGHAM			1,098,469	1.1%	1,098,469	1.1%
HOLBROOK			1,076,505	3.1%	1,076,505	3.1%
NATICK			3,665,823	2.7%	3,665,823	2.7%
RANDOLPH			3,915,599	0.3%	3,915,599	0.3%
READING			2,969,021	3.6%	2,969,021	3.6%
WALPOLE			2,377,411	-0.5%	2,377,411	-0.5%
WESTWOOD			1,842,566	1.3%	1,842,566	1.3%
WEYMOUTH			7,756,352	1.4%	7,756,352	1.4%
WILMINGTON			1,773,807	3.8%	1,773,807	3.8%
TOTAL			\$ 59,261,706	2.2%	\$ 59,261,706	2.2%
MWRA Water-only Customers						
LYNNFIELD	\$ 281,378	10.0%			\$ 281,378	10.0%
MARBLEHEAD	1,195,143	9.4%			1,195,143	9.4%
NAHANT	221,840	9.8%			221,840	9.8%
SAUGUS	1,786,974	4.3%			1,786,974	4.3%
SOUTHBOROUGH ¹	542,896	11.5%			542,896	11.5%
SWAMPSCOTT	1,158,272	7.0%			1,158,272	7.0%
WESTON	1,013,900	8.2%			1,013,900	8.2%
TOTAL	\$ 6,200,402	7.4%			\$ 6,200,402	7.4%
MWRA Partial Water-only Customers						
LYNN	\$ 177,690	2.6%			\$ 177,690	2.6%
MARLBOROUGH ¹	2,603,416	11.5%			2,603,416	11.5%
NORTHBOROUGH	140,389	-11.1%			140,389	-11.1%
PEABODY	817,116	25.9%			817,116	25.9%
TOTAL	\$ 3,738,612	12.8%			\$ 3,738,612	12.8%
SYSTEMS TOTAL	\$ 123,780,698	7.3%	312,047,678	2.6%	\$ 435,828,376	3.9%

¹ FY03 charges for Marlborough and Southborough are estimates.

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 rate revenue requirements for FY05 through FY13 based on the rate increase for FY04.

spending. However, new water system improvements, for which there are fewer non-ratepayer sources of funding, and the impact of recent financing strategies will increase MWRA capital financing costs over the next several years.

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

The second largest budget growth factor is inflation of base operating costs. The estimated \$38.4 million increase in direct expenses from FY05 to FY13 is primarily the result of an assumed inflation rate of 2.5% annually. In addition, over the next ten years there will be an increase in direct expenses as a result of capital improvement projects. The largest increase will be for operation of new facilities. The Walnut Hill Water Treatment Plant, scheduled to reach full operation by FY05, will have an estimated incremental cost of \$3 million in FY05 and

	Estimates of Future Rate Revenue Requirements (\$ in Millions)										
	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
RATE REVENUE	\$435.8	\$461.8	\$489.6	\$519.2	\$575.2	\$598.7	\$651.2	\$674.8	\$701.3	\$724.3	\$731.8
RATE REVENUE INCREASE	3.9%	6.0%	6.0%	6.0%	10.8%	4.1%	8.8%	3.6%	3.9%	3.3%	1.0%

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

FY06. Startup and operation of the Union Park Detention and Treatment facility, the Reserved Channel CSO facility, and associated remote odor control facilities have incremental impacts between FY06 and FY09. Improvements to increase remote monitoring and control of wastewater facilities are expected to result in decreased operating costs in FY06 and FY08.

The anticipated increases and decreases in costs associated with these capital improvements are shown on Page I-24.

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:

- 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 what rate increases will be; rather they provide the context and framework for the policy decisions that actually shape future rate revenue requirements and increases.

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

There are several areas where differences from planning estimate assumptions may reduce projected increases, or where MWRA will have opportunities to decrease costs:

- Lower than anticipated borrowing rates or higher than expected investment income rates.
- The planning estimates do not factor in any positive year-end variances.
- More opportunities for SRF borrowing than expected; a dollar borrowed through the SRF at 2% replaces the need to borrow a dollar long-term at an assumed 6%.
- Debt refinancing opportunities.
- Capital spending.
- Operating expenses.

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

Capital Improvement Program

Each year MWRA prepares a three-year budget and a ten-year plan for capital spending. After review and comment by the Advisory Board, the Board approves the budget, which remains in effect for one year.

In June 2002, the Board of Directors adopted a ten-year CIP spending cap of \$1,832 million for FY03-12, with spending for the first three fiscal years (FY03, FY04, and FY05) capped at \$339 million, \$347 million, and \$271 million, respectively. The ten-year CIP spending cap is reset each year by removing the current fiscal year and adding a new tenth year at \$100 million, plus inflation. Unspent funds from the current year are carried forward. As part of the proposed FY04-FY06 CIP, MWRA calculated a preliminary cap of \$1,657 million for FY04-13. On January 15, 2003, in response to the Commonwealth's elimination of debt service assistance, the Board approved the deferral of \$63.5 million in planned capital spending from FY03-05 to FY06 and beyond. In addition, the Board reduced the CIP spending cap for FY04 from \$347 million to \$263.5 million and for FY05 from \$271 million to \$225.5 million. These changes, together with responses to the Advisory Board's recommendations on the proposed CIP, will be incorporated into the final CIP presented to the Board for approval in June.

MWRA divides the CIP into three program areas: Wastewater, Waterworks, and Business and Operations Support. The Wastewater program area, which includes the Boston Harbor Project (BHP) and Wastewater System Improvement projects such as the Combined Sewer Overflow (CSO) Program, aims to modernize the wastewater collection and treatment system to meet current and future demand.

Waterworks System Improvement projects support MWRA's commitment to provide high

quality drinking water to its customers. MWRA has undertaken an Integrated Water Supply Improvement Program (IWSIP) to ensure that the treatment, transmission, and storage of water meets quality standards and complies with state and federal regulatory requirements. IWSIP includes the construction of the Walnut Hill Treatment Plant, the MetroWest Water Supply Tunnel, and seven covered storage facilities.

The Business and Operations Support program area includes projects with authority-wide benefits, including the new MWRA facility in Chelsea, the Business Systems Plan, and environmental remediation at MWRA sites and facilities.

MWRA's proposed capital budget, including detailed expenditure forecasts and program descriptions, is available online at www.mwra.com.

Proposed FY04-06 CIP

MWRA has undertaken many capital improvements since 1985. Expenditures on all projects from MWRA's inception through the end of FY03 are \$5.9 billion². As shown on the next page, the total planned capital investment for the ten-year period FY04-13 is \$1.58 billion, including contingency funds. The proposed CIP for FY04-06 includes projected three-year outlays of \$834 million, including contingency funds, for more than 95 projects. The proposed FY04-06 budget is stated in December 2003 dollars.

Total project costs presented in the proposed FY04-06 CIP, which include both past and projected expenditures for active CIP projects, are \$5 billion for BHP and other Wastewater projects; \$2 billion for Waterworks projects; and \$54.2 million for Business and Operations

² Includes approximately \$551 million in completed projects that are no longer included in the CIP budget totals.

Proposed FY04-06 CIP Expenditure Summary (\$ in Thousands)						
	FY04	FY05	FY06	FY04-06	FY07-13	Total 10-Year CIP
Total MWRA	\$ 265,174	\$ 249,821	\$ 256,888	\$ 771,883	\$ 671,172	\$ 1,443,055
S.99601 Boston Harbor Project	\$ 110	\$ 123	\$ -	\$ 233	\$ -	\$ 233
S.99201 Wastewater System Improvements	\$ 122,128	\$ 120,139	\$ 145,734	\$ 388,001	\$ 429,364	\$ 817,365
S.10 Interception & Pumping	42,038	43,618	33,982	119,638	126,553	246,191
S.25 Treatment	14,236	16,937	14,558	45,731	78,617	124,348
S.12 Residuals	-	-	-	-	-	-
S.13 CSO	60,537	55,032	94,981	210,550	229,979	440,529
S.14 Other	5,317	4,552	2,212	12,081	(5,785)	6,296
S.99301 Waterworks System Improvements	\$ 133,033	\$ 123,888	\$ 108,054	\$ 364,975	\$ 241,808	\$ 606,783
S.16 Drinking Water Quality Improvements	65,923	49,056	23,999	138,978	17,102	156,080
S.17 Transmission	13,086	18,206	10,830	42,122	38,320	80,442
S.18 Distribution And Pumping	35,502	39,494	58,599	133,595	199,991	333,586
S.19 Other	18,522	17,131	14,626	50,279	(13,605)	36,674
S.99801 Business & Operations Support	\$ 9,903	\$ 5,671	\$ 3,100	\$ 18,674	\$ -	\$ 18,674
Contingency	21,071	19,972	22,229	63,272	74,293	137,565
Total MWRA with Contingency	\$ 286,245	\$ 269,793	\$ 279,117	\$ 835,155	\$ 745,465	\$ 1,580,620

Support projects. The proposed CIP also includes \$138 million in contingency budget funds for the next ten years.

MWRA capital spending has been driven by a small number of large projects. Peak spending for the Boston Harbor Project occurred in FY94 and for the MetroWest Water Supply Tunnel in FY99. Peak spending for the Walnut Hill Water Treatment Plant is expected in FY02, and for CSOs in FY06.

Capital spending will continue to decrease as the key components of the Integrated Water Supply Improvement Program and elements of the CSO Program are completed and in place to serve the long-term needs of the service area.

These decreases do not translate into reduced rate revenue requirements, however, because federal grants, SRF borrowing, and Commonwealth debt service assistance have heavily supported BHP spending. In addition, MWRA has used a variety of financing techniques to delay some of the impacts of capital spending to date. MWRA does not anticipate the availability of debt service assistance in the foreseeable future.

Capital Financing and Grant Revenues

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

In the past, federal and state grant receipts have been a significant source of funds, totaling an estimated \$1.1 billion through September 2001 or 20% of spending for the period. Grant receipts of \$6 million and \$4 million in FY02 and FY03 amount to less than 1% of budgeted spending for the two years. After netting out grant revenue, MWRA expects to finance \$722 million in capital projects through long-term debt, SRF loans, and commercial paper over the next three fiscal years.

CIP Impact on the Current Expense Budget

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

The table below summarizes, by program area, the estimated incremental costs and savings in MWRA's Current Expense Budget from FY05 through FY13 as a result of the capital program.

Incremental Costs and Savings from CIP Projects									
	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
Wastewater	\$ 141,358	\$ 316,988	\$ (385,833)	\$ (2,295,847)	\$ 1,043,294	\$ (80,155)	\$ 49,156	\$ (50,844)	\$ -
Waterworks	3,103,482	2,999,587	-	-	-	-	-	-	-
Business & Operations Support	-	-	-	-	-	-	-	-	-
TOTAL	\$ 3,244,840	\$ 3,316,575	\$ (385,833)	\$ (2,295,847)	\$ 1,043,294	\$ (80,155)	\$ 49,156	\$ (50,844)	\$ -

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, retained ownership of real property, including the reservoirs and watersheds.

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

History and Accomplishments

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

MWRA has 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 \$438 million per year over the last twelve years (FY91 to FY02). 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 the planning estimates included with the proposed CEB the rate revenue requirement increases by 6.0% annually for the next three years.

With the prospect of higher rate increases in the future, MWRA must ensure that its operating and capital costs are kept to a minimum, and that every dollar adds to the value of water and sewer

services. MWRA has taken several steps toward this end.

- First, MWRA works to limit increases in ongoing operating costs. The proposed FY03 direct expense budget is \$6.4 million less than FY99 spending.
- Second, 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.
- Third, MWRA continues to aggressively seek additional SRF assistance.
- Fourth, MWRA will use rate stabilization funds in FY04 and beyond in the context of its longer-term rate smoothing strategy.
- Fifth, MWRA will seek to maximize savings in the deregulated electricity market, and will continue to explore reorganization opportunities.
- Finally, MWRA is working to reduce labor costs wherever appropriate. The proposed FY04 budget includes funding for 1,325 filled positions by June 30, 2004 compared to 1,517 positions filled as of January 2002.

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

MWRA Organization

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

document presents MWRA's organizational structure.

The **Executive Office** provides centralized MWRA management, direction, and policy development. The budget includes funds for the Office of the Executive Director, the Board of Directors, the Advisory Board, and other advisory committees.

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. In addition, it provides for long-term planning of the water and wastewater facilities and systems.

The **Finance Division** is responsible for budgeting, rate setting, accounting, grants management, and treasury activities; securing financing to support the capital improvement program; and coordinating strategic planning and performance measurement activities throughout MWRA.

The **Law Division** provides legal counsel to all divisions on environmental law, real estate transactions, litigation, and compliance with developing policy standards. The division represents MWRA in all court-related matters.

The **Support Services Division** provides support functions across MWRA. Support Services oversees the central functions of communications and community relations, real property and environmental management, human resources, affirmative action, procurement, internal audit, vehicle maintenance, computer system development and management, facilities and

office supplies management, the library and records management, and mail services. The division also manages the Fore River Staging Area in Quincy and MWRA's Chelsea Facility.

Statement of Financial Position

In accordance with its Enabling Act, each year MWRA submits annual reports to the Governor, the President of the State Senate, the House of Representatives, the Advisory Board, and the Chairs of the state Senate and House Committees on Ways and Means containing financial statements relating to its operations maintained in accordance with Generally Acceptable Accounting Principles (GAAP) and, commencing with the annual reports for 1986, audited by independent certified public accountants. MWRA's audited financial statements at June 30, 2002 and 2001, and for the fiscal years ended June 30, 2002 and 2001 are available online at www.mwra.com.



Executive Office
Budget

EXECUTIVE OFFICE

PROPOSED FY04 Current Expense Budget EXECUTIVE DIVISION by Line Item						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 794,104	\$ 790,525	\$ 503,482	\$ 503,071	\$ (411)	-0.1%
OVERTIME	57	82	-	-	-	0.0%
TRAINING & MEETINGS	14,220	2,993	6,842	4,075	(2,767)	-40.4%
PROFESSIONAL SERVICES	379,151	286,188	162,225	162,225	-	0.0%
OTHER MATERIALS	3,169	4,567	3,933	1,785	(2,148)	-54.6%
OTHER SERVICES	441,066	455,103	460,562	464,867	4,305	0.9%
TOTAL	\$ 1,631,767	\$ 1,539,458	\$ 1,137,045	\$ 1,136,023	\$ (1,022)	-0.1%

PROPOSED FY04 Current Expense Budget EXECUTIVE DIVISION by Department						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
EXECUTIVE OFFICE / BOARD OF DIRECTORS	\$ 1,065,845	\$ 942,672	\$ 521,053	\$ 513,226	\$ (7,827)	-1.5%
ADVISORY BOARD / OTHER COMMITTEES	565,922	596,787	615,991	622,797	6,806	1.1%
TOTAL	\$ 1,631,767	\$ 1,539,459	\$ 1,137,044	\$ 1,136,023	\$ (1,021)	-0.1%

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

Executive Office goals are to:

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

The Executive Office budget supports the Executive Director's Office (which includes the Board of Directors cost center) and the MWRA Advisory Board and Advisory Committees cost center. The Board of Directors formulates policies to guide MWRA actions and is responsible for major policy and fiscal decision making. The MWRA Advisory Board was established by the Enabling Act to serve as a "watchdog" for MWRA's customer communities. The Advisory Board makes recommendations to MWRA on annual expense budgets and capital improvement programs. In addition, the Advisory Board

reviews and comments on MWRA reports, holds hearings on related matters, and makes recommendations to the Governor and the legislature. The other advisory committees supported by this budget are the Water Supply Citizens' Advisory Committee and the Wastewater Advisory Committee. The Executive Office budget accounts for less than 1% of the proposed FY04 direct expense budget.

Budget Highlights

- *\$162,000 for Professional Services, level funded with the amended FY03 budget but a decrease of \$120,000 or 42.5% from FY02 spending because of the elimination of funds for the Competitiveness Study completed in FY02. The budget funds the Water Supply Citizens' Advisory Committee and the Wastewater Advisory Committee.*
- *\$460,000 for the MWRA Advisory Board staff and operating expenses including space rental and general administrative office materials and supplies.*



Operations Division
Budget

OPERATIONS DIVISION

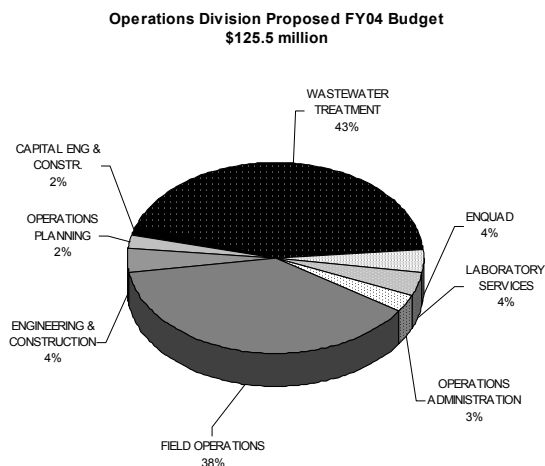
In FY01 MWRA established the Operations Division to integrate wastewater and water system operations and maintenance, treatment, planning, laboratory services, and engineering and construction functions, including the Program Management Division (PMD). The proposed FY04 Current Expense Budget and structure of the Operations Division is shown and described below.

PROPOSED FY04 Current Expense Budget OPERATIONS DIVISION by Line Item						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 66,251,856	\$ 63,941,259	\$ 59,939,996	\$ 60,746,568	\$ 806,572	1.3%
OVERTIME	3,714,141	4,065,742	3,653,156	3,568,728	(84,428)	-2.3%
FRINGE BENEFITS	98,520	96,924	83,344	95,865	12,521	15.0%
WORKERS' COMPENSATION	779,718	1,323,614	1,800,000	-	(1,800,000)	-100.0%
CHEMICALS	7,489,328	6,403,105	7,437,716	6,795,831	(641,885)	-8.6%
UTILITIES	19,898,563	15,556,711	14,133,713	15,261,650	1,127,937	8.0%
ONGOING MAINTENANCE	13,414,661	12,477,204	13,377,082	14,811,088	1,434,006	10.7%
TRAINING & MEETINGS	244,239	192,326	165,025	165,002	(23)	0.0%
PROFESSIONAL SERVICES	4,196,699	5,310,055	6,047,063	5,112,329	(934,734)	-15.5%
OTHER MATERIALS	4,854,562	3,209,664	2,674,211	3,621,978	947,767	35.4%
OTHER SERVICES	16,223,415	15,314,685	15,408,259	15,271,107	(137,152)	-0.9%
TOTAL	\$ 137,165,702	\$ 127,891,289	\$ 124,719,565	\$ 125,450,146	\$ 730,581	0.6%

PROPOSED FY04 Current Expense Budget OPERATIONS DIVISION by Department						
DEPARTMENT	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
OPERATIONS ADMINISTRATION	\$ 3,839,013	\$ 5,854,183	\$ 5,537,009	\$ 3,889,340	\$ (1,647,669)	-29.8%
OPERATIONS PLANNING	3,115,998	3,060,091	2,960,102	2,577,572	(382,530)	-12.9%
WASTEWATER TREATMENT	62,191,613	54,127,719	53,458,136	53,926,014	467,878	0.9%
FIELD OPERATIONS	47,254,062	45,753,462	45,050,310	47,751,943	2,701,633	6.0%
LABORATORY SERVICES	4,647,654	4,717,716	4,721,150	4,891,153	170,003	3.6%
ENQUAD	4,228,319	5,130,613	5,481,523	4,908,873	(572,650)	-10.4%
ENGINEERING & CONSTRUCTION	7,647,497	6,479,639	5,302,834	5,273,239	(29,595)	-0.6%
CAPITAL ENG & CONSTR.	2,743,349	2,346,803	2,208,501	2,232,012	23,511	1.1%
PMD	1,498,197	421,063	-	-	-	0.0%
TOTAL	\$ 137,165,702	\$ 127,891,289	\$ 124,719,565	\$ 125,450,146	\$ 730,581	0.6%

The *Wastewater Treatment Department*, which accounts for more than 40% 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 more than 35% 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. Field Operations consolidates the former Transport, TRAC, and Water Operations departments, and the metering portion of the former Sewerage Facilities Development Department.



Two departments in the Operations Division are responsible for most of the Division's engineering and construction work. The *Engineering and Construction Department* manages and coordinates the planning, design, and construction of ongoing system improvements in the wastewater transport and treatment and water distribution and treatment systems. The *Capital Engineering and Construction Department (CECD)* is responsible for managing engineering, design (including water system hydraulic modeling), and construction of the Integrated Water Supply Improvement Program (IWSIP) which includes the Walnut Hill Treatment Plant, the MetroWest Water Supply Tunnel, and seven covered storage facilities. CECD is also responsible for the planning, design, and construction of the program to rehabilitate MWRA's large water distribution mains.

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

The *Operations Planning Department* manages the planning activities for the water and wastewater systems and MWRA's energy program. The department provides central coordination and support in public health research and outreach, CSO control, technical and financial community support, Geographic Information Systems (GIS), watershed protection, environmental review, and master planning.

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

The *Operations Administration Department* provides oversight and general management support in the areas of finance, contract administration, personnel, and planning. The Administration Department budget also includes funds for MWRA vehicle purchases and certain division-wide memberships. The budget for MWRA's workers' compensation program has been transferred to Human Resources, to better align the management and responsibility of the program and coordination with the third-party administrator.

The Operations Division's goals are to:

- Plan, develop, implement, and operate efficient, reliable, and economical water 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.

OPERATIONS ADMINISTRATION

PROPOSED FY04 Current Expense Budget OPERATIONS ADMINISTRATION							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 2,026,306	\$ 3,155,964	\$ 2,912,591	\$ 2,488,450	\$ (424,141)	-14.6%	
OVERTIME	339	2,974	-	-	-	0.0%	
FRINGE BENEFITS	-	83	-	-	-	0.0%	
WORKERS' COMPENSATION	779,718	1,323,614	1,800,000	-	(1,800,000)	-100.0%	
ONGOING MAINTENANCE	687	-	-	-	-	0.0%	
TRAINING & MEETINGS	16,580	8,571	12,553	12,553	-	0.0%	
PROFESSIONAL SERVICES	17,556	277,396	260,000	-	(260,000)	-100.0%	
OTHER MATERIALS	666,596	641,907	133,827	1,117,141	983,314	734.8%	
OTHER SERVICES	330,231	443,674	418,039	271,195	(146,844)	-35.1%	
TOTAL	\$ 3,838,013	\$ 5,854,183	\$ 5,537,010	\$ 3,889,339	\$ (1,647,671)	-29.8%	

The Operations Administration Department consists of the Chief Operating Officer, the Deputy Chief Operating Officer, and administrative staff who provide overall policy and program direction and support for Operations Division personnel, labor relations, finance, contract administration, and invoice processing functions. The Operations Administration budget also includes funding for division vehicle purchases and certain division-wide memberships. As part of the proposed FY04 budget, the workers' compensation budget has been transferred to the Human Resources Department, which is responsible for managing the program.

Budget Highlights

- *\$2.5 million for regular pay for employees performing management, administrative, contract administration, labor relations, and financial management functions.*
- *Funding for Workers' Compensation claims and medical payments has been transferred to the Human Resources Department.*
- *\$1.1 million for non-domicile work crew vehicle purchases. Vehicle purchases totaled \$622,000 and \$120,000 in FY02 and FY03, respectively.*
- *\$271,000 for Other Services of which \$250,000 represents the cost of MWRA memberships, primarily in the American Water Works Research Foundation and the Association of Metropolitan Water and Sewer Agencies (AMWA/AMSA).*

OPERATIONS PLANNING

PROPOSED FY04 Current Expense Budget OPERATIONS PLANNING							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 2,563,527	\$ 2,612,671	\$ 2,286,047	\$ 2,160,306	\$ (125,741)	-5.5%	
OVERTIME	10,134	3,135	5,866	3,847	(2,019)	-34.4%	
FRINGE BENEFITS	309	90	156	-	(156)	-100.0%	
UTILITIES	764	16	-	-	-	0.0%	
ONGOING MAINTENANCE	1,110	16,222	25,000	-	(25,000)	-100.0%	
TRAINING & MEETINGS	29,480	21,110	20,669	20,669	-	0.0%	
PROFESSIONAL SERVICES	46,524	74,809	69,501	85,000	15,499	22.3%	
OTHER MATERIALS	259,476	39,565	49,798	46,850	(2,948)	-5.9%	
OTHER SERVICES	204,675	292,473	503,065	260,900	(242,165)	-48.1%	
TOTAL	\$ 3,115,999	\$ 3,060,091	\$ 2,960,102	\$ 2,577,572	\$ (382,530)	-12.9%	

Actuals for FY01 represent the totals for the former Sewerage Facilities Development and Waterworks Planning departments.

The Operations Planning Department manages the planning activities for the water and wastewater systems and MWRA's energy program. The department provides central coordination and support in public health research and outreach, CSO control, technical and financial community support, Geographic Information Systems (GIS), watershed protection, environmental review, and master planning.

The Operations Planning Department is comprised of the following sections:

Master Planning is responsible for water and wastewater master plans, and capital project development. This unit is also responsible for public health research, including outreach and water quality reporting and the annual Consumer Confidence Report (CCR) and supports the Operations Division in environmental review and permitting of projects, including impacts on MWRA facilities from other agency projects; review and processing of system expansion requests, water supply agreements, and emergency connection requests; and coordination with MDC Division of Watershed Management on source water protection. Additionally this unit assists in the development of strategies for long-term emergency risk reduction and preparation for MWRA facilities and systems, and energy planning for MWRA operating facilities.

Community Program Support is responsible for inflow/infiltration (I/I) and sanitary sewer overflows (SSO) policy development, implementation, and reporting. It is also responsible for 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. In addition, this unit provides oversight of and reporting on MWRA leak detection regulations and demand management programs. The unit is also responsible for reporting on the portions of MWRA's NPDES permit related to demand management and flow limitation activities.

Through the I/I Financial Assistance Program MWRA has distributed grants and loans to member communities totaling \$90.2 million since the program's inception in FY93. The Proposed FY04-06 CIP includes \$40 million for Phase IV, to be allocated to member communities at a 45% grant and 55% loan ratio. The Water Infrastructure Rehabilitation Financial Assistance Program distributed \$30 million in grants and loans in FY98 and FY99. A new \$250 million Local Pipeline Assistance Program was initiated in FY01 and 46.5 million of interest-free loans were distributed by March 2003.

Mapping, Modeling, and Data Analysis is responsible for the development and maintenance of GIS for both water and wastewater systems, including integration of field and engineering records into GIS for access by planning, engineering, and operations staff. It provides demand analysis and forecasting of water and wastewater flows for master planning and system operations, modeling of reservoir operations, drought forecasting and planning, and evaluation of system expansion requests. This unit is also responsible for the development and maintenance of water and sewer system models in support of master planning, system operations, and optimization. It provides statistical analysis for planning and operations, including pathogen risk analysis.

Combined Sewer Overflows (CSO) Program is responsible for the \$650 million CSO control plan. Responsibilities include long-term CSO control master planning and evaluation; CSO project permitting, engineering design; technical assistance during construction of MWRA managed CSO projects; oversight of community managed CSO design and construction activities; and start-up assistance for new CSO facilities. It is anticipated that this section will phase out upon completion of the CSO capital program with key functions integrated into the rest of the organization.

Budget Highlights

- *\$2.2 million for Wages and Salaries, a decrease of \$126,000 from the amended FY03 budget.*
- *\$50,000 for Professional Services to fund professional assistance regarding power suppliers for MWRA's energy program.*
- *\$242,000 for the production and distribution of the federally mandated Consumer Confidence Report (CCR).*

WASTEWATER TREATMENT

PROPOSED FY04 Current Expense Budget WASTEWATER TREATMENT						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 17,319,924	\$ 16,534,740	\$ 15,428,439	\$ 15,332,813	\$ (95,626)	-0.6%
OVERTIME	1,216,764	1,529,721	1,111,709	1,145,108	33,399	3.0%
FRINGE BENEFITS	40,410	40,450	25,630	37,359	11,729	45.8%
CHEMICALS	4,400,760	3,182,544	3,907,100	3,161,668	(745,432)	-19.1%
UTILITIES	15,129,787	10,667,776	9,516,727	10,592,222	1,075,495	11.3%
ONGOING MAINTENANCE	7,959,670	7,854,613	9,048,993	8,772,937	(276,056)	-3.1%
TRAINING & MEETINGS	55,013	70,430	34,544	34,668	124	0.4%
PROFESSIONAL SERVICES	671,705	780,663	1,107,799	1,081,664	(26,135)	-2.4%
OTHER MATERIALS	1,087,461	598,588	545,789	535,738	(10,051)	-1.8%
OTHER SERVICES	14,310,121	12,868,194	12,731,406	13,231,838	500,432	3.9%
TOTAL	\$ 62,191,615	\$ 54,127,719	\$ 53,458,136	\$ 53,926,015	\$ 467,879	0.9%

PROPOSED FY04 Current Expense Budget WASTEWATER TREATMENT by Program						
PROGRAM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
DEER ISLAND	\$ 41,429,751	\$ 39,497,258	\$ 39,002,175	\$ 39,170,181	\$ 168,006	0.4%
RESIDUALS	19,855,213	13,700,725	13,516,139	13,855,460	339,321	2.5%
CLINTON	906,649	929,736	939,822	900,373	(39,449)	-4.2%
TOTAL	\$ 62,191,613	\$ 54,127,719	\$ 53,458,136	\$ 53,926,014	\$ 467,878	0.9%

The Deer Island Treatment Plant (DITP), the Residuals Management Program, and the Clinton Treatment Plant comprise the Wastewater Treatment Department. Together the budgets for these programs comprise 43% of the Operations Division's FY04 proposed budget and 31% of MWRA's proposed FY04 operating costs.

The **Deer Island Treatment Plant** budget accounts for more than 31% of the Operations Division's proposed FY04 budget. DITP has a primary treatment peak capacity of 1.27 billion gallons per day (bgd).

There are three headworks facilities which handle flows from MWRA's north system communities. At these headworks, bricks, logs, sand, and large debris are removed from the wastewater prior to transport to Deer Island through one of two underground tunnels. At Deer Island, north system flows are pumped through a grit removal facility prior to entering the primary treatment process. The grit is hauled off-island and disposed of in a landfill.

South system flows are transported to the Nut Island Headworks for preliminary treatment. The flows are then transported to Deer Island through a cross-harbor tunnel. At Deer Island, south system flows are pumped directly to the primary treatment process, by-passing Deer Island's on-island grit removal system because of the level of grit removal achieved at the Nut Island Headworks.

North and south system flows are combined in primary treatment which takes place in a series of stacked clarifiers where scum (fats, oils, grease) rises to the top and sludge (solids) settles to the bottom. The secondary process provides additional treatment, passing the wastewater through a series of reactors containing bacteria in a pure oxygen environment. These bacteria break down dissolved organics in the wastewater. The flow then moves on to a series of secondary clarifiers where the bacteria are allowed to

settle out in the form of secondary sludge. This secondary sludge, along with the primary sludge, is thickened, anaerobically digested, and barged to MWRA's residuals processing facility in Quincy. Methane, a by-product of anaerobic digestion, is used as fuel for the Deer Island plant's boilers, which produce steam to heat the facility and generate electricity.

Deer Island Operating Assumptions for the Proposed FY04 CEB

An average of 357 million gallons per day, based on 5-year running average, is assumed for the combined flows of the north and south systems with secondary treatment capacity of 495 million gallons per day.

Sludge quantities for FY04 are assumed to be 96.5 tons per day (TS). The assumed average solids content for digested sludge is 5.5%.

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

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

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

The **Clinton Wastewater Treatment Plant** provides sewage treatment services to the Town of Clinton and the Lancaster Sewer District. The plant treats an average of 2.5 mgd.

Budget Highlights

- *\$15.3 million for Wages and Salaries, a decrease of \$96,000 or 0.6% from the FY03 amended budget. Regular pay is 98% of the wages and salaries budget. \$74,000 for temporary employees, a \$143,000 or 65.6% decrease from the amended FY03 budget.*
- *\$1.1 million for Overtime, a \$33,000 or 3.0% increase over the FY03 amended budget.*
- *\$3.2 million for Chemicals, a decrease of \$745,000 or 19.1% from the FY03 amended budget. Decreases for polymer, hydrogen peroxide, and sodium hypochlorite are partially offset by an increase for ferrous chloride to be used in the treatment and control of struvite. The chemicals budget includes \$1.4 million for sodium hypochlorite, which is used for disinfection and odor control, and \$535,000 for polymer, which is used to thicken sludge.*
- *\$10.6 million for Utilities, a \$1.1 million or 11.3% increase over the FY03 amended budget primarily due to price uncertainties in the cost of electricity and an increase in the wholesale water rate.*
- *\$7.6 million for DITP and Clinton maintenance, a \$237,000 or 3.0% decrease from the amended FY03 budget. The proposed FY04 budget includes \$2.4 million for materials and \$5.2 million for services. The proposed FY04 maintenance budget for the Residuals Management program is \$1.1 million. Under the terms of the NEFCo contract, it will be used to cover the cost of all repairs with an individual cost of more than \$10,000.*
- *\$1.1 million for Professional Services, a \$26,000 or 2.4% decrease from the FY03 amended budget. The proposed budget includes \$931,000 for perimeter and access security at Deer Island, \$34,000 for vibration analysis, and \$20,000 for Maximo support services.*
- *\$536,000 for Other Materials, a \$10,000 or 1.8% decrease from the amended FY03 budget. The proposed budget includes \$120,000 for materials, \$93,000 for work clothes, \$70,000 for vehicle expenses, \$58,000 for health and safety materials, and \$34,000 for fill for the Clinton Treatment Plant landfill.*
- *\$13.2 million for Other Services, a \$500,000 or 3.9% increase from the amended FY03 budget primarily due to price uncertainty for the electricity and natural gas components of the sludge pelletization contract.*

FIELD OPERATIONS

PROPOSED FY04 Current Expense Budget						
FIELD OPERATIONS						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 29,332,061	\$ 28,728,824	\$ 28,029,109	\$ 29,320,113	\$ 1,291,004	4.6%
OVERTIME	2,187,766	2,274,653	2,313,510	2,168,109	(145,401)	-6.3%
FRINGE BENEFITS	52,839	52,165	53,000	54,420	1,420	2.7%
CHEMICALS	3,088,568	3,220,561	3,530,616	3,634,163	103,547	2.9%
UTILITIES	4,634,259	4,768,891	4,482,255	4,529,959	47,704	1.1%
ONGOING MAINTENANCE	5,028,179	4,188,746	3,841,220	5,581,948	1,740,728	45.3%
TRAINING & MEETINGS	72,270	57,491	58,493	58,358	(135)	-0.2%
PROFESSIONAL SERVICES	214,396	134,211	202,388	119,500	(82,888)	-41.0%
OTHER MATERIALS	1,541,827	872,522	974,480	969,069	(5,411)	-0.6%
OTHER SERVICES	1,101,897	1,455,398	1,565,239	1,316,304	(248,935)	-15.9%
TOTAL	\$ 47,254,062	\$ 45,753,462	\$ 45,050,310	\$ 47,751,943	\$ 2,701,633	6.0%

The primary goal of Field Operations 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) departments. The department is responsible for the treatment, transmission, and distribution of water from the Quabbin and Wachusett reservoirs to the community water systems. It also manages the collection and transport of wastewater flow from MWRA communities to the Deer Island Treatment Plant. Through TRAC, FOD manages MWRA's industrial pretreatment, permitting, and monitoring program. FOD consists of five operating units: Wastewater Operations, Metropolitan Maintenance, Water Operations and Maintenance, Operations Support, and Administration.

Wastewater Operations and Maintenance is comprised of Wastewater Operations and TRAC. Wastewater Operations operates MWRA's wastewater transport facilities, including 11 pumping stations, (nine of which are unstaffed), four headworks facilities which are continuously staffed, and five combined sewer overflow (CSO) facilities (four of which are unstaffed). TRAC manages MWRA's regulatory program for industrial and commercial dischargers, provides analytical and technical support to other MWRA programs, conducts independent research on sources and impacts of toxics in the MWRA system, and provides education and outreach on toxics to MWRA sewer users.

Water Operations and Maintenance is responsible for the treatment and delivery of water from the Quabbin and Wachusett reservoirs to the community water systems. The water system encompasses a service area from Chicopee in the western part of the state to Wakefield, Marblehead, and Norwood in the metropolitan area. Additionally, this unit maintains MWRA's western waterworks facilities, including the Ware Water Treatment Plant, the Interim Corrosion Control Facility in Marlborough, the Cosgrove Intake Facility, and the Norumbega Reservoir. This unit also oversees covered storage facilities and will operate the MetroWest Tunnel and the Walnut Hill Treatment Plant when those facilities come on line in 2003 and 2004, respectively. 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 new Chelsea facility. The Western Operations Center (WOC) is located at the Cosgrove Intake adjacent to the Wachusett Reservoir.

Metropolitan Maintenance is responsible for maintenance of MWRA's wastewater and water systems and facilities within the Route 128 area. Staff maintain pipelines, valves, interceptors, pumps, facility

equipment, buildings, and grounds. Metropolitan Maintenance staff maintain 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 system.

Operations Support provides technical support to FOD in the areas of engineering, quality assurance, data management, metering, and monitoring. Engineering staff coordinate 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 the tracking and analyzing of 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. This unit is also responsible for the maintenance of the water and future wastewater SCADA systems.

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

Budget Highlights

- *\$29.3 million for Wages and Salaries, an increase of \$1.3 million or 4.6% from the amended FY03 budget. This budget includes \$283,000 in funding for 16 new positions of which 13 are for the new Walnut Hill Water Treatment Plant and 3 are for the wastewater SCADA system.*
- *\$2.2 million for Overtime, a decrease of \$145,000 from the FY03 amended budget.*
- *\$3.6 million for Chemicals, an increase of \$104,000 or 2.9% from the amended FY03 budget. The proposed budget includes \$1.6 million for soda ash, \$818,000 for sodium hypochlorite, \$319,000 for potassium permanganate, and \$307,000 for carbon dioxide.*
- *\$4.5 million for Utilities, an increase of \$48,000 from the amended FY03 budget. The proposed budget includes \$3.6 million for electricity and \$562,000 for diesel fuel.*
- *\$5.6 million for Maintenance, an increase of \$1.7 million or 45.3% from the amended FY03 budget. The increase is primarily attributable to the inclusion of several facility rehabilitation projects in FY04 and additional services to cover upkeep of MWRA facilities in the western service area of the waterworks system. The proposed budget includes \$2.3 million for maintenance materials and \$3.3 million for maintenance services. These funds are also intended to cover unanticipated security initiatives and emergency situations such as pipeline breaks.*
- *\$1.3 million for Other Services, a decrease of \$249,000 or 15.9% from the amended FY03 budget. The decrease is primarily due to state police expenses at Norumbega, which are expected to be less in FY04 than in FY03. The proposed budget includes \$617,000 for police details to insure public safety on roadways during MWRA work activities and for security coverage as-needed at selected facilities and \$522,000 for telephone services.*
- *\$969,000 for Other Materials, including \$455,000 for vehicle expense, \$172,000 for work clothes, \$122,000 for health and safety materials, and \$93,000 for lab testing supplies for TRAC and Quality Assurance.*

LABORATORY SERVICES

PROPOSED FY04 Current Expense Budget LABORATORY SERVICES							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 3,010,123	\$ 3,215,667	\$ 3,265,831	\$ 3,420,535	\$ 154,704	4.7%	
OVERTIME	75,422	65,828	69,940	67,549	(2,391)	-3.4%	
FRINGE BENEFITS	1,331	1,183	1,200	1,200	-	0.0%	
UTILITIES	133,752	120,028	134,731	139,470	4,739	3.5%	
ONGOING MAINTENANCE	232,339	269,257	278,021	284,906	6,885	2.5%	
TRAINING & MEETINGS	8,322	4,978	7,093	7,070	(23)	-0.3%	
PROFESSIONAL SERVICES	142,459	109,941	76,075	100,193	24,118	31.7%	
OTHER MATERIALS	971,315	852,582	799,013	769,347	(29,666)	-3.7%	
OTHER SERVICES	72,592	78,251	89,246	100,883	11,637	13.0%	
TOTAL	\$ 4,647,654	\$ 4,717,716	\$ 4,721,150	\$ 4,891,153	\$ 170,003	3.6%	

The Department of Laboratory Services (DLS) supports the laboratory sampling, testing, and consulting needs of various client groups in the Operations Division through its four locations: Southborough, Somerville, 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.

DLS monitors drinking water treatment effectiveness and provides laboratory services in support of in-depth studies of corrosion control, disinfectant residual decay, nitrification, biofilm, and treatment issues. DLS regularly tests reservoir and community water systems for regulatory compliance with bacterial levels, chemical parameters such as chlorine residuals, and algae.

Results are tracked and analyzed and compliance reports are regularly submitted to the Environmental Protection Agency and the Massachusetts Department of Environmental Protection.

Most MWRA laboratory testing is done in-house. Certain exceedingly specialized or low volume tests are outsourced, such as tests for dioxins and radioactivity. In addition, MWRA maintains contracts with outside laboratories for use when DLS capacity is exceeded.

The department's goals are to provide high quality and responsive laboratory services to MWRA's water and wastewater treatment programs, and to conduct 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) and Clean Water Act NPDES permits.

Budget Highlights

- *\$3.4 million for Wages and Salaries, an increase of \$155,000 or 4.7% from the amended FY03 budget to reflect filled positions.*
- *\$68,000 for Overtime, a 3.4% decrease from the amended FY03 budget.*
- *\$139,000 for Utilities, an increase of \$5,000 or 3.5% from the amended FY03 budget.*
- *\$285,000 for Maintenance, a \$7,000 or 2.5% increase from the amended FY03 budget, of which \$165,000 is for special equipment services and repair contracts for lab equipment.*
- *\$100,000 for Professional Services to support outside lab testing, an increase of \$24,000 or 31.7% from the amended FY03 budget but a decrease of \$10,000 or 8.8% from FY02 actual spending.*
- *\$769,000 for Other Materials, a decrease of \$30,000 or 3.7% from the amended FY03 budget. The proposed budget includes \$183,000 for equipment replacement and \$539,000 for laboratory supplies.*

ENVIRONMENTAL QUALITY

PROPOSED FY04 Current Expense Budget ENVIRONMENTAL QUALITY							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 1,022,658	\$ 1,065,250	\$ 1,089,585	\$ 1,119,410	\$ 29,825	2.7%	
OVERTIME	8,332	4,449	4,099	4,099	-	0.0%	
FRINGE BENEFITS	17	-	20	20	-	0.0%	
ONGOING MAINTENANCE	2,432	369	2,700	3,000	300	11.1%	
TRAINING & MEETINGS	6,116	4,826	3,619	3,619	-	0.0%	
PROFESSIONAL SERVICES	3,041,785	3,915,496	4,330,600	3,725,972	(604,628)	-14.0%	
OTHER MATERIALS	24,929	10,404	18,800	20,570	1,770	9.4%	
OTHER SERVICES	122,051	129,819	32,100	32,183	83	0.3%	
TOTAL	\$ 4,228,319	\$ 5,130,613	\$ 5,481,523	\$ 4,908,873	\$ (572,650)	-10.4%	

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

ENQUAD's goals for FY04 are to:

- Maintain compliance with the reporting requirements of MWRA's NPDES permits for the Deer Island and Clinton treatment plants;
- Ensure that the permit-required outfall monitoring meets NPDES requirements, is scientifically credible, and is cost-effective;
- Monitor the effects of the Boston Harbor Project and MWRA's CSO Plan and provide data and assistance for CSO planning and compliance with regulatory requirements;
- Communicate results of monitoring to MWRA management, and to scientists, regulators, and the public.

Budget Highlights

- *\$1.1 million for Wages and Salaries, of which 99% is regular pay.*
- *\$3.7 million for outside laboratory testing and analysis, a reduction of \$600,000 from the amended FY03 budget reflecting the elimination of some discretionary spending and the completion of several studies in FY03. This line item includes \$3.3 million for continued outfall monitoring required by EPA. The remaining funds are for studies related to Massachusetts Bay monitoring, performed in conjunction with the U.S. Geological Survey, and biotoxicity testing.*
- *\$32,000 for Other Services, essentially level funded with the amended FY03 budget.*

ENGINEERING AND CONSTRUCTION

PROPOSED FY04 Current Expense Budget ENGINEERING AND CONSTRUCTION							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 7,072,159	\$ 6,070,138	\$ 4,965,675	\$ 4,914,062	\$ (51,613)		-1.0%
OVERTIME	214,994	184,997	148,032	180,015	31,983		21.6%
FRINGE BENEFITS	3,578	2,947	3,338	2,866	(472)		-14.1%
ONGOING MAINTENANCE	26,337	22,470	23,269	10,417	(12,852)		-55.2%
TRAINING & MEETINGS	14,474	14,042	11,415	11,416	1		0.0%
PROFESSIONAL SERVICES	3,092	408	700	-	(700)		-100.0%
OTHER MATERIALS	266,286	162,484	118,205	130,963	12,758		10.8%
OTHER SERVICES	46,577	22,152	32,200	23,500	(8,700)		-27.0%
TOTAL	\$ 7,647,497	\$ 6,479,639	\$ 5,302,834	\$ 5,273,239	\$ (29,595)		-0.6%

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

ECD is organized into two units. The **Engineering Unit** provides in-house engineering, consultant management (during the facilities planning, environmental review, and design stages of capital projects), drafting, surveying, and other technical assistance required for the maintenance, repair, and rehabilitation of the wastewater and waterworks systems. In addition, unit staff provide specialized technical services in the electrical, structural, mechanical, and civil engineering disciplines; maintain the Design Information Services Center (DISC); provide engineering and project management support, computer-aided design and drafting (CADD) services, and survey and design services; and manage construction document control.

The **Construction Unit** provides contract management and resident inspection on water and wastewater construction and rehabilitation projects. Staff administer, oversee, and monitor construction projects to ensure timely, cost-effective, high quality construction for a variety of infrastructure improvement projects. Staff manage contractor activities to ensure projects are completed in accordance with approved plans and specifications with quality construction practices, timely project completion, and cost efficiency.

Budget Highlights

- \$4.9 million for Wages and Salaries, a reduction of \$52,000 or 1% from the amended FY03 budget.
- \$180,000 for Overtime, an increase of \$32,000 or 21.6% compared to the amended FY03 budget but \$5,000 less than FY02 actual spending. Overtime is used primarily to ensure timely monitoring of construction projects when contractor activity extends beyond normal working hours. Overtime is also necessary to accommodate unplanned design or survey efforts, attendance at evening public meetings, or other work load requirements to meet project schedules.
- \$87,000 for vehicle expenses, primarily for staff traveling to and from construction sites.

CAPITAL ENGINEERING AND CONSTRUCTION

PROPOSED FY04 Current Expense Budget CAPITAL ENGINEERING AND CONSTRUCTION							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 2,437,747	\$ 2,147,000	\$ 1,962,720	\$ 1,990,878	\$ 28,158	1.4%	
OVERTIME	274	-	-	-	-	0.0%	
FRINGE BENEFITS	36	6	-	-	-	0.0%	
ONGOING MAINTENANCE	164,004	125,527	157,880	157,880	-	0.0%	
TRAINING & MEETINGS	32,320	8,488	16,637	16,650	13	0.1%	
PROFESSIONAL SERVICES	59,183	17,132	-	-	-	0.0%	
OTHER MATERIALS	26,004	26,163	34,300	32,300	(2,000)	-5.8%	
OTHER SERVICES	23,780	22,488	36,964	34,304	(2,660)	-7.2%	
TOTAL	\$ 2,743,349	\$ 2,346,803	\$ 2,208,501	\$ 2,232,012	\$ 23,511	1.1%	

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

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

Budget Highlights

- *\$2 million for regular pay, and increase of \$28,000 or 1.4% from the amended FY03 budget.*
- *\$158,000 for maintenance including \$141,000 for operation of temporary chloramination facilities and \$15,000 for community chlorine analyzers for the MetroWest communities.*



Law Division
Budget

LAW DIVISION

PROPOSED FY04 Current Expense Budget LAW DIVISION by Line Item						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 1,778,696	\$ 2,057,038	\$ 1,932,986	\$ 1,508,127	\$ (424,859)	-22.0%
OVERTIME	408	165	663	-	(663)	-100.0%
TRAINING & MEETINGS	14,710	10,208	10,706	5,956	(4,750)	-44.4%
PROFESSIONAL SERVICES	576,513	430,390	316,584	316,584	-	0.0%
OTHER MATERIALS	3,473	3,834	5,464	5,464	-	0.0%
OTHER SERVICES	92,328	70,021	68,245	67,405	(840)	-1.2%
TOTAL	\$ 2,466,128	\$ 2,571,655	\$ 2,334,648	\$ 1,903,536	\$ (431,112)	-18.5%

The Law Division provides legal counsel to all divisions on compliance with federal and state laws and regulations and court and administrative orders, litigation matters, real estate matters, labor/employment issues and construction issues. The division represents MWRA in all litigation through division staff or supervision of outside counsel retained to handle matters beyond the resources or expertise of division staff. The budget for the division accounts for 1.1% of MWRA's direct expense budget.

Budget Highlights

- *\$1.5 million for regular pay, a reduction of \$425,000 from the amended FY03 budget and \$550,000 less than FY02 spending due to staff reductions. The proposed FY04 CEB includes no funds for interns, a reduction of \$28,000 from the FY03 amended budget.*
- *\$317,000 for professional services, level funded with the FY03 amended budget but \$114,000 or 26.4% less than FY02 spending. The budget funds outside legal counsel to assist in handling cases which require special expertise on tax, energy, insurance, labor, environmental, and financial business issues. In-house staff concentrate on cases which require a close understanding of MWRA.*



Finance Division
Budget

FINANCE DIVISION

PROPOSED FY04 Current Expense Budget FINANCE DIVISION by Line Item							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 3,256,283	\$ 3,069,974	\$ 2,837,534	\$ 2,856,563	\$ 19,029	0.7%	
OVERTIME	4	1,233	-	-	-	0.0%	
FRINGE BENEFITS	8	-	-	-	-	0.0%	
ONGOING MAINTENANCE	-	566	2,500	-	(2,500)	-100.0%	
TRAINING & MEETINGS	28,373	3,788	9,668	9,791	123	1.3%	
PROFESSIONAL SERVICES	249,737	212,256	220,420	225,420	5,000	2.3%	
OTHER MATERIALS	3,973	1,586	5,512	7,246	1,734	31.5%	
OTHER SERVICES	40,318	24,661	35,898	44,007	8,109	22.6%	
TOTAL	\$ 3,578,697	\$ 3,314,065	\$ 3,111,532	\$ 3,143,027	\$ 31,495	1.0%	

PROPOSED FY04 Current Expense Budget FINANCE DIVISION by Department							
DEPARTMENT	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
DIVISION DIRECTOR'S OFFICE	\$ 229,349	\$ 248,840	\$ 155,475	\$ 271,113	\$ 115,638	74.4%	
PLANNING/COORDINATION	367,178	304,839	308,949	185,831	(123,118)	-39.9%	
RATES/BUDGET	841,404	594,698	744,842	603,430	(141,412)	-19.0%	
TREASURY	2,140,766	2,165,688	1,902,266	787,302	(1,114,964)	-58.6%	
CONTROLLER	-	-	-	1,295,351	1,295,351	100.0%	
TOTAL	\$ 3,578,697	\$ 3,314,065	\$ 3,111,532	\$ 3,143,027	\$ 31,495	1.0%	

The Finance Division is responsible for overseeing rates and revenue management, disbursements, budgeting, capital financing, investment, accounting, grant and loan management, and coordination of MWRA planning. In the proposed FY04 CEB the division accounts for less than 2% of MWRA's direct expense budget.

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

The new 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 now encompasses the financial responsibilities of securing funds for ongoing operations and capital programs, processing disbursements, and managing MWRA's insurance coverage and liability claims. Treasury Department staff collect revenue, disburse funds, and manage debt issuance and investments. As part of the division reorganization, the Grant and Loan Management Department was merged with the Treasury Department.

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 strategic planning throughout MWRA.

DIVISION DIRECTOR'S OFFICE

PROPOSED FY04 Current Expense Budget FINANCE DIVISION DIRECTOR'S OFFICE by Line Item						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 224,601	\$ 245,713	\$ 152,306	\$ 267,445	\$ 115,139	75.6%
OVERTIME	-	254	-	-	-	0.0%
TRAINING & MEETINGS	1,399	-	413	1,503	1,090	263.9%
OTHER MATERIALS	593	96	350	350	-	0.0%
OTHER SERVICES	2,755	2,778	2,406	1,815	(591)	-24.6%
TOTAL	\$ 229,348	\$ 248,842	\$ 155,475	\$ 271,113	\$ 115,638	74.4%

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

The division's continued challenge in FY04 will be to maintain agency-wide attention on how best to balance the need to minimize rate increases, compounded by the loss of debt of service assistance, while ensuring that critical MWRA services are maintained.

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

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

PLANNING AND COORDINATION

PROPOSED FY04 Current Expense Budget PLANNING AND COORDINATION by Line Item							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 278,331	\$ 298,836	\$ 302,854	\$ 176,064	\$ (126,790)	-41.9%	
TRAINING & MEETINGS	10,606	5,077	5,363	5,193	(170)	-3.2%	
PROFESSIONAL SERVICES	75,844	-	-	-	-	0.0%	
OTHER MATERIALS	467	597	732	774	42	5.7%	
OTHER SERVICES	1,929	328	-	3,800	3,800	100.0%	
TOTAL	\$ 367,178	\$ 304,839	\$ 308,949	\$ 185,831	\$ (123,118)	-39.9%	

The Planning and Coordination Department coordinates planning activities throughout MWRA. The program has primary responsibility for coordinating development of the MWRA Business Plan. Department staff are also responsible for coordinating and staffing benchmarking and work process improvement projects to identify ways of changing MWRA work processes to increase efficiency and effectiveness, for coordinating development and reporting of MWRA's monthly and quarterly performance indicators, and for researching activities of and maintaining a database of peer water and wastewater utilities.

Budget Highlights

- *Total budget of \$186,000, a decrease of \$123,000 or 39% from the amended FY03 budget and FY02 spending, reflecting reduced staff and elimination of outside professional services to support the productivity improvement program.*

RATES AND BUDGET

PROPOSED FY04 Current Expense Budget RATES AND BUDGET by Line Item						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 811,357	\$ 577,657	\$ 720,269	\$ 574,544	\$ (145,725)	-20.2%
TRAINING & MEETINGS	7,040	-	1,992	1,305	(687)	-34.5%
PROFESSIONAL SERVICES	-	-	-	-	-	0.0%
OTHER MATERIALS	72	391	481	481	-	0.0%
OTHER SERVICES	22,936	16,650	22,100	27,100	5,000	22.6%
TOTAL	\$ 841,404	\$ 594,698	\$ 744,842	\$ 603,430	\$ (141,412)	-19.0%

The Rates and Budget Department provides the financial analysis that allows MWRA to translate its goals and legal/financial commitments into cost-effective annual and multi-year programs and budgets. Department staff 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 is responsible for forecasting near- and long-term expense and revenue requirements, and for the effective management of the annual process of establishing water and sewer assessments to be paid by MWRA's customer communities.

Budget Highlights

- *Total budget of \$600,000, a decrease of \$141,000 or 19% from the amended FY03 budget because of staff reductions.*

TREASURY and CONTROLLER

PROPOSED FY04 Current Expense Budget TREASURY by Line Item						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 1,941,994	\$ 1,947,768	\$ 1,662,105	\$ 657,322	\$ (1,004,783)	-60.5%
OVERTIME	4	979	-	-	-	0.0%
FRINGE BENEFITS	8	-	-	-	-	0.0%
ONGOING MAINTENANCE	-	566	2,500	-	(2,500)	-100.0%
TRAINING & MEETINGS	9,328	(1,289)	1,900	790	(1,110)	-58.4%
PROFESSIONAL SERVICES	173,892	212,256	220,420	120,420	(100,000)	-45.4%
OTHER MATERIALS	2,841	502	3,949	888	(3,061)	-77.5%
OTHER SERVICES	12,698	4,905	11,392	7,882	(3,510)	-30.8%
TOTAL	\$ 2,140,765	\$ 2,165,687	\$ 1,902,266	\$ 787,302	\$ (1,114,964)	-58.6%

PROPOSED FY04 Current Expense Budget CONTROLLER by Line Item						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ -	\$ -	\$ -	\$ 1,181,188	\$ 1,181,188	100.0%
OVERTIME	-	-	-	-	-	0.0%
FRINGE BENEFITS	-	-	-	-	-	0.0%
TRAINING & MEETINGS	-	-	-	1,000	1,000	100.0%
PROFESSIONAL SERVICES	-	-	-	105,000	105,000	100.0%
OTHER MATERIALS	-	-	-	4,753	4,753	100.0%
OTHER SERVICES	-	-	-	3,410	3,410	100.0%
TOTAL	\$ -	\$ -	\$ -	\$ 1,295,351	\$ 1,295,351	100.0%

The Treasury Department secures funds for ongoing operations and capital programs, processes disbursements, and manages MWRA's insurance coverage and liability claims. Department staff collect revenue, disburse funds, and manage debt issuance and investments.

The Controller Department consists of the Accounting, Accounts Payable, and Payroll units. This department was created in FY03 as part of an organizational change in Finance and Operations. The department has the responsibility for ensuring financial system integrity and integration among these functions. The department also is responsible for appropriate treatment and classification of MWRA revenues and expenditures in accordance with accounting principles generally accepted in the United States and for preparing statements of MWRA's financial condition.

Budget Highlights

- \$2.1 million combined budget, an increase of \$180,000 from the amended FY03 budget reflecting the consolidation of functions from Operations.
- \$225,000 for professional services, including \$105,000 for audit services, \$100,000 for trustee services, and \$19,000 for deposit services.



Support Services Division
Budget

SUPPORT SERVICES DIVISION

PROPOSED FY04 Current Expense Budget SUPPORT DIVISION by Line Item						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change ¹ FY04 to FY03	
WAGES & SALARIES	\$ 15,588,539	\$ 16,282,700	\$ 15,303,842	\$ 14,281,967	\$ (1,021,875)	-6.7%
OVERTIME	84,856	66,284	67,774	28,467	(39,307)	-58.0%
FRINGE BENEFITS	10,153,364	10,699,720	11,268,570	12,535,956	1,267,386	11.2%
WORKERS' COMPENSATION	43,945	39,500	36,700	2,100,000	2,063,300	5622.1%
CHEMICALS	67	-	-	-	-	0.0%
UTILITIES	587,504	822,546	987,724	917,759	(69,965)	-7.1%
ONGOING MAINTENANCE	3,243,187	3,868,445	3,548,917	3,484,492	(64,425)	-1.8%
TRAINING & MEETINGS	129,030	96,297	69,390	72,807	3,417	4.9%
PROFESSIONAL SERVICES	854,019	1,436,891	769,252	968,664	199,412	25.9%
OTHER MATERIALS	1,136,901	1,299,684	620,855	703,200	82,345	13.3%
OTHER SERVICES	7,329,297	8,279,810	6,737,185	7,184,772	447,587	6.6%
TOTAL	\$ 39,150,709	\$ 42,891,877	\$ 39,410,209	\$ 42,278,084	\$ 2,867,875	7.3%

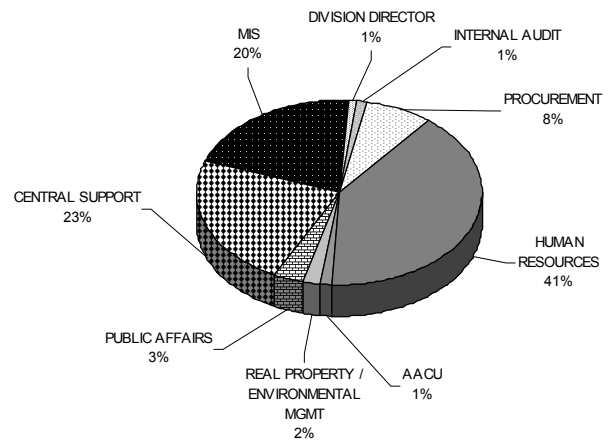
PROPOSED FY04 Current Expense Budget SUPPORT DIVISION by Department						
DEPARTMENT	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change ¹ FY04 to FY03	
DIVISION DIRECTOR	\$ -	\$ -	\$ -	\$ 371,485	\$ 371,485	100.0%
INTERNAL AUDIT	896,429	686,274	651,316	530,853	(120,463)	-18.5%
PUBLIC AFFAIRS	2,051,203	2,182,485	1,840,407	1,391,786	(448,621)	-24.4%
CENTRAL SUPPORT	11,013,246	12,205,889	10,566,157	9,729,689	(836,468)	-7.9%
AACU	602,206	694,818	582,985	554,884	(28,101)	-4.8%
HUMAN RESOURCES	12,142,329	13,130,531	13,357,063	16,865,640	3,508,577	26.3%
MIS	8,357,773	9,418,409	8,394,752	8,655,669	260,917	3.1%
PROCUREMENT	3,198,619	3,748,857	3,283,475	3,284,524	1,049	0.0%
REAL PROPERTY / ENVIRONMENTAL MGMT	888,902	824,615	734,054	893,554	159,500	21.7%
TOTAL	\$ 39,150,707	\$ 42,891,878	\$ 39,410,209	\$ 42,278,084	\$ 2,867,875	7.3%

¹ All of the increase in the Support Services Division budget is attributable to transfer of the budget for workers' compensation payments from Operations to Human Resources and to the increase in the budget for MWRA-wide fringe benefits, also included in the Human Resources Department budget.

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

The division includes nine departments: Division Director, Internal Audit, Public Affairs, Central Support, Affirmative Action and Compliance (AACU), Human Resources, Management Information Systems (MIS), Procurement, and Real Property and Environmental Management (RPEM). The \$42.3 million proposed FY04 budget accounts for 24% of MWRA's direct expense

Support Division Proposed FY04 Budget
\$42.3 million



budget. The division budget includes \$12.5 million for fringe benefits for all MWRA personnel, as well as \$5.8 million for lease, taxes and insurance, and operating and maintenance costs for the CNY headquarters and the Chelsea facility, and \$2.1 million for workers' compensation claims and medical expenses. Net of these agency-wide expenses, the Support Services Division accounts for 13% of direct expenses.

As shown below, a new separate Division Director department is included in the Proposed FY04 CEB. This department consists of administrative and security staff.

DIVISION DIRECTOR

PROPOSED FY04 Current Expense Budget DIVISION DIRECTOR						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ -	\$ -	\$ -	\$ 361,607	\$ 361,607	100.0%
TRAINING & MEETINGS	-	-	-	5,000	5,000	100.0%
OTHER MATERIALS	-	-	-	2,418	2,418	100.0%
OTHER SERVICES	-	-	-	2,460	2,460	100.0%
TOTAL	\$ -	\$ -	\$ -	\$ 371,485	\$ 371,485	100.0%

The division's goals are to:

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

INTERNAL AUDIT

PROPOSED FY04 Current Expense Budget						
INTERNAL AUDIT						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 870,484	\$ 671,363	\$ 634,377	\$ 514,660	\$ (119,717)	-18.9%
TRAINING & MEETINGS	21,478	10,079	12,339	12,350	11	0.1%
OTHER MATERIALS	2,541	2,353	2,465	2,000	(465)	-18.9%
OTHER SERVICES	1,925	2,478	2,135	1,843	(292)	-13.7%
TOTAL	\$ 896,428	\$ 686,273	\$ 651,316	\$ 530,853	\$ (120,463)	-18.5%

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

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. In FY02, Internal Audit identified \$3.41 million in savings, including \$2.17 million related to consultant billings to MWRA, \$780,000 related to the review of the CSO Financial Assistance Agreement with BWSC, negotiation of the Harbor Outfall Monitoring fourth contract, and \$462,000 related to construction change orders and claims.

Budget Highlights

- *\$515,000 for Wages and Salaries, a reduction of \$120,000 or 19% from the amended FY03 budget and \$160,000 less than FY02 spending, to perform internal audits, management advisory services, preliminary review and incurred cost audits, and consultant disclosure statement reviews.*
- *\$12,350 training and meetings budget of which 65% is for travel to consultant offices required to perform cost audits.*

PUBLIC AFFAIRS

PROPOSED FY04 Current Expense Budget PUBLIC AFFAIRS							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 1,856,902	\$ 2,013,515	\$ 1,692,491	\$ 1,267,295	\$ (425,196)	-25.1%	
OVERTIME	529	32	-	-	-	0.0%	
TRAINING & MEETINGS	7,018	8,375	7,055	3,930	(3,125)	-44.3%	
PROFESSIONAL SERVICES	23,550	25,894	4,050	1,050	(3,000)	-74.1%	
OTHER MATERIALS	39,920	28,798	24,901	22,443	(2,458)	-9.9%	
OTHER SERVICES	123,284	105,871	111,910	97,068	(14,842)	-13.3%	
TOTAL	\$ 2,051,203	\$ 2,182,485	\$ 1,840,407	\$ 1,391,786	\$ (448,621)	-24.4%	

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 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 school education materials to all grade levels 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.

The Public Affairs Department's goals are to:

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

Budget Highlights

- *\$1.3 million for Wages and Salaries, a reduction of \$425,000 or 25% from the amended FY03 budget and \$746,000 less than FY02 spending, reflecting staff reductions.*
- *\$120,000 for other materials and services, including \$70,000 to fund services associated with the publication and distribution of MWRA's Annual Report, as well as production of materials to inform the public about MWRA activities and to educate school children about Boston Harbor and other environmental matters. These line items have been reduced by \$17,000 or 13% from the amended FY03 budget reflecting scaled back education materials and elimination of funding for Envirolab boat tours.*

CENTRAL SUPPORT

PROPOSED FY04 Current Expense Budget CENTRAL SUPPORT						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 2,481,019	\$ 2,388,415	\$ 2,256,238	\$ 1,439,744	\$ (816,494)	-36.2%
OVERTIME	53,344	47,907	47,145	20,349	(26,796)	-56.8%
FRINGE BENEFITS	1,553	1,113	3,961	50	(3,911)	-98.7%
UTILITIES	587,504	814,871	987,724	917,759	(69,965)	-7.1%
ONGOING MAINTENANCE	1,020,363	863,782	905,997	841,919	(64,078)	-7.1%
TRAINING & MEETINGS	110	7,804	4,189	3,189	(1,000)	-23.9%
PROFESSIONAL SERVICES	51,449	505,210	345,952	388,144	42,192	12.2%
OTHER MATERIALS	497,083	428,169	351,134	195,217	(155,917)	-44.4%
OTHER SERVICES	6,320,822	7,148,618	5,663,817	5,923,318	259,501	4.6%
TOTAL	\$ 11,013,247	\$ 12,205,889	\$ 10,566,157	\$ 9,729,689	\$ (836,468)	-7.9%

PROPOSED FY04 Current Expense Budget CENTRAL SUPPORT by Area						
AREA	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
Fleet Services	\$ 1,324,000	\$ 1,413,539	\$ 1,414,032	\$ 1,069,268	\$ (344,764)	-24.4%
FRSA	992,000	806,079	466,164	537,293	71,129	15.3%
Facilities Management	7,059,000	8,767,066	7,689,631	7,479,595	(210,036)	-2.7%
Administrative Services	1,205,000	1,219,205	996,329	643,529	(352,800)	-35.4%
Energy Services	434,000	-	-	-	-	0.0%
TOTAL	\$ 11,014,000	\$ 12,205,889	\$ 10,566,156	\$ 9,729,685	\$ (836,471)	-7.9%

The Central Support Department provides a wide range of support services to MWRA staff located at the Charlestown Navy Yard (CNY), Chelsea and Fore River Staging Area (FRSA) facilities. The department comprises three sections: Fleet Services, Facilities Management and Administrative Services.

Fleet Services manages and maintains MWRA's motor vehicle and equipment fleet and the radio communications network which provides communications and emergency support services to MWRA headquarters and field personnel. Fleet Services staff also manage development and processing of specifications for new vehicles and equipment, provide ongoing in-house training in safe driving procedures to MWRA drivers, and manage the gas card program and the fuel facility in Chelsea.

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

Staff are also responsible for the security, operation, and maintenance of the site utilities and various structures and buildings within **FRSA**. MWRA uses this facility for the operation of its sludge processing facility, Field Operations storage and work space, confined space entry training, the warehousing of materials, records, and geological samples and the Fore River Railroad Corporation's office, storage tracks and main rail line crossing the parcel. Of the approximately 50-acre site, Central Support is responsible for 35 acres, including several major buildings. The remaining site and one building at the northern end of the site are leased by the United States Naval Shipbuilding Museum. In turn the museum sub-leases much of its space to Water Transportation Alternatives, Inc., which utilizes the space for a parking lot and water shuttle ferry

to Boston and Logan Airport. MWRA notified the Museum that it does not intend to extend the lease beyond June 2003, when the lease term expires. MWRA is continuing to pursue options to surplus and sell those portions of FRSA not needed to support MWRA operations.

Administrative Services provides administrative and office support services that facilitate efficient use of MWRA resources. The Administrative Services Unit provides and manages the Motor Pools at Chelsea and CNY, copying and printing services, general office equipment repairs, transportation, mail and courier services, and receptionist coverage at CNY and the Chelsea facility.

Central Support goals are to:

- Provide a safe, secure, and well-maintained working environment for all MWRA staff at Chelsea, CNY, and FRSA and provide appropriate space for staff by coordinating workspace planning, design, and furniture acquisitions.
- Maintain MWRA's vehicle and equipment fleet to minimize downtime and extend the life of the assets.
- Maintain and protect the Chelsea and FRSA facilities to prevent loss or deterioration of MWRA assets.
- Assist other MWRA divisions in their activities at FRSA by coordinating overall site development plans and monitoring the activities of operations at the site.
- Provide efficient and cost-effective administrative services to CNY and Chelsea facility staff.

Budget Highlights

- *Total budget of \$9.7 million, a decrease of \$836,000 or 8% from the amended FY03 budget reflecting reduced staff.*
- *\$20,000 for Overtime for coverage of support services. Overtime has decreased \$27,000 or 57% from the amended FY03 budget reflecting the elimination of 24-hour security at FRSA.*
- *\$918,000 for Utilities, a decrease of \$70,000 reflecting in part avoided costs as Navy Yard as space is consolidated.*
- *\$842,000 for Maintenance, a decrease of \$64,000 or 7% from the amended FY03 budget. The budget includes \$265,000 for automotive materials and services to maintain MWRA's vehicle fleet; \$133,000 to service and maintain radio communications equipment, security equipment, and card access at Chelsea, and \$39,000 to support maintenance agreements for copiers, facsimile machines, and other office equipment.*
- *\$388,000 for Professional Services, an increase of \$42,000 to fund security services.*
- *\$195,000 for Other Materials, a decrease of \$155,000 or 44% from the amended FY03 budget. The decrease reflects the transfer of the MWRA-wide office supply budget to Procurement and is now part of Materials Management warehouse inventory. Postage, routine delivery services, and overnight delivery services comprise 64% of this line item.*
- *\$5.9 million for Other Services, an increase of \$260,000 or 4.6%, to fund increases in operating expenses and taxes for CNY and insurance for the Chelsea facility. The increase also includes a surrender fee of \$182,000 to vacate a portion of the leased space in the Navy Yard prior to the lease expiration. This will result in reduced costs for rent and utilities.*

AFFIRMATIVE ACTION and COMPLIANCE

PROPOSED FY04 Current Expense Budget AFFIRMATIVE ACTION & COMPLIANCE UNIT						
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03	
WAGES & SALARIES	\$ 597,828	\$ 643,963	\$ 575,738	\$ 551,090	\$ (24,648)	-4.3%
TRAINING & MEETINGS	2,895	3,800	1,700	1,450	(250)	-14.7%
PROFESSIONAL SERVICES	-	45,415	-	-	-	0.0%
OTHER MATERIALS	402	1,139	4,447	1,244	(3,203)	-72.0%
OTHER SERVICES	1,081	500	1,100	1,100	-	0.0%
TOTAL	\$ 602,206	\$ 694,817	\$ 582,985	\$ 554,884	\$ (28,101)	-4.8%

The Affirmative Action and Compliance Unit (AACU) develops, administers, and monitors compliance with all aspects of MWRA's Affirmative Action Plan, programs, and policies of affirmative action, equal opportunity, and non-discrimination. The director of AACU reports directly to the Board of Directors.

AACU goals 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 accomplishments in areas of identified underutilization of minorities and females and to evaluate the effectiveness of MWRA's affirmative action program.
- Communicate to managers and supervisors MWRA's commitment to equal opportunity and affirmative action.
- Provide for the equitable participation of minority and women-owned businesses (MBE/WBE) in procurement opportunities and ensure that minorities and women are represented in the labor force on construction contracts.

Assist divisions and departments in understanding MBE/WBE program policies and practices and monitor and report on contractor compliance.

HUMAN RESOURCES

PROPOSED FY04 Current Expense Budget HUMAN RESOURCES							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 1,418,211	\$ 1,466,968	\$ 1,575,711	\$ 1,589,386	\$ 13,675	0.9%	
OVERTIME	76	123	1,322	440	(882)	-66.7%	
FRINGE BENEFITS	10,150,368	10,698,306	11,264,609	12,535,906	1,271,297	11.3%	
WORKERS' COMPENSATION	43,945	39,500	36,700	2,100,000	2,063,300	5622.1%	
ONGOING MAINTENANCE	885	786	1,200	1,200	-	0.0%	
TRAINING & MEETINGS	13,887	12,417	11,444	11,198	(246)	-2.1%	
PROFESSIONAL SERVICES	417,410	845,583	419,250	579,470	160,220	38.2%	
OTHER MATERIALS	26,614	39,366	24,175	21,925	(2,250)	-9.3%	
OTHER SERVICES	70,933	27,482	22,652	26,115	3,463	15.3%	
TOTAL	\$ 12,142,329	\$ 13,130,531	\$ 13,357,063	\$ 16,865,640	\$ 3,508,577	26.3%	

The Human Resources Department is comprised of three units.

The **Employment, Compensation, and Benefits Unit** coordinates and oversees all recruitment and selection activities to meet the business needs of MWRA, and develops and coordinates MWRA compensation benefits strategies and programs. The **Labor Relations Unit** is responsible for fulfilling MWRA's collective bargaining and contract administration obligations under Massachusetts' public sector collective bargaining law, its workers' compensation responsibilities, and its responsibilities for employee occupational safety and health. The **Training Unit** develops, coordinates, delivers, and evaluates MWRA technical and professional development training programs and other programs directed at the improvement of employee knowledge, skills, productivity, and the quality of workplace interaction. It is responsible for performance evaluation training, oversight and tracking, and administration of Employee Recognition, 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.

Human Resources Department goals 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 which 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

- *\$1.6 million for Wages and Salaries, an increase of \$14,000 or less than 1% from the amended FY03 budget.*
- *\$12.5 million for Fringe Benefits, an increase of \$1.3 million or 11%, primarily due to increases for health insurance premiums. The budget includes \$10.5 million for MWRA's share of health insurance costs, \$1.0 million for MWRA's share of Medicare taxes, \$850,000 for MWRA's share of dental insurance costs and union health and welfare fund contributions, \$90,000 for unemployment insurance payments, and \$55,000 for tuition reimbursement.*
- *\$2.1 million for Workers' Compensation expenses. The budget for this program has been transferred from the Operations Division to Human Resources, where management and responsibility of the program and coordination with the third-party administrator exists.*
- *\$332,000 for professional development training services, an increase of \$144,000 from the amended FY03 budget to enhance technical training of MWRA staff to ensure that, where possible, existing personnel can staff the new Walnut Hill plant and other new facilities.*
- *The budget for other professional services includes \$58,000 for the Employee Assistance Program, \$15,000 for specialized investigation services, and \$25,000 for medical evaluation services.*

MANAGEMENT INFORMATION SYSTEMS (MIS)

PROPOSED FY04 Current Expense Budget							
MIS							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 4,608,080	\$ 5,355,511	\$ 4,834,824	\$ 4,939,914	\$ 105,090		2.2%
OVERTIME	3,104	2,668	2,678	2,678	-		0.0%
ONGOING MAINTENANCE	2,267,562	2,486,568	2,641,720	2,641,373	(347)		0.0%
TRAINING & MEETINGS	61,232	42,947	14,982	15,990	1,008		6.7%
PROFESSIONAL SERVICES	360,000	-	-	-	-		0.0%
OTHER MATERIALS	546,930	788,579	195,119	285,414	90,295		46.3%
OTHER SERVICES	510,846	742,137	705,429	770,300	64,871		9.2%
TOTAL	\$ 8,357,754	\$ 9,418,410	\$ 8,394,752	\$ 8,655,669	\$ 260,917		3.1%

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 FY04 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. During FY01 and FY02 several major viruses affected e-mail and Internet services causing unscheduled minicomputer downtime. However, network and telecommunications reliability remained within the downtime limit of less than eight hours for the entire year. Cyber Security in FY03 has become a major work item and will continue to be so in FY04.
- Responsive services* are provided as a result of calls for assistance, training, troubleshooting, repair of systems or requests for materials, research, and records. A range of performance measurements has been adopted based on business impact and problem type. The response rate target for calls to be closed within three days was increased to 90% at the start of FY02 compared to 80% in FY01. This target will continue for FY04 as well as a target to address 100% of system outages 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 with 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.

MIS' goal is to support more than 1,200 MWRA users, including those at the Charlestown Navy Yard, Chelsea, and remote sites, by ensuring that:

- Existing applications, hardware, and network resources are cost-effectively maintained, supported, upgraded, and replaced.
- Information system development efforts are in line with the MWRA Business Plan, reflecting management priorities.
- System security and integrity are maintained.
- Flexible tools and system capabilities are provided in line with industry standards and norms.

Budget Highlights

- *Total budget of \$8.7 million, an increase of \$260,000 from the amended FY03 budget, but a decrease of 763,000 from FY02 spending reflecting fewer staff.*
- *\$2.6 million for license and maintenance fees to support administrative, operations, and database applications used by MWRA staff.*
- *\$254,000 to replace printers, personal computers, and other equipment. In FY04, MIS will maintain a limited reserve of personal computers to replace failed desktop units and laptops. The PC replacement program budget will need to be increased in FY05, as useful life of existing inventory will have been nearly exhausted.*
- *\$580,000 for MWRA network and telephone services for Charlestown headquarters, the Chelsea facility, and Southborough. This is an increase of \$73,000 to support MWRA's security network.*

PROCUREMENT

PROPOSED FY04 Current Expense Budget PROCUREMENT							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 3,114,016	\$ 3,145,862	\$ 3,171,117	\$ 3,023,551	\$ (147,566)	-4.7%	
OVERTIME	27,803	15,554	16,629	5,000	(11,629)	0.0%	
FRINGE BENEFITS	1,424	301	-	-	-	0.0%	
CHEMICALS	67	-	-	-	-	0.0%	
ONGOING MAINTENANCE	(45,623)	517,308	-	-	-	0.0%	
TRAINING & MEETINGS	20,787	6,783	14,081	16,100	2,019	0.0%	
PROFESSIONAL SERVICES	1,610	-	-	-	-	0.0%	
OTHER MATERIALS	21,927	9,850	16,900	171,125	154,225	912.6%	
OTHER SERVICES	56,608	53,198	64,748	68,748	4,000	6.2%	
TOTAL	\$ 3,198,619	\$ 3,748,856	\$ 3,283,475	\$ 3,284,524	\$ 1,049	0.0%	

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 will consolidate existing inventory locations into four regional warehouses/distribution centers that will support all MWRA activities. The consolidation will result in better control, reduce dollar inventory levels, and establish consistency across MWRA.

Procurement Department goals 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 the 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 budget of \$3.3 million, level funded with the amended FY03 budget, but a decrease of \$465,000 from FY02 spending. The MWRA-wide office supply budget has been transferred from the Central Support Department to Materials Management and is now part of MWRA's warehouse inventory. Excluding this adjustment of \$157,000 the total proposed budget is 4.8% less than the amended FY03 budget.*

REAL PROPERTY and ENVIRONMENTAL MANAGEMENT

PROPOSED FY04 Current Expense Budget REAL PROPERTY / ENVIRONMENTAL MANAGEMENT							
LINE ITEM	FY01 Actual	FY02 Actual	FY03 Amended	FY04 Proposed	Change FY04 to FY03		
WAGES & SALARIES	\$ 641,999	\$ 597,103	\$ 563,346	\$ 594,720	\$ 31,374		5.6%
UTILITIES	-	7,675	-	-	-		0.0%
ONGOING MAINTENANCE	-	-	-	-	-		0.0%
TRAINING & MEETINGS	1,623	4,092	3,600	3,600	-		0.0%
PROFESSIONAL SERVICES	-	14,789	-	-	-		0.0%
OTHER MATERIALS	1,483	1,430	1,714	1,414	(300)		-17.5%
OTHER SERVICES	243,798	199,526	165,394	293,820	128,426		77.6%
TOTAL	\$ 888,903	\$ 824,615	\$ 734,054	\$ 893,554	\$ 159,500		21.7%

The Real Property and Environmental Management Department negotiates the purchase or lease of real estate and land necessary to support MWRA's capital projects. Staff participate in selecting sites, negotiating acquisitions or easements, and managing the sale or lease of MWRA surplus real property. 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 air emission permits negotiation and preparation and submittal of monthly/quarterly monitoring reports.

Real Property and Environmental Management Department goals are to:

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

Budget Highlights

- *Total budget of \$894,000, an increase of \$160,000 from the amended FY03 budget, reflecting remediation projects planned in FY03 but deferred to FY04 and beyond due to the loss of Commonwealth debt service assistance.*



Appendices

APPENDIX A

DESCRIPTIONS OF FUNCTIONAL AREAS

Facilities Planning, Design, and Construction - Management of planning, design, and construction activities to repair, rehabilitate, and construct MWRA transport, treatment, distribution, and support facilities. Functions include in-house engineering, drafting, surveying, technical assistance, environmental review, management of consultants, and construction project management, including contract management and administration. More than 90 projects valued at nearly \$7 billion are now in planning, design, or construction stages.

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

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

DESCRIPTIONS OF FUNCTIONAL AREAS – CONTINUED

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

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

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

DESCRIPTIONS OF FUNCTIONAL AREAS – CONTINUED

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

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

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

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

DESCRIPTIONS OF FUNCTIONAL AREAS – CONTINUED

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

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

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

DESCRIPTIONS OF FUNCTIONAL AREAS – CONTINUED

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

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

APPENDIX B

DIRECT EXPENSE BUDGET LINE ITEMS

Introduction

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

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

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

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

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

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

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

potassium permanganate, and hydrofluosilicic acid.

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

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

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

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

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

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

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

Appendix C



Position Control Register (Feb-2003)

Massachusetts Water Resources Authority

DEPARTMENT	PCR #	POSITION TITLE			
BOARD OF DIRECTORS		EXECUTIVE			
01110	11100	BOARD OF DIRECTORS			
	1110001	ASST TO THE BOARD OF DIRECTORS			
SUB COST CENTER		Total Positions:	1	Vacants:	0
				Filled Positions:	1
COST CENTER		Total Positions:	1	Vacants:	0
				Filled Positions:	1
DEPARTMENT		Total Positions:	1	Vacants:	0
				Filled Positions:	1
EXEC DIR OFFICE		EXECUTIVE			
01210	12100	EXEC DIRECTOR'S OFFICE			
	1210001	EXECUTIVE DIRECTOR			
	1210003	ASSISTANT TO EXECUTIVE DIRECTR			
	1210004	EXECUTIVE ASSISTANT			
	1210005	FINANCIAL & ADMIN MANAGER			
	1210008	POLICY & PLANNING MANAGER			
SUB COST CENTER		Total Positions:	5	Vacants:	0
				Filled Positions:	5
COST CENTER		Total Positions:	5	Vacants:	0
				Filled Positions:	5
DEPARTMENT		Total Positions:	5	Vacants:	0
				Filled Positions:	5
DIVISION		Total Positions:	6	Vacants:	0
				Filled Positions:	6

DEPARTMENT	PCR #	POSITION TITLE			
DIRECTOR'S OFFICE		FINANCE			
04110	41100	DIRECTOR'S OFFICE			
	4110001	ACTING DIRECTOR, FINANCE			
	4110002	EXECUTIVE SECRETARY			
	4110005	ADMINISTRATIVE MANAGER			
	4110006	EXECUTIVE SECRETARY			
	4110007	SECRETARY I			
SUB COST CENTER	Total Positions:	5	Vacants:	1	Filled Positions: 4
COST CENTER	Total Positions:	5	Vacants:	1	Filled Positions: 4
DEPARTMENT	Total Positions:	5	Vacants:	1	Filled Positions: 4
PLAN & COORD		FINANCE			
04210	42100	PLANNING & COORDINATION			
	4210001	DIRECTOR, PLANNING & COORD			
	4210002	PLANNING MANAGER			
SUB COST CENTER	Total Positions:	2	Vacants:	0	Filled Positions: 2
COST CENTER	Total Positions:	2	Vacants:	0	Filled Positions: 2
DEPARTMENT	Total Positions:	2	Vacants:	0	Filled Positions: 2
CONTROLLER		FINANCE			
04310	43100	CONTROLLER			
	4310001	CONTROLLER			
	4310002	SR ACCOUNTANT			
	4310004	SR ACCOUNTANT			
	4310005	PAYROLL MANAGER			
	4310006	PAYABLES SUPERVISOR			
	4310007	PAYABLES COORDINATOR			
	4310008	ACCOUNTING MANAGER			
	4310009	DEPUTY ACCOUNTS PAYABLE MGR			
	4310010	DEPUTY ACCOUNTS PAYABLE MGR			
	4310011	SR ACCOUNTANT			
	4310012	ASSOC. MANAGER, A/P			
	4310013	PAYABLES COORDINATOR			
	4310014	PAYABLES COORDINATOR			
	4310015	PAYABLES COORDINATOR			
	4310016	PAYABLES COORDINATOR			
	4310017	PAYROLL ADMINISTRATOR - OPS			
	4310018	ASST PERSONNEL/PAYROLL ADMIN			
	4310019	PAYROLL ADMIN ASST			
	4310020	PAYROLL SPECIALIST			
	4310021	PAYROLL ASSISTANT			
	4310023	PAYROLL ASSISTANT			
	4310024	PAYROLL ADMINISTRATIVE ASST.			
	4310025	PAYROLL ASSISTANT			
	4310026	PAYROLL ADMINISTRATIVE ASST.			
	4310027	PAYROLL ASSISTANT			
	4310028	ACCOUNTS PAYABLE MANAGER			
	4310029	DEPUTY PAYROLL MANAGER			
SUB COST CENTER	Total Positions:	27	Vacants:	5	Filled Positions: 22

DEPARTMENT	PCR #	POSITION TITLE				
COST CENTER	Total Positions:	27	Vacants:	5	Filled Positions:	22
DEPARTMENT	Total Positions:	27	Vacants:	5	Filled Positions:	22

RATES & BUDGET	FINANCE
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04410	44100	RATES & BUDGET
	4410001	BUDGET DIRECTOR
	4410003	SENIOR FINANCIAL ANALYST
	4410004	FINANCIAL IS PROJECT LEADER
	4410007	SR FINANCIAL ANALYST
	4410011	BUDGET MANAGER
	4410012	ASSISTANT BUDGET MANAGER
	4410015	ASSIST MANGR RATES, REV & FIN
	4410016	SR FINANCIAL ANALYST
	4410019	DOCUMENT/REPORT DEVELOP SPEC

SUB COST CENTER	Total Positions:	9	Vacants:	1	Filled Positions:	8
COST CENTER	Total Positions:	9	Vacants:	1	Filled Positions:	8
DEPARTMENT	Total Positions:	9	Vacants:	1	Filled Positions:	8

TREASURY	FINANCE
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04510	45100	TREASURY
	4510001	TREASURER
	4510002	SR FINANCIAL PROJECTS ANALYST
	4510003	ACCOUNT COORDINATOR
	4510004	ACCOUNT COORDINATOR
	4510006	CASH MANAGER
	4510007	MANAGER, DEBT & INVESTMENT
	4510008	RISK MANAGEMENT COORDINATOR
	4510009	DEBT/INVESTMENT ANALYST
	4510030	FINANCIAL COORDINATOR
	4510037	MANAGER, RISK MANAGEMENT
	4510038	CLAIMS COORDINATOR
	4510041	DIRECTOR, ADM & FED/STATE FIN.
	4510042	ASST GRANTS MANAGER
	4510043	CLAIMS MANAGEMENT SPECIALIST

SUB COST CENTER	Total Positions:	14	Vacants:	3	Filled Positions:	11
COST CENTER	Total Positions:	14	Vacants:	3	Filled Positions:	11
DEPARTMENT	Total Positions:	14	Vacants:	3	Filled Positions:	11
DIVISION	Total Positions:	57	Vacants:	10	Filled Positions:	47

DEPARTMENT	PCR #	POSITION TITLE
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OPERATIONS ADMIN	OPERATIONS
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05210	52100	OPERATIONS ADMINISTRATION
	5210001	CHIEF OPERATING OFFICER
	5210002	DEPUTY CHIEF OPERATING OFFICER
	5210003	SPECIAL ASST TO DIV DIRECTOR
	5210004	SECRETARY I
	5210006	HEAD ADMINISTRATIVE ASSISTANT
	5210007	MANAGER, CONTRACT ADMIN
	5210008	ASST MANAGER, CONTRACT ADMIN
	5210009	CONTRACT ADMINISTRATOR
	5210010	CONTRACT ADMINISTRATOR
	5210011	CONTRACT ASSISTANT
	5210012	ADMINISTRATIVE SYSTEMS COORD
	5210013	CONTRACT ASSISTANT
	5210015	MANAGER, FINANCE
	5210016	SENIOR FINANCIAL ANALYST
	5210018	MANAGER, CEB
	5210019	CONTRACT ASSISTANT
	5210020	LABOR RELATION/PLAN ANALYST
	5210023	SENIOR FINANCIAL PLANNER
	5210024	HEAD CLERK
	5210025	EXECUTIVE SECRETARY
	5210027	HEAD CLERK
	5210036	SENIOR FINANCIAL ANALYST
	5210037	DIRECTOR COORDINATION&CONTROL
	5210038	SR CONTRACT ADMINISTRATOR, TUN
	5210040	CONTRACT ADMINISTRATOR
	5210042	SR CONTRACT ADMINISTRATOR
	5210043	MANAGER, CONTRACT ADMIN
	5210045	ASSISTANT FINANCE MANAGER
	5210046	CONTRACT ADMINISTRATOR
	5210047	ADMINISTRATIVE SYSTEMS COORD
	5210048	SR CONTRACT ADMINISTRATOR
	5210049	CONTRACT ADMINISTRATOR
	5210050	MANAGER, FIN & SPEC PROJECTS
	5210053	ADMINISTRATIVE SYSTEMS COORD
	5210057	JR ENGINEERING AIDE
	5210058	TECHNICAL ASSISTANCE MANAGER
	5210059	MANAGER, CONTRACT ADMINIS
	5210061	SR CONTRACT ADMINISTRATOR
	5210063	SR CONTRACT ADMINISTRATOR
	5210065	SENIOR PROGRAM MANAGER
	5210066	CONTRACT ADMINISTRATOR
	5210068	DIRECTOR, PROGRAM MANAGEMENT
	5210070	EXECUTIVE SECRETARY

SUB COST CENTER	Total Positions: 43	Vacants: 2	Filled Positions: 41
COST CENTER	Total Positions: 43	Vacants: 2	Filled Positions: 41
DEPARTMENT	Total Positions: 43	Vacants: 2	Filled Positions: 41

ENQUAD	OPERATIONS
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02250	22500	ENVIRONMENTAL QUALITY
	2250001	DIRECTOR, ENQUAD

DEPARTMENT	PCR #	POSITION TITLE			
	2250002	PROJECT MANAGER, ENVOIRMEN DATA			
	2250003	PROJECT MANAGER, MARINE STUDY			
	2250004	PRJT MGR, HRBR & OUTFL MNTRING			
	2250005	PROGRAM MANAGER, WATER QUALITY			
	2250006	PROGRAM MANAGER, OUTFALL MONIT			
	2250009	ENVIRONMENTAL INFORMATION ANAL			
	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			
	2250018	PROJECT ENGINEER			
	2250019	PROJECT MGR, MARINE INFO ANLST			
SUB COST CENTER	Total Positions:	17	Vacants:	1	Filled Positions: 16
COST CENTER	Total Positions:	17	Vacants:	1	Filled Positions: 16
DEPARTMENT	Total Positions:	17	Vacants:	1	Filled Positions: 16

RESIDUALS MGT	OPERATIONS
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02150	21500	OPERATIONS & ADMIN			
	2150002	PROJECT MANAGER, RESIDUALS			
	2150003	PROJECT ENGINEER			
	2150006	MANAGER, RESIDUALS OPERATIONS			
SUB COST CENTER	Total Positions:	3	Vacants:	0	Filled Positions: 3
COST CENTER	Total Positions:	3	Vacants:	0	Filled Positions: 3
DEPARTMENT	Total Positions:	3	Vacants:	0	Filled Positions: 3

DEER ISLAND	OPERATIONS
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02915	29150	D.I./DIRECTORS/OFFICE			
	2915001	DIRECTOR, DIWWTP			
	2915009	ADMINISTRATIVE ASSISTANT I			
SUB COST CENTER	Total Positions:	2	Vacants:	0	Filled Positions: 2
COST CENTER	Total Positions:	2	Vacants:	0	Filled Positions: 2

02925	29250	DI PROC CONTRL&MONITORING			
	2925012	PROGRAM MANAGER, PROCESS ENG			
	2925013	PROGRAM MANAGER, PICS CONTROL			
	2925014	PROJECT MANAGER			
	2925015	PICS PROJECT ENGINEER			
	2925016	PROJECT MANAGER, PICS			
	2925018	PROJET MANAGER, PICS NETWORK			
	2925019	PROGRAM MANAGER, PROCESS ENG			
	2925021	PROGRAM MANAGER, PROCESS ENG			
	2925022	PROJECT MANAGER			
	2925023	PROJECT MANAGER, PROCESS ENG			
	2925024	PROJECT ENGINEER			
	2925028	ACTING MANAGER, PROCESS CONTRL			
	2925029	PROJECT MANAGER, RESIDUALS			

DEPARTMENT	PCR #	POSITION TITLE			
	2925030	PROJECT ENGINEER, PROCESS			
	2925031	DATA ENTRY CLERK			
	2925032	PROGRAM MANAGER, PROCESS ENG			
	2925033	PROGRAM MANAGER, PROCESS ENG			
	2925034	MONITORING COORDINATOR			
SUB COST CENTER	Total Positions:	18	Vacants:	3	Filled Positions: 15
COST CENTER	Total Positions:	18	Vacants:	3	Filled Positions: 15
02930	29305	OPER MGMNT/DIRECT OFFICE			
	2930501	MANAGER, THERMAL POWER PLANT			
	2930502	SHIFT OPERATIONS MANAGER			
	2930503	SHIFT OPERATIONS MANAGER			
	2930504	ACTING SR SHIFT MANAGER			
	2930505	SHIFT OPERATIONS MANAGER			
	2930506	SHIFT OPERATIONS MANAGER			
	2930507	SHIFT OPERATIONS MANAGER			
	2930508	SHIFT OPERATIONS MANAGER			
	2930509	PROGRAM MANAGER, ENERGY			
	2930510	OPERATIONS PROCESS MANAGER			
	2930512	DEPUTY DIRECTOR, OPERATIONS			
	2930514	ADMINISTRATIVE ASSISTANT I			
	2930515	MANAGER, POWER GENERATION			
	2930517	TECHNICAL ASSISTANT			
SUB COST CENTER	Total Positions:	14	Vacants:	2	Filled Positions: 12
02930	29310	THERMAL			
	2931001	SECOND CLASS ENGINEER			
	2931002	SECOND CLASS ENGINEER			
	2931004	SECOND CLASS ENGINEER			
	2931009	THIRD CLASS ENGINEER			
	2931010	THIRD CLASS ENGINEER			
	2931011	THIRD CLASS ENGINEER			
	2931012	THIRD CLASS ENGINEER			
	2931014	THIRD CLASS ENGINEER			
	2931015	THIRD CLASS ENGINEER			
	2931016	SECOND CLASS ENGINEER			
	2931017	THIRD CLASS ENGINEER			
	2931018	TECHNICAL ASSISTANT			
SUB COST CENTER	Total Positions:	12	Vacants:	2	Filled Positions: 10
02930	29320	PRIMARY/GRIT			
	2932001	OPERATOR			
	2932002	AREA SUPERVISOR			
	2932003	OPERATOR			
	2932004	AREA SUPERVISOR			
	2932005	OPERATOR			
	2932006	OPERATOR			
	2932008	AREA SUPERVISOR			
	2932010	AREA SUPERVISOR			
	2932011	OPERATOR			
	2932012	OPERATOR			
	2932013	OPERATOR			
	2932014	OPERATOR			
	2932017	OPERATOR			
	2932019	AREA SUPERVISOR			

DEPARTMENT	PCR #	POSITION TITLE			
	2932020	AREA SUPERVISOR			
	2932021	AREA SUPERVISOR			
	2932025	OPERATOR			
	2932027	OPERATOR			
	2932032	OPERATOR			
	2932033	AREA SUPERVISOR			
	2932034	STP ATTENDANT			
	SUB COST CENTER	Total Positions:	21	Vacants:	3 Filled Positions: 18
02930	29330	PUMPING/LOGISTICS			
	2933001	OPERATOR			
	2933002	OPERATOR			
	2933004	AREA SUPERVISOR			
	2933006	AREA SUPERVISOR			
	2933007	OPERATOR			
	2933008	OPERATOR			
	2933011	OPERATOR			
	2933013	OPERATOR			
	2933015	AREA SUPERVISOR			
	2933017	OPERATOR			
	SUB COST CENTER	Total Positions:	10	Vacants:	0 Filled Positions: 10
02930	29340	RESIDUALS			
	2934004	AREA SUPERVISOR			
	2934006	OPERATOR			
	2934007	OPERATOR			
	2934011	AREA SUPERVISOR			
	2934012	OPERATOR			
	2934013	OPERATOR			
	2934014	OPERATOR			
	2934015	AREA SUPERVISOR			
	2934016	OPERATOR			
	2934017	AREA SUPERVISOR			
	2934018	OPERATOR			
	2934020	OPERATOR			
	SUB COST CENTER	Total Positions:	12	Vacants:	1 Filled Positions: 11
02930	29360	SECONDARY			
	2936006	OPERATOR			
	SUB COST CENTER	Total Positions:	1	Vacants:	0 Filled Positions: 1
	COST CENTER	Total Positions:	70	Vacants:	8 Filled Positions: 62
02940	29410	SAFETY			
	2941001	ACTING MAGR, SEC & EMERG PLNNG			
	2941002	SAFETY TECHNICIAN			
	2941003	O&M SAFETY SPECIALIST			
	2941004	SECRETARY I			
	2941005	SECRETARY I			
	SUB COST CENTER	Total Positions:	5	Vacants:	2 Filled Positions: 3
02940	29450	DI/ADMINISTRATION&FINANCE			
	2945003	HEAD CLERK			
	2945004	RECEPTIONIST			
	2945004	SECRETARY II - SHARE			
	2945005	FINANCIAL ANALYST			

DEPARTMENT	PCR #	POSITION TITLE			
	2945007	BUILDING/GROUNDS WORKER			
	2945011	FINANCE & TECH SUPPORT ANALYST			
	2945012	SECRETARY I			
	2945013	DEPUTY DIR, O&M SUPPORT SVS			
	2945014	MANAGER, ADMIN AND FINANCE			
SUB COST CENTER		Total Positions:	8	Vacants:	1 Filled Positions: 7
02940	29460	COMPLIANCE			
	2946003	ADMINISTRATIVE COORDINATOR			
	2946004	JR SANITARY ENGINEER			
	2946005	PROJECT ENGINEER, PILOT PLANT			
	2946006	PROJECT MANAGER, PROCESS ENG			
SUB COST CENTER		Total Positions:	4	Vacants:	0 Filled Positions: 4
COST CENTER		Total Positions:	17	Vacants:	3 Filled Positions: 14
02970	29710	TECHNICAL INFORMATION			
	2971001	PROGRAM MANAGER, TECH INFO			
	2971003	TIC CLERK			
	2971004	O&M SYSTEMS SPECIALIST			
	2971005	PROJECT ENGINEER, CADD			
	2971006	CADD COORDINATOR			
SUB COST CENTER		Total Positions:	5	Vacants:	0 Filled Positions: 5
02970	29720	CAPITAL DESIGN/PLANNING			
	2972004	PROGRAM MANAGER,MECHANICAL			
	2972006	SR SANITARY ENGINEER			
	2972010	PROJECT MANAGER			
	2972011	PROGRAM MANAGER			
	2972012	MANAGER, ENGINEERING SERVICES			
	2972013	TECHNICAL SUPPORT SPECIALIST			
	2972016	CONTRACT/PROCUREMENT ASSISTANT			
	2972017	ADMINISTRATIVE MANAGER			
	2972019	PROGRAM MANAGER			
SUB COST CENTER		Total Positions:	9	Vacants:	1 Filled Positions: 8
COST CENTER		Total Positions:	14	Vacants:	1 Filled Positions: 13
02980	29800	MAINT. DIRECTOR'S OFFICE			
	2980001	DEPUTY DIRECTOR, MAINTENANCE			
	2980002	SECRETARY I			
	2980003	ADMINISTRATIVE SYSTEMS COORD			
	2980004	MAINTENANCE MANAGER			
	2980005	ASSETS MANAGER			
	2980006	JR CIVIL ENGINEER			
	2980007	CONSTRUCTION COORDINATOR			
SUB COST CENTER		Total Positions:	7	Vacants:	0 Filled Positions: 7
02980	29805	FACILITIES COORDINATION			
	2980501	BUILDING/GROUNDS SUPERVISOR			
	2980502	BUILDING/GROUNDS WORKER			
	2980503	BUILDING/GROUNDS SUPERVISOR			
	2980504	BUILDING/GROUNDS WORKER			
	2980505	BUILDING/GROUNDS WORKER			
	2980506	BUILDING/GROUNDS WORKER			
	2980507	BUILDING/GROUNDS WORKER			

DEPARTMENT	PCR #	POSITION TITLE			
	2980508	BUILDING/GROUNDS WORKER			
	2980509	BUILDING/GROUNDS WORKER			
	2980510	BUILDING/GROUNDS WORKER			
	2980511	BUILDING/GROUNDS WORKER			
	2980512	BUILDING/GROUNDS WORKER			
	2980513	EQUIPMENT REPAIR SPECIALIST			
	2980514	BUILDING/GROUNDS EQUIP OPER			
	2980515	EQUIPMENT REPAIR SUPERVISOR			
	2980516	BUILDING/GROUNDS EQUIP OPER			
	2980517	EQUIPMENT REPAIR SPECIALIST			
	2980518	ACTING BLD/GRNDS EQUIP OPERATR			
	2980519	MECHANIC SPECIALIST			
	2980520	FACILITIES SPECIALIST			
	2980521	FACILITIES SPECIALIST			
	2980522	TRADES FOREMAN			
	2980523	FACILITIES SPECIALIST			
	2980524	BUILDING/GROUNDS WORKER			
	2980525	FACILITIES MANAGER			
	2980526	BUILDING/GROUNDS WORKER			
SUB COST CENTER	Total Positions:	26	Vacants:	3	Filled Positions: 23
02980	29810	PUMP/POWER			
	2981021	M&O SPECIALIST			
	2981023	M&O SPECIALIST			
	2981024	UNIT SUPERVISOR			
	2981027	M&O SPECIALIST			
	2981028	M&O SPECIALIST			
SUB COST CENTER	Total Positions:	5	Vacants:	0	Filled Positions: 5
02980	29815	PLANT ENGINEERING			
	2981501	SR PROGRAM MANAGER			
	2981502	PROGRAM MANAGER, ELECTRICAL			
	2981503	PROGRAM MANAGER, I&C			
	2981504	PROJECT MANAGER, SR DESIGNER			
	2981505	PROGRAM MANAGER, MECHANICAL			
SUB COST CENTER	Total Positions:	5	Vacants:	1	Filled Positions: 4
02980	29820	PRIMARY/SECONDARY			
	2982008	AREA MANAGER, MECH/PRIMARY			
	2982014	M&O SPECIALIST			
	2982016	M&O SPECIALIST			
	2982017	STP MECHANIC			
	2982018	M&O SPECIALIST			
	2982019	M&O SPECIALIST			
	2982021	M&O SPECIALIST			
	2982026	M&O SPECIALIST			
	2982027	M&O SPECIALIST			
	2982028	UNIT SUPERVISOR			
	2982031	M&O SPECIALIST			
	2982032	UNIT SUPERVISOR			
	2982033	M&O SPECIALIST			
	2982034	M&O SPECIALIST			
	2982035	AREA MANAGER, SECONDARY			
	2982036	M&O SPECIALIST			
	2982037	M&O SPECIALIST			
	2982038	UNIT SUPERVISOR			

DEPARTMENT	PCR #	POSITION TITLE			
	2982039	M&O SPECIALIST			
	2982040	M&O SPECIALIST			
	2982041	M&O SPECIALIST			
	2982042	M&O SPECIALIST			
SUB COST CENTER		Total Positions: 22	Vacants: 3	Filled Positions: 19	
02980	29830	RESIDUALS			
	2983001	AREA MANAGER, RESIDUALS			
	2983008	UNIT SUPERVISOR			
	2983010	M&O SPECIALIST			
	2983011	M&O SPECIALIST			
	2983014	M&O SPECIALIST			
	2983015	UNIT SUPERVISOR			
	2983016	M&O SPECIALIST			
	2983018	M&O SPECIALIST			
	2983019	M&O SPECIALIST			
SUB COST CENTER		Total Positions: 9	Vacants: 0	Filled Positions: 9	
02980	29850	ELECTRICAL			
	2985001	UNIT SUPERVISOR			
	2985002	ELECTRICIAN			
	2985003	ELECTRICIAN			
	2985007	ELECTRICIAN			
	2985008	UNIT SUPERVISOR			
	2985011	ELECTRICIAN			
	2985012	ELECTRICIAN			
	2985014	ELECTRICIAN			
	2985015	ELECTRICIAN			
	2985017	ELECTRICIAN			
	2985018	ELECTRICIAN			
	2985022	AREA MANAGER, ELEC/PIPING			
	2985026	ELECTRICIAN			
	2985027	ELECTRICIAN			
	2985029	ELECTRICIAN			
	2985030	ELECTRICIAN			
	2985031	ELECTRICIAN			
	2985032	ELECTRICIAN			
	2985033	ELECTRICIAN			
	2985043	ELECTRICIAN			
	2985044	ELECTRICIAN			
SUB COST CENTER		Total Positions: 21	Vacants: 2	Filled Positions: 19	
02980	29851	PIPE			
	2985101	PLUMBER/PIPEFITTER			
	2985102	PLUMBER/PIPEFITTER			
	2985103	PLUMBER/PIPEFITTER			
	2985104	PLUMBER/PIPEFITTER			
	2985105	UNIT SUPERVISOR			
	2985106	PLUMBER/PIPEFITTER			
	2985107	PLUMBER/PIPEFITTER			
	2985108	PLUMBER/PIPEFITTER			
	2985109	PLUMBER/PIPEFITTER			
	2985110	PLUMBER/PIPEFITTER			
	2985111	PLUMBER/PIPEFITTER			
	2985112	PLUMBER/PIPEFITTER			

DEPARTMENT	PCR #	POSITION TITLE			
	SUB COST CENTER	Total Positions:	12	Vacants:	2 Filled Positions: 10
02980	29852	MACHINE SHOP			
	2985201	UNIT SUPERVISOR			
	2985202	METAL FABRICATOR/WELDER			
	2985203	METAL FABRICATOR/WELDER			
	2985204	TOOLMAKER			
	2985206	METAL FABRICATOR/WELDER			
	2985207	MACHINIST			
	SUB COST CENTER	Total Positions:	6	Vacants:	0 Filled Positions: 6
02980	29860	HVAC			
	2986005	AREA MANAGER, HVAC & I/C			
	2986006	HVAC SPECIALIST			
	2986007	UNIT SUPERVISOR			
	2986016	HVAC SPECIALIST			
	2986023	HVAC SPECIALIST			
	2986024	HVAC APPRENTICE			
	2986027	HVAC SPECIALIST			
	2986028	HVAC SPECIALIST			
	2986029	HVAC SPECIALIST			
	SUB COST CENTER	Total Positions:	9	Vacants:	1 Filled Positions: 8
02980	29861	IC			
	2986101	INSTRUMENTATION SPECIALIST			
	2986103	INSTRUMENTATION SPECIALIST			
	2986104	INSTRUMENTATION SPECIALIST			
	2986105	INSTRUMENTATION SPECIALIST			
	2986106	COMMUNICATION & CONTROL TECH			
	2986107	INSTRUMENTATION SPECIALIST			
	2986108	UNIT SUPERVISOR, INSTRUMENT			
	2986109	INSTRUMENTATION SPECIALIST			
	2986110	INSTRUMENTATION SPECIALIST			
	2986111	COMMUNICATION & CONTROL TECH			
	2986112	INSTRUMENTATION SPECIALIST			
	2986113	COMMUNICATION & CONTROL TECH			
	2986114	COMMUNICATION & CONTROL TECH			
	2986115	APPRENTICE INSTRUMENT SPECIAL			
	2986116	COMMUNICATION & CONTROL TECH			
	2986117	INSTRUMENTATION SPECIALIST			
	2986118	INSTRUMENTATION SPECIALIST			
	2986119	UNIT SUPERVISOR, INSTRUMENT			
	2986120	COMMUNICATION & CONTROL TECH			
	2986121	COMMUNICATION & CONTROL TECH			
	2986122	INSTRUMENTATION SPECIALIST			
	SUB COST CENTER	Total Positions:	21	Vacants:	0 Filled Positions: 21
02980	29865	CONSTRUCT/COORD WARRANTY			
	2986501	PROJECT MANAGER, CONST LIAISON			
	2986502	STAFF ENGINEER, CONST LIAISON			
	2986503	PROGRAM MANAGER, CONSTRC COORD			
	2986504	PROJECT MANAGER, FAC TURNOVER			
	SUB COST CENTER	Total Positions:	4	Vacants:	2 Filled Positions: 2
	COST CENTER	Total Positions:	147	Vacants:	14 Filled Positions: 133

DEPARTMENT	PCR #	POSITION TITLE			
02985	29855	DI WORK COORDINATION			
	2985501	WORK COORDINATION CENTER MGR			
	2985502	HEAD CLERK			
	2985503	PLANNING/SCHEDULING COORD			
	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			
SUB COST CENTER	Total Positions:	11	Vacants:	0	Filled Positions: 11
COST CENTER	Total Positions:	11	Vacants:	0	Filled Positions: 11
DEPARTMENT	Total Positions:	279	Vacants:	29	Filled Positions: 250

CLINTON	OPERATIONS
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02910	29100	CLINTON			
	2910001	SUPERINTENDENT, CLINTON			
	2910002	AREA SUPERVISOR			
	2910005	AREA SUPERVISOR			
	2910006	ASST STP OPERATOR			
	2910010	AREA MANAGER			
	2910011	M&O SPECIALIST			
	2910012	HEAD CLERK			
	2910013	M&O SPECIALIST			
SUB COST CENTER	Total Positions:	8	Vacants:	1	Filled Positions: 7
COST CENTER	Total Positions:	8	Vacants:	1	Filled Positions: 7
DEPARTMENT	Total Positions:	8	Vacants:	1	Filled Positions: 7

WASTEWATER OPERATIONS	OPERATIONS
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02210	22100	TOXIC REDUCTION & CONTROL			
	2210001	MANAGER, TRAC			
	2210009	INDUSTRIAL COORDINATOR			
	2210010	INDUSTRIAL COORDINATOR			
	2210011	INDUSTRIAL COORDINATOR			
	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	ACTING PROGRAM MGR, TRAC IS			
	2210022	SAMPLING ASSOCIATE			
	2210023	SAMPLING ASSOCIATE			
	2210024	SAMPLING ASSOCIATE			
	2210025	SAMPLING ASSOCIATE			
	2210026	SAMPLING ASSOCIATE			
	2210027	SAMPLING ASSOCIATE			

DEPARTMENT	PCR #	POSITION TITLE
	2210028	SAMPLING ASSOCIATE
	2210029	COMPLIANCE COORDINATOR
	2210030	PERMIT COORDINATOR
	2210031	COMPLIANCE COORDINATOR
	2210032	COMPLIANCE COORDINATOR
	2210034	COMPLIANCE COORDINATOR
	2210035	INDUSTRIAL COORDINATOR
	2210037	DATA MANAGEMENT SUPERVISOR
	2210038	DATA TRACKING ASSISTANT
	2210039	DATA TRACKING ASSISTANT
	2210040	SR SAMPLING ASSOCIATE
	2210041	SAMPLING ASSOCIATE
	2210042	SAMPLING ASSOCIATE
	2210043	SR SAMPLING ASSOCIATE
	2210044	INDUSTRIAL COORDINATOR
	2210045	SR ENGINEER
	2210046	INDUSTRIAL COORDINATOR
	2210048	REGIONAL MANAGER
	2210049	INDUSTRIAL COORDINATOR
	2210050	INDUSTRIAL COORDINATOR
	2210055	ENFORCEMENT COORDINATOR
	2210056	INDUSTRIAL COORDINATOR
	2210059	INDUSTRIAL COORDINATOR
	2210060	SR SAMPLING ASSOCIATE
	2210061	INDUSTRIAL COORDINATOR
	2210062	SAMPLING ASSOCIATE
	2210063	REGIONAL MANAGER
	2210064	SAMPLING ASSOCIATE
	2210065	ACTING DATA TRACKER
	2210066	SOURCE COORDINATOR
	2210067	SAMPLING ASSOCIATE

SUB COST CENTER	Total Positions:	50	Vacants:	6	Filled Positions:	44
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COST CENTER	Total Positions:	50	Vacants:	6	Filled Positions:	44
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02470

24700

WW GENERAL

2470001	DIRECTOR, TRANSPORT
2470003	PROGRAM MANAGERPROCESS CNTRL
2470004	MANAGER, OPERATIONS
2470005	SKILLED LABORER
2470006	ACTING ASST PUMP STATION SUPER
2470007	M & O SPECIALIST
2470008	AREA SUPERVISOR
2470009	OPERATOR
2470010	OMC LABORER
24700100	OPERATOR
24700101	OPERATOR
24700102	AREA SUPERVISOR
24700103	OPERATOR
24700104	OPERATOR
24700105	OPERATOR
24700107	SKILLED LABORER
24700108	OPERATOR
24700109	SKILLED LABORER
2470011	OPERATOR
24700110	SKILLED LABORER

DEPARTMENT	PCR #	POSITION TITLE
	24700111	AREA SUPERVISOR
	24700112	AREA SUPERVISOR
	24700113	ACTING AREA SUPERVISOR
	24700115	OPERATOR
	24700116	OPERATOR
	24700117	OPERATOR
	24700118	OPERATOR
	24700119	OPERATOR
	24700120	ASSISTANT DIRECTOR
	24700121	OPERATOR
	24700122	PROJECT ENGINEER,PICS
	24700123	WORK ORDER COORDINATOR
	24700124	AREA SUPERVISOR
	24700125	INSTRUMENTATION SPECIALIST
	24700126	PROGRAM MANAGER, CONSTRUCTION
	2470013	SKILLED LABORER
	2470014	SKILLED LABORER
	2470015	AREA SUPERVISOR
	2470016	OPERATOR
	2470017	OPERATOR
	2470018	OPERATOR
	2470019	AREA SUPERVISOR
	2470020	OPERATOR
	2470021	OPERATOR
	2470022	OPERATOR
	2470023	AREA SUPERVISOR
	2470025	OPERATOR
	2470027	OMC LABORER
	2470028	SKILLED LABORER
	2470029	OPERATOR
	2470030	OMC LABORER
	2470031	SKILLED LABORER
	2470032	ACTING PUMP STATION SUPERVISOR
	2470033	AREA SUPERVISOR
	2470034	OPERATOR
	2470035	OPERATOR
	2470036	OPERATOR
	2470038	OMC LABORER
	2470039	OMC LABORER
	2470042	SKILLED LABORER
	2470043	SKILLED LABORER
	2470044	AREA SUPERVISOR
	2470045	HEADWORKS OPERATOR
	2470047	OPERATOR
	2470048	OPERATOR
	2470052	SKILLED LABORER
	2470054	SKILLED LABORER
	2470055	HEADWORKS OPERATOR
	2470056	HEADWORKS MANAGER
	2470057	AREA SUPERVISOR
	2470058	HEADWORKS OPERATOR
	2470059	HEADWORKS OPERATOR
	2470060	OPERATOR
	2470061	OPERATOR
	2470062	OPERATOR
	2470063	SKILLED LABORER

DEPARTMENT	PCR #	POSITION TITLE
	2470064	SKILLED LABORER
	2470065	OPERATOR
	2470066	SKILLED LABORER
	2470067	HEADWORKS OPERATOR
	2470069	AREA SUPERVISOR
	2470070	HEADWORKS OPERATOR
	2470071	HEADWORKS OPERATOR
	2470072	OPERATOR
	2470073	OPERATOR
	2470074	OPERATOR
	2470075	OPERATOR
	2470076	SKILLED LABORER
	2470077	SKILLED LABORER
	2470078	SKILLED LABORER
	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
	2470091	BUILDING/GROUNDS WORKER
	2470092	BUILDING/GROUNDS WORKER
	2470093	OMC LABORER
	2470094	SKILLED LABORER
	2470095	OPERATOR
	2470096	AREA SUPERVISOR
	2470097	PROGRAM MANAGER, CONST LIAISON
	2470099	SKILLED LABORER
SUB COST CENTER	Total Positions: 108	Vacants: 11 Filled Positions: 97
COST CENTER	Total Positions: 108	Vacants: 11 Filled Positions: 97
DEPARTMENT	Total Positions: 158	Vacants: 17 Filled Positions: 141

WATER OPERATIONS	OPERATIONS
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03380	33850	METRO WATER GENERAL
	3385001	SR PROGRAM MANAGER, OCC
	3385002	AREA SUPERVISOR
	3385003	AREA SUPERVISOR
	3385004	AREA SUPERVISOR
	3385005	AREA SUPERVISOR
	3385006	AREA SUPERVISOR
	3385007	AREA SUPERVISOR
	3385008	AREA SUPERVISOR
	3385012	OPERATOR
	3385016	ACTING AREA SUPERVISOR
	3385019	OPERATOR
	3385021	OPERATOR
	3385022	OPERATOR
	3385023	OPERATOR
	3385025	AREA SUPERVISOR

DEPARTMENT	PCR #	POSITION TITLE			
	3385029	AREA SUPERVISOR			
	3385031	DIRECTOR, METROPOLITAN			
SUB COST CENTER	Total Positions:	17	Vacants:	2	Filled Positions: 15
COST CENTER	Total Positions:	17	Vacants:	2	Filled Positions: 15
03390	33910	WESTERN GENERAL			
	3391001	DIRECTOR, WESTERN OPERATIONS			
	3391003	PRINCIPAL CLERK			
	3391004	SR CLERK			
	3391005	INVENTORY CONTROL SUPERVISOR			
	3391006	ADMINISTRATIVE SYSTEMS COORD			
	3391007	PRINCIPAL STOREKEEPER			
	3391008	STOREKEEPER			
	3391009	PRINCIPAL STOREKEEPER			
	3391011	MANAGER, WESTERN MAINTENANCE			
SUB COST CENTER	Total Positions:	9	Vacants:	0	Filled Positions: 9
03390	33920	TREATMENT & TRANSMISSION			
	3392001	SR TRANS/TREATMENT OPERATOR			
	3392004	TRANSMISSION & TREATMENT OPER			
	3392006	TRANSMISSION & TREATMENT OPER			
	3392007	TRANSMISSION & TREATMENT OPER			
	3392008	TRANSMISSION & TREATMENT OPER			
	3392009	TRANSMISSION & TREATMENT OPER			
	3392010	TRANSMISSION & TREATMENT OPER			
	3392012	TRANSMISSION & TREATMENT OPER			
	3392013	TRANSMISSION & TREATMENT OPER			
	3392014	TRANSMISSION & TREATMENT OPER			
	3392015	TRANSMISSION & TREATMENT OPER			
	3392016	TRANSMISSION & TREATMENT OPER			
	3392018	TRANSMISSION & TREATMENT OPER			
	3392019	TRANSMISSION & TREATMENT OPER			
	3392020	TRANSMISSION & TREATMENT OPER			
	3392021	MANAGER, TRANS & TREATMENT			
	3392023	SUPERVISOR, FLUORIDATION			
	3392025	SR TRANS/TREATMENT OPERATOR			
	3392026	TRANSMISSION & TREATMENT OPER			
	3392031	SKILLED LABORER			
	3392032	SUPERVISOR, DISINFECT & SAMPLE			
	3392034	JR SANITARY ENGINEER			
	3392038	SR INSTRUMENT TECHNICIAN			
	3392040	SR TRANS/TREATMENT OPERATOR			
	3392041	PROGRAM MANAGER, WATER TREAT			
	3392042	INSTRUMENT TECHNICIAN			
	3392043	PROGRAM MRG, PROCESS ENGINEER			
	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			
	3392050	COMMUNICATION & CONTROL TECH			
	3392054	TRANSMISSION & TREATMENT OPER			
SUB COST CENTER	Total Positions:	34	Vacants:	3	Filled Positions: 31
03390	33930	FACILITIES MAINT - WEST			

DEPARTMENT	PCR #	POSITION TITLE				
	3393001	SUPERVISOR, PLANT MAINTENANCE				
	3393002	MACHINIST				
	3393004	ELECTRICIAN				
	3393006	PLUMBER/PIPEFITTER				
	3393007	UNIT SUPERVISOR				
	3393008	METAL WORKER/WELDER				
	3393009	TRADES FOREMAN				
	3393011	FACILITIES SPECIALIST				
	3393012	MOTOR EQUIPMENT REPAIR FOREMAN				
	3393013	MOTOR EQUIPMENT REPAIRMAN				
	3393014	TRADES FOREMAN				
	3393015	FACILITIES SPECIALIST				
	3393016	SUPERVISOR, BUILDINGS/GROUNDS				
	3393018	FACILITIES SPECIALIST				
	3393026	SKILLED LABORER/MOTOR TRUCK DR				
	3393027	FACILITIES SPECIALIST				
	3393028	PROGRAM MANAGER, FACILITIES				
	3393029	PRINCIPAL CLERK				
	3393030	FACILITIES SPECIALIST				
	3393031	FACILITIES SPECIALIST				
	3393032	MOTOR EQUIPMENT REPAIRMAN				
	3393034	OMC LABORER				
	3393036	UNIT SUPERVISOR				
	3393037	MACHINIST				
	3393038	OMC LABORER				
	3393041	UNIT SUPERVISOR				
	3393042	SUPERVISOR, EQUIPMENT MAINT				
	3393043	WTP MAINTENANCE TECHNICIAN				
	3393044	WTP MAINTENANCE TECHNICIAN				
	3393045	TRADES FOREMAN				
	3393046	OMC LABORER				
	3393047	ELECTRICIAN				
	3393048	WTP MAINTENANCE TECHNICIAN				
	3393049	WTP MAINTENANCE TECHNICIAN				
	3393050	ASST SUPERVISOR, POWER GENERAT				
SUB COST CENTER	Total Positions:	35	Vacants:	7	Filled Positions:	28

03390 33940 GROUNDS MAINT - WEST

3394001	SR PROGRAM MGR, WESTERN MAINT
3394002	SUPERVISOR, WARE RIVER INTAKE
3394004	WSS FOREMAN
3394007	WSS SUB-FOREMAN
3394009	OMC LABORER
3394010	OMC LABORER
3394013	SKILLED LABORER
3394015	WSS GENERAL FOREMAN
3394016	WSS GENERAL FOREMAN
3394017	WSS FOREMAN
3394019	WSS FOREMAN
3394020	VALVE MAINTENANCE FOREMAN
3394021	WSS SUB-FOREMAN
3394022	WSS SUB-FOREMAN
3394023	WSS SUB-FOREMAN
3394024	FENCING FOREMAN
3394025	HEAVY EQUIPMENT OPERATOR
3394026	SKILLED LABORER

DEPARTMENT	PCR #	POSITION TITLE			
	3394030	OMC LABORER			
	3394031	SKILLED LABORER			
	3394033	HEAVY EQUIPMENT OPERATOR			
	3394034	OMC LABORER			
	3394035	ACTING FENCING FOREMAN			
	3394036	ACTING WSS FOREMAN			
	3394037	HEAVY EQUIPMENT OPERATOR			
	3394038	OMC LABORER			
	3394039	SKILLED LABORER			
	3394053	OMC LABORER			
	3394055	ACTING FENCING FOREMAN			
	3394056	OMC LABORER			
SUB COST CENTER	Total Positions:	30	Vacants:	5	Filled Positions: 25
COST CENTER	Total Positions:	108	Vacants:	15	Filled Positions: 93
DEPARTMENT	Total Positions:	125	Vacants:	17	Filled Positions: 108

METRO MAINTENANCE	OPERATIONS
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05410	54100	FACILITY MAINT METRO
	5410002	FACILITIES SPECIALIST
	5410003	ACTING TRADES FOREMAN
	5410004	FACILITIES SPECIALIST
	5410005	FACILITIES SPECIALIST
	5410006	TRADES FOREMAN
	5410007	FACILITIES SPECIALIST
	5410008	FACILITIES SPECIALIST
	5410009	FACILITIES SPECIALIST
	5410010	FACILITIES SPECIALIST
	5410011	TRADES FOREMAN
	5410012	TRADES FOREMAN
	5410013	FACILITIES SPECIALIST
	5410014	FACILITIES SPECIALIST
	5410015	FACILITIES SPECIALIST
	5410016	FACILITIES SPECIALIST
	5410017	FACILITIES SPECIALIST
	5410018	FACILITIES MANAGER
	5410019	BUILDING & FACIL FOREMAN

SUB COST CENTER	Total Positions:	18	Vacants:	1	Filled Positions: 17
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05410	54110	GROUNDS MAINT METRO
	5411002	OMC LABORER
	5411003	SKILLED LABORER
	5411004	WSS FOREMAN
	5411005	OMC LABORER
	5411006	SKILLED LABORER
	5411007	ACTING MATERIAL HANDLER
	5411008	WSS GENERAL FOREMAN
	5411009	WSS FOREMAN
	5411010	WSS FOREMAN
	5411011	SKILLED LABORER
	5411012	SKILLED LABORER
	5411013	OMC LABORER
	5411014	SKILLED LABORER

SUB COST CENTER	Total Positions:	13	Vacants:	1	Filled Positions: 12
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DEPARTMENT	PCR #	POSITION TITLE
COST CENTER	Total Positions: 31	Vacants: 2 Filled Positions: 29
05430	54310	VALVE MAINT - WATER
	5431001	ACTING 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
	5431011	OMC LABORER
	5431012	SKILLED LABORER
	5431013	SKILLED LABORER
	5431014	ACTING WDS GENERAL FRMN/VALVES
SUB COST CENTER	Total Positions: 14	Vacants: 2 Filled Positions: 12
05430	54320	INSPECTION - WATER
	5432001	SKILLED LABORER
	5432002	SUPERVISOR, INSPECTION
	5432003	SR GENERAL CONST INSPECTOR
	5432004	GENERAL CONSTRUCTION INSPECTOR
	5432005	GENERAL CONSTRUCTION INSPECTOR
	5432006	ASST SUPERVISOR,INSP BRANCH
	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
	5432013	GENERAL CONSTRUCTION INSPECTOR
	5432014	PROJECT COORD.CONTROL VALVES
SUB COST CENTER	Total Positions: 13	Vacants: 2 Filled Positions: 11
05430	54330	PIPE MAINT - WATER
	5433001	PROGRAM MANAGER,PIPELINES
	5433002	WDS GENERAL FOREMAN
	5433003	SENIOR WDS FOREMAN
	5433004	SR WDS FOREMAN
	5433006	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
	5433014	FACILITIES SPECIALIST
	5433015	FACILITIES SPECIALIST
	5433016	OMC LABORER
	5433017	OMC LABORER
	5433018	OMC LABORER
	5433019	OMC LABORER
	5433020	OMC LABORER
	5433021	MASTER WELDER

DEPARTMENT	PCR #	POSITION TITLE
	5433022	CONSTRUCTION PIPELAYER
	5433023	CONSTRUCTION PIPELAYER
	5433024	CONSTRUCTION PIPELAYER
	5433025	CONSTRUCTION PIPELAYER
	5433026	CONSTRUCTION PIPELAYER
	5433027	WDS GENERAL FOREMAN
	5433028	OMC LABORER
	5433029	MOTOR EQUIPMENT REPAIRMAN
	5433030	SKILLED LABORER
	5433031	SENIOR WDS FOREMAN
SUB COST CENTER	Total Positions: 30	Vacants: 7 Filled Positions: 23

05430	54340	PIPE MAINT - WASTEWATER
	5434001	ACTING MATERIAL HANDLER
	5434002	DISTRICT SUPERVISOR
	5434003	ASST DISTRICT SUPERVISOR
	5434004	SEWER MAINT FOREMAN
	5434005	SEWER MAINT FOREMAN
	5434006	SEWER MAINT FOREMAN
	5434007	SEWER MAINT FOREMAN
	5434008	SKILLED LABORER
	5434009	SKILLED LABORER
	5434010	ACTING HEAVY EQUIP OPERATOR
	5434011	HEAVY EQUIPMENT OPERATOR
	5434012	HEAVY EQUIPMENT OPERATOR
	5434013	FACILITIES SPECIALIST
	5434014	FACILITIES SPECIALIST
	5434016	ACTING DISTRICT SUPERVISOR
	5434017	ACTING ASST DISTRICT SUPER
	5434018	ACTING SEWER MAINT FOREMAN
	5434019	ACTING SEWER MAINT FOREMAN
	5434020	SEWER MAINT FOREMAN
	5434021	HEAVY EQUIPMENT OPERATOR
	5434022	SKILLED LABORER
	5434023	HEAVY EQUIPMENT OPERATOR
	5434024	SEWER MAINT FOREMAN
	5434025	FACILITIES SPECIALIST
	5434026	FACILITIES SPECIALIST
SUB COST CENTER	Total Positions: 25	Vacants: 2 Filled Positions: 23

05430	54350	TV INSPECTION - WASTEWATE
	5435002	SENIOR PROGRAM MANAGER
	5435003	ACTING FIELD SUPERVISOR
	5435004	TELE-INSPECTION ASSISTANT
	5435005	ACTING TELE-INSPECT OPERATOR
	5435006	TELE-INSPECTION ASSISTANT
	5435007	TELE-INSPECTION ASSISTANT
	5435008	ACTING TELE-INSPECT FOREMAN
	5435009	TELE-INSPECTION FOREMAN
	5435010	TELE-INSPECTION ASSISTANT
	5435011	ACTING TELE-INSPECT OPERATOR
	5435012	SR FIELD INSPECTOR
	5435013	FIELD SUPERVISOR
	5435014	ACTING TELE-INSPECT FOREMAN
	5435015	TELE-INSPECTION ASSISTANT
	5435016	TELE-INSPECTION OPERATOR

DEPARTMENT	PCR #	POSITION TITLE			
	5435018	STAFF ENGINEER			
SUB COST CENTER	Total Positions:	16	Vacants:	3	Filled Positions: 13
COST CENTER	Total Positions:	98	Vacants:	16	Filled Positions: 82
05440	54400	WORK COORDINATION			
	5440001	WORK ORDER COORDINATOR			
	5440002	MANAGER,FINANCIAL SYSTEMS			
	5440003	MATERIALS COORDINATION MANAGER			
	5440004	ADMINISTRATIVE ASSISTANT			
	5440005	PLANNER/SCHEDULER COORDINATOR			
	5440006	HEAVY EQUIPMENT OPERATOR			
	5440007	MATERIAL & EQUIPMENT SUPERVISOR			
	5440008	PLANNER/SCHEDULER			
	5440010	PLANNING/SCHEDULING COORD.			
	5440011	PLANNING/SCHEDULING COORD.			
	5440012	PLANNING/SCHEDULING COORD.			
	5440013	WORK COORD.CENTER MANAGER			
	5440016	SUPERVISOR,LOGISTICS UNIT			
	5440019	PLANNING/SCHEDULING COORD			
	5440020	PLANNING/SCHEDULING COORD			
	5440021	PLANNER/SCHEDULER COORDINATOR			
	5440022	PLANNER/SCHEDULER COORDINATOR			
SUB COST CENTER	Total Positions:	17	Vacants:	0	Filled Positions: 17
COST CENTER	Total Positions:	17	Vacants:	0	Filled Positions: 17
05450	54500	METRO MAINT GENERAL			
	5450001	SENIOR PROG MNGR,METRO TRADES			
	5450002	ASSOCIATE CIVIL ENGINEER			
	5450003	PROGRAM MANAGER,OPS & MAINT			
SUB COST CENTER	Total Positions:	3	Vacants:	0	Filled Positions: 3
COST CENTER	Total Positions:	3	Vacants:	0	Filled Positions: 3
05470	54700	EQUIP - GENERAL			
	5470001	CHIEF,FACILITIES MAINTENANCE			
	5470002	M&O SPECIALIST			
	5470003	M&O SPECIALIST			
	5470004	M&O SPECIALIST			
	5470005	M&O SPECIALIST			
	5470006	M&O SPECIALIST			
	5470008	DIESEL ENGINE MAINT FOREMAN			
	5470009	M&O SPECIALIST			
	5470010	M&O SPECIALIST			
	5470011	M&O SPECIALIST			
	5470014	UNIT SUPERVISOR,MAINTENANCE			
	5470015	MACHINIST			
	5470016	METAL WORKER/WELDER			
	5470017	MACHINIST			
	5470019	ACTING UNIT SUPERVISOR MECH			
	5470020	MASTER WELDER			
	5470021	MASTER WELDER			
	5470022	METAL WORKER/WELDER			
	5470023	ELECTRICIAN			
	5470024	ELECTRICIAN			
	5470025	ELECTRICIAN			

DEPARTMENT	PCR #	POSITION TITLE
	5470026	ELECTRICIAN
	5470027	ELECTRICIAN
	5470028	ACTING UNIT SUPERVISOR
	5470029	PLUMBER/PIPEFITTER
	5470030	PLUMBER/PIPEFITTER
	5470031	PLUMBER/PIPEFITTER
	5470032	UNIT SUPERVISOR
	5470033	PLUMBER/PIPEFITTER
	5470035	SKILLED LABORER
	5470036	HVAC SPECIALIST
	5470037	SKILLED LABORER
	5470038	UNIT SUPERVISOR
	5470039	M&O SPECIALIST
	5470040	DIESEL ENGINE MAINT FOREMAN
	5470041	UNIT SUPERVISOR
	5470042	PLUMBER/PIPEFITTER
	5470043	WTP MAINTENANCE TECHNICIAN
	5470044	UNIT SUPERVISOR
	5470045	PROGRAM MANAGER
	5470046	M&O SPECIALIST
	5470047	ELECTRICIAN
	5470048	PROJECT MANAGER,MECHANICAL
	5470049	PROJECT ENGINEER/ELECTRICAL
	5470050	UNIT SUPERVISOR
	5470051	ELECTRICIAN
	5470052	ELECTRICIAN
	5470053	PLUMBER/PIPEFITTER
	5470055	ELECTRICIAN
	5470056	UNIT SUPERVISOR
	5470057	HVAC SPECIALIST
	5470058	MOTOR EQUIPMENT REPAIR FOREMAN
SUB COST CENTER	Total Positions: 52	Vacants: 4 Filled Positions: 48
COST CENTER	Total Positions: 52	Vacants: 4 Filled Positions: 48
DEPARTMENT	Total Positions: 201	Vacants: 22 Filled Positions: 179

OPERATIONS SUPPORT	OPERATIONS
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05810	58110	OP ENGINEERING
	5811002	SENIOR ENGINEERING AIDE
	5811003	PROJECT ENGINEER
	5811004	PROJECT ENGINEER
	5811005	DRAFTER
	5811008	PROJECT MANAGER
	5811009	TECHNICAL ASSISTANT
	5811010	SAFETY PROGRAM COORDINATOR
	5811011	MANAGER,OPERATIONALENG
	5811012	EMERGENCY RESPONSE PLANNER
	5811013	PROJECT MANAGER
	5811014	PROG MGR,MONITOR & CONTROL
	5811015	PROG MGR,OPERATIONS PLANNING
	5811016	PROJECT ENGINEER,CIVIL
	5811017	DISTRIBUTION SYSTEM LIAISON
	5811018	JR CIVIL ENGINEER
	5811019	PROGRAM MANAGER,SCADA

DEPARTMENT	PCR #	POSITION TITLE			
	5811020	SR PROGRAM MGR, START UP			
SUB COST CENTER	Total Positions:	17	Vacants:	5	Filled Positions: 12
COST CENTER	Total Positions:	17	Vacants:	5	Filled Positions: 12
05820	58210	QUALITY ASSURANCE			
	5821001	SR PROGRAM MGR,QUALITY ASSURA			
	5821002	LAB SUPERVISOR/JOBSHRE/WQCHM			
	5821002	LAB SUPERVISOR/JOBSHRE/WQCHM			
	5821003	ASSISTANT CHEMIST			
	5821004	PROGRAM MANAGER,WATER QUALITY			
	5821005	PROGRAM MANAGER,CHEMISTRY			
	5821006	QUALITY ASSURANCE PLANNER			
	5821007	SR SANITARY ENGINEERING AIDE			
	5821008	SR SANITARY ENGINEERING AIDE			
	5821009	SR SANITARY ENGINEERING AIDE			
	5821010	PROJECT MANAGER, TECH SERVICES			
	5821011	MANAGER, TECHNICAL SERVICES			
	5821012	PROJECT ENGINEER			
	5821014	JR SANITARY ENGINEER			
SUB COST CENTER	Total Positions:	13	Vacants:	1	Filled Positions: 12
COST CENTER	Total Positions:	13	Vacants:	1	Filled Positions: 12
05830	58310	DATA MANAGEMENT			
	5831001	TECHNICAL INFORMATION ASST			
	5831003	STATISTICIAN			
	5831004	MIS COORDINATOR			
	5831005	JR CIVIL ENGINEER			
	5831007	WATER QUALITY DATA SUPERVISOR			
	5831008	PROJECT MANAGER,OPERATIONS IN			
SUB COST CENTER	Total Positions:	6	Vacants:	1	Filled Positions: 5
COST CENTER	Total Positions:	6	Vacants:	1	Filled Positions: 5
05840	58410	SCADA MAINT - WATER			
	5841001	PROGRAM MANAGER,SCADA			
	5841002	COMMUNICATION & CONTROL TECH			
	5841003	PROJECT MANAGER			
	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	SENIOR PROGRAM MANAGER,SCADA			
	5841011	PROGRAM MANAGER,SCADA			
	5841012	SR SCADA MAINT TECHNICIAN			
	5841013	SR SCADA MAINT TECHNICIAN			
	5841014	SR SCADA MAINT TECHNICIAN			
	5841015	PROJECT MANAGER,SCADA			
	5841016	COMMUNICATION & CONTROL TECH.			
	5841017	COMMUNICATION & CONTROL TECH			
	5841018	PROJECT MANAGER			
	5841019	SENIOR MONITOR & CONTROL ENG			
	5841020	SENIOR MONITOR & CONTROL ENG			
	5841022	SR MONITOR & CONTROL ENGINEER			

DEPARTMENT	PCR #	POSITION TITLE			
	5841023	PROGRAM MANAGER, SCADA			
SUB COST CENTER		Total Positions: 22	Vacants: 4	Filled Positions: 18	
05840	58420	SCADA MAINT - WASTEWATER			
	5842001	SENIOR SCADA TECHNICIAN			
SUB COST CENTER		Total Positions: 1	Vacants: 1	Filled Positions: 0	
05840	58430	METER MAINT - WATER			
	5843002	INSTRUMENT TECHNICIAN			
	5843003	JUNIOR INSTRUMENT TECHNICIAN			
	5843004	JR INSTRUMENT TECHNICIAN			
	5843005	JUNIOR INSTRUMENT TECHNICIAN			
	5843007	SR INSTRUMENT TECHNICIAN			
	5843008	SR INSTRUMENT TECHNICIAN			
	5843009	INSTRUMENT TECHNICIAN			
	5843010	PROGRAM MANAGER,WATER ACCOUNT			
	5843011	ASST PROGRAM MANAGER,MET/MON			
	5843012	STATISTICAL SUPERVISOR			
	5843013	PROJECT MANAGER, METER ACC.			
	5843014	SR INSTRUMENT TECHNICIAN			
SUB COST CENTER		Total Positions: 12	Vacants: 2	Filled Positions: 10	
05840	58440	METER MAINT - WASTEWATER			
	5844001	JUNIOR INSTRUMENT TECHNICIAN			
	5844002	JUNIOR INSTRUMENT TECHNICIAN			
	5844003	JUNIOR INSTRUMENT TECHNICIAN			
	5844004	INSTRUMENT TECHNICIAN			
	5844005	PROGRAM MANAGER,METERING			
	5844006	COMMUNICATION & CONTROL TECH			
	5844007	SR INSTRUMENT TECHNICIAN			
	5844008	INSTRUMENT TECHNICIAN			
	5844009	SR INSTRUMENT TECHNICIAN			
	5844010	ACTING FIELD SUPERVISOR			
	5844011	INSTRUMENT TECHNICIAN			
	5844012	TECHNICAL ASSISTANT			
	5844013	PROJECT ENGINEER,I/I			
	5844014	DATA ANALYST			
	5844015	PROJECT MANAGER			
	5844016	DATA ANALYST			
	5844017	STATISTICAL SUPERVISOR			
SUB COST CENTER		Total Positions: 17	Vacants: 1	Filled Positions: 16	
COST CENTER		Total Positions: 52	Vacants: 8	Filled Positions: 44	
05850	58500	OP SUPPORT GENERAL			
	5850001	DEP DIR/OPER & DIR OPER SUPP			
	5850002	MANAGER,METERING & MONITORING			
SUB COST CENTER		Total Positions: 2	Vacants: 0	Filled Positions: 2	
COST CENTER		Total Positions: 2	Vacants: 0	Filled Positions: 2	
DEPARTMENT		Total Positions: 90	Vacants: 15	Filled Positions: 75	

FOD ADMINISTRATION	OPERATIONS
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05910	59100	POLICY & ADMINISTRATION
	5910001	DIRECTOR OF FIELD OPERATIONS

DEPARTMENT	PCR #	POSITION TITLE			
	5910003	EXECUTIVE SECRETARY			
	5910004	MANAGER, FINANCE & ADMIN			
	5910005	EXECUTIVE SECRETARY			
	5910006	SECRETARY I			
	5910008	PRINCIPAL CLERK			
	5910009	MANAGER, ADMIN AND FINANCE			
	5910010	PRINCIPAL CLERK			
	5910011	EXECUTIVE SECRETARY			
	5910012	FILE CLERK			
	5910013	SR CLERK & TYPIST			
	5910014	MANAGER, POLICY & PLANNING SUP			
	5910015	SR FINANCIAL ANALYST			
	5910016	HEAD CLERK			
	5910017	ADMINISTRATIVE SYSTEMS COORD			
	5910018	ADMINISTRATIVE ASSISTANT I			
	5910019	ADMINISTRATIVE ASSISTANT I			
	5910020	SR CLERK & TYPIST			
	5910021	ADMINISTRATIVE SYSTEMS COORD			
	5910022	MIS COORDINATOR			
SUB COST CENTER	Total Positions:	20	Vacants:	1	Filled Positions: 19
COST CENTER	Total Positions:	20	Vacants:	1	Filled Positions: 19
DEPARTMENT	Total Positions:	20	Vacants:	1	Filled Positions: 19

CAP ENG & CONSTR	OPERATIONS
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03610	36100	CAPITAL ENGR & CONSTRUCT.
	3610001	DIRECTOR, CAPITAL ENGINEERING
	3610007	MANAGER, ENVIR COMPLIANCE
	3610013	EXECUTIVE SECRETARY
	3610014	ASST. DIRECTOR
	3610015	PROJECT MANAGER
	3610016	DEPUTY DIRECTOR, ENGINEER DESI
	3610017	PROJECT MANAGER
	3610018	PROJECT ENGINEER
	3610019	DESIGN MANAGER
	3610020	DESIGN MANAGER
	3610022	DESIGN MANAGER
	3610023	DESIGN MANAGER
	3610024	DESIGN MANAGER
	3610025	PROJECT MANAGER
	3610026	SR ENGINEERING AIDE
	3610027	PROJECT MANAGER
	3610028	DESIGN MANAGER
	3610029	MANAGER, QA/QC
	3610030	DEPUTY DIRECTOR, CAPITAL CONST
	3610031	SR CONSTRUCTION MANAGER
	3610032	CONSTRUCTION COORDINATOR
	3610035	CONSTRUCTION COORDINATOR
	3610036	CONSTRUCTION COORDINATOR
	3610037	CONSTRUCTION COORDINATOR
	3610038	SR CONSTRUCTION MANAGER
	3610039	CONSTRUCTION COORDINATOR

SUB COST CENTER	Total Positions:	26	Vacants:	2	Filled Positions: 24
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DEPARTMENT	PCR #	POSITION TITLE		
COST CENTER	Total Positions:	26	Vacants: 2	Filled Positions: 24
DEPARTMENT	Total Positions:	26	Vacants: 2	Filled Positions: 24

OPERATIONS PLANNING	OPERATIONS
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05310	53100	OPERATIONS PLANNING
	5310002	PROJECT MANAGER
	5310003	PROJECT ENGINEER, I/I
	5310004	SR PROGRAM MANAGER
	5310005	PROJECT MANAGER
	5310006	PROJECT MANAGER
	5310007	PROJECT MANAGER
	5310008	PROJECT MANAGER
	5310009	PROJECT MANAGER, I/I
	5310010	PROGRAM MANAGER, GEOTECH CSO
	5310011	PROGRAM MANAGER, PLANNING
	5310012	PROJECT MANAGER, I/I
	5310013	SECRETARY I
	5310014	SR SANITARY ENGINEERING AIDE
	5310015	PROJECT ENGINEER, CSO
	5310017	SR PROGRAM MANAGER
	5310019	PROJECT ENGINEER
	5310020	PROJECT ENGINEER
	5310021	PROJECT ENGINEER
	5310023	STAFF ENGINEER - I/I
	5310025	PROJECT MANAGER - PLANNING
	5310026	SR PROGRAM MANAGER, PLANNING
	5310027	PROJECT ENGINEER
	5310029	PROJECT ENGINEER
	5310032	PROJECT MANAGER
	5310034	PROJECT ENGINEER
	5310035	STAFF ENGINEER
	5310036	SECRETARY I
	5310037	PROJECT MANAGER, PLANNING
	5310038	PROJECT MANAGER
	5310039	PROJECT MANAGER
	5310040	PROJECT MANAGER
	5310041	DIRECTOR OF PLANNING
	5310042	PROJECT MANAGER
	5310043	PROJECT MANAGER
	5310044	PROGRAM MANAGER, WRP
	5310046	PROJECT MANAGER, RESIDENTIAL
	5310048	PROGRAMMER ANALYST II
	5310049	SR PRGRM MNGR, MPPNG MDLNG & D
	5310051	PROJECT MANAGER, PUBLIC HEALTH
	5310052	SENIOR PROGRAM MANAGER

SUB COST CENTER	Total Positions:	40	Vacants: 7	Filled Positions: 33
COST CENTER	Total Positions:	40	Vacants: 7	Filled Positions: 33
DEPARTMENT	Total Positions:	40	Vacants: 7	Filled Positions: 33

ENG & CONSTR	OPERATIONS
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05525	55250	ENGINEERING
	5525002	SR PROGRAM MANAGER

DEPARTMENT	PCR #	POSITION TITLE
	5525003	PROJECT MANAGER
	5525007	SR CIVIL ENGINEER-DRAFTSMAN
	5525009	SR STAFF ENGINEER, STRUCTURAL
	5525010	SR STAFF ENGINEER, MECHANICAL
	55250100	SR CIVIL ENGINEER
	55250101	SR CIVIL ENGINEER
	55250102	SR CIVIL ENGINEER
	55250103	ASSISTANT CIVIL ENGINEER
	55250104	ASSISTANT CIVIL ENGINEER
	55250105	CONSTRUCTION COORDINATOR
	55250106	PROGRAM MANAGER
	55250107	PRINCIPAL CIVIL ENGINEER
	55250108	CONSTRUCTION COORDINATOR
	55250109	ASST DIRECTOR, CONSTRUCTION
	5525011	PRINCIPAL SANITARY ENGINEER
	55250110	CONSTRUCTION MANAGER
	55250111	SECRETARY I
	5525015	STAFF ENGINEER
	5525016	PROJECT MANAGER
	5525017	ASST DIRECTOR, ENGINEERING
	5525019	SR STAFF ENGINEER, ELECTRICAL
	5525020	PROJECT MANAGER
	5525020	PROJECT MANAGER, TRANSPORT
	5525021	SR PROGRAM MANAGER
	5525022	PROJECT MANAGER
	5525023	APPLICATIONS ENGINEER
	5525024	MECHANICAL DESIGNER
	5525025	TECH INFO SYSTEMS ADMINISTRATO
	5525026	SR ENGINEER
	5525029	SR ENGINEER
	5525030	SR STAFF ENGINEER, STRUCTURAL
	5525031	PROJECT ENGINEER
	5525032	PROJECT ENGINEER
	5525034	ASST DIRECTOR, ENGINEERING
	5525035	SR STAFF ENGINEER
	5525036	SR ENGINEER
	5525037	PROJECT MANAGER
	5525039	PROGRAM MANAGER
	5525040	SR DRAFTSPERSON
	5525041	PROJECT MANAGER
	5525042	SR STAFF ENGINEER
	5525043	PROJECT ENGINEER, CIVIL
	5525044	PROGRAM MANAGER
	5525045	CADD/DRAFTING MANAGER
	5525048	ASSISTANT CIVIL ENGINEER
	5525051	SR CIVIL ENGINEER
	5525052	CONSTRUCTION COORDINATOR
	5525053	PROGRAM MANAGER
	5525054	ASSOCIATE ENVIR ENGINEER
	5525058	PROJECT ENGINEER
	5525060	PROJECT ENGINEER
	5525061	SR PROGRAM MANAGER, P & V
	5525062	SR PROGRAM MANAGER
	5525063	PROGRAM MANAGER
	5525066	TIC CLERK
	5525068	DIRECTOR, ENGINEERING & CONSTR

DEPARTMENT	PCR #	POSITION TITLE
	5525069	SECRETARY I
	5525070	ADMINISTRATIVE SYSTEMS COORD
	5525072	PROGRAM MANAGER
	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
	5525083	PROJECT MANAGER
	5525084	SR CIVIL ENGINEER
	5525085	SR CIVIL ENGINEER
	5525086	CONSTRUCTION MANAGER
	5525087	CONSTRUCTION COORDINATOR
	5525088	PROJECT MANAGER
	5525090	CONSTRUCTION COORDINATOR
	5525091	SR CIVIL ENGINEER
	5525092	PRINCIPAL CIVIL ENGINEER
	5525096	PROJECT MANAGER
	5525097	ASSISTANT CIVIL ENGINEER
	5525098	PROJECT MANAGER
	5525099	PRINCIPAL CIVIL ENGINEER
SUB COST CENTER	Total Positions: 81	Vacants: 12 Filled Positions: 69
COST CENTER	Total Positions: 81	Vacants: 12 Filled Positions: 69
DEPARTMENT	Total Positions: 81	Vacants: 12 Filled Positions: 69

LAB SERVICES	OPERATIONS
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05710	57100	LABORATORY SERVICES
	5710001	DIRECTOR, LABORATORY SERVICES
	5710002	LABORATORY SECTION MANAGER
	5710003	LABORATORY SUPERVISOR III
	5710004	IS PROJECT LEADER
	5710005	SECRETARY I
	5710006	LABORATORY MANAGER
	5710007	LABORATORY MANAGER
	5710008	LABORATORY SUPERVISOR III
	5710009	CHEMIST III
	5710010	LABORATORY SUPERVISOR III
	5710011	LABORATORY SUPERVISOR II
	5710012	LABORATORY SUPERVISOR II
	5710013	CHEMIST III
	5710014	CHEMIST III
	5710015	CHEMIST I
	5710016	SR LABORATORY TECHNICIAN
	5710017	SR LABORATORY TECHNICIAN
	5710018	LABORATORY TECHNICIAN
	5710019	LABORATORY TECHNICIAN
	5710021	QUALITY ASSURANCE COORDINATOR
	5710022	SECRETARY II
	5710023	ADMINISTRATIVE SYSTEMS COORD

DEPARTMENT	PCR #	POSITION TITLE			
	5710024	CHEMIST III			
	5710025	CHEMIST III			
	5710026	CHEMIST II			
	5710027	CHEMIST I			
	5710028	CHEMIST II			
	5710029	CHEMIST II			
	5710030	MICROBIOLOGIST II			
	5710031	SR LABORATORY TECHNICIAN			
	5710033	CLIENT SERVICES COORDINATOR			
	5710035	CHEMIST II			
	5710036	CHEMIST I			
	5710038	LAB TECHNICIAN			
	5710039	CHEMIST III			
	5710040	CHEMIST I			
	5710041	CHEMIST I			
	5710042	SR LABORATORY TECHNICIAN			
	5710043	SR LABORATORY TECHNICIAN			
	5710044	BIOLOGIST I			
	5710045	CHEMIST III			
	5710046	CHEMIST II			
	5710047	CHEMIST I			
	5710048	CHEMIST I			
	5710049	SR LABORATORY TECHNICIAN			
	5710050	SR LABORATORY TECHNICIAN			
	5710051	SR LABORATORY TECHNICIAN			
	5710052	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			
	5710061	LABORATORY TECHNICIAN			
	5710062	LABORATORY SUPERVISOR			
	5710063	SR LABORATORY TECHNICIAN			
	5710064	MICROBIOLOGIST I			
	5710065	MICROBIOLOGIST I			
	5710066	LABORATORY SUPERVISOR II			
	5710067	PROJECT MANAGER			
	5710068	CHEMIST III			
SUB COST CENTER	Total Positions:	63	Vacants:	2	Filled Positions: 61
COST CENTER	Total Positions:	63	Vacants:	2	Filled Positions: 61
DEPARTMENT	Total Positions:	63	Vacants:	2	Filled Positions: 61
DIVISION	Total Positions:	1154	Vacants:	128	Filled Positions: 1026

DEPARTMENT	PCR #	POSITION TITLE
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LAW	LAW
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07110	71100	LAW
	7110001	GENERAL COUNSEL
	7110002	ASSOCIATE GENERAL COUNSEL
	7110003	ASSOCIATE GENERAL COUNSEL
	7110005	SR STAFF COUNSEL
	7110006	SR STAFF COUNSEL
	7110008	SR STAFF COUNSEL
	7110009	LEGAL ASSISTANT
	7110011	REGULATORY COMPLIANCE COORD
	7110012	SECRETARY I
	7110013	SECRETARY I
	7110014	SECRETARY I
	7110015	ADMINISTRATIVE COORDINATOR
	7110016	STAFF COUNSEL
	7110017	SR STAFF COUNSEL
	7110020	SR STAFF COUNSEL
	7110021	LEGAL ASSISTANT
	7110023	EXECUTIVE SECRETARY
	7110024	SR STAFF COUNSEL
	7110025	SR STAFF COUNSEL
	7110027	ASSOCIATE GENERAL COUNSEL
	7110028	SR STAFF COUNSEL
	7110029	SR STAFF COUNSEL
	7110030	LEGAL ASSISTANT
	7110031	SECRETARY I
	7110032	ADMINISTRATIVE SYSTEMS COORD
	7110034	SR STAFF COUNSEL

SUB COST CENTER	Total Positions:	26	Vacants:	3	Filled Positions:	23
COST CENTER	Total Positions:	26	Vacants:	3	Filled Positions:	23
DEPARTMENT	Total Positions:	26	Vacants:	3	Filled Positions:	23
DIVISION	Total Positions:	26	Vacants:	3	Filled Positions:	23

DEPARTMENT	PCR #	POSITION TITLE
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DIVISION DIRECTOR	SUPPORT SERVS
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08150	81500	DIVISION DIRECTOR			
	8150001	MANAGING DIRECTOR			
	8150003	TECH ASST/SUPPORT SERVICES			
	8150004	MGR, SECURITY & EMERG PLANNING			
	8150005	EXECUTIVE SECRETARY			
	8150006	SECURITY ADMINISTRATOR			
SUB COST CENTER	Total Positions:	5	Vacants:	0	Filled Positions: 5
COST CENTER	Total Positions:	5	Vacants:	0	Filled Positions: 5
DEPARTMENT	Total Positions:	5	Vacants:	0	Filled Positions: 5

INTERNAL AUDIT	SUPPORT SERVS
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08210	82100	INTERNAL AUDIT			
	8210001	ACTING DIRECTOR INTERNAL AUDIT			
	8210003	SUPERVISORY AUDITOR			
	8210005	SR STAFF AUDITOR			
	8210006	ADMINSTRATIVE COORDINATOR			
	8210007	ACTING ASST DIR AUDIT & CNTRCT			
	8210008	SR STAFF AUDITOR			
	8210013	SR SUPERVISORY AUDITOR, CONTRA			
	8210014	SR STAFF AUDITOR, CONTRACT AUD			
	8210015	SR STAFF AUDITOR			
SUB COST CENTER	Total Positions:	9	Vacants:	1	Filled Positions: 8
COST CENTER	Total Positions:	9	Vacants:	1	Filled Positions: 8
DEPARTMENT	Total Positions:	9	Vacants:	1	Filled Positions: 8

PUBLIC AFFAIRS	SUPPORT SERVS
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08250	82500	PUBLIC AFFAIRS			
	8250001	DEPUTY DIRECTOR, COMM RELATION			
	8250002	SENIOR COMM RELATIONS COORD			
	8250003	COMMUNITY RELATION COORDINATOR			
	8250004	SENIOR COMM RELATIONS COORD			
	8250006	COMMUNICATIONS MANAGER			
	8250007	MANAGER, PUBLIC ACCESS			
	8250013	SECRETARY II			
	8250016	PROGRAM MANAGER GRAPHIC DESIGN			
	8250017	PROJECT COORDINATOR			
	8250020	DIRECTOR, PUBLIC AFFAIRS			
	8250022	INTERGOVERNMENTAL AFFAIR MNGR			
	8250023	ADMINISTRATIVE SYSTEMS COORD			
	8250024	SECRETARY I			
	8250026	DEP DIR, COMMUNICATIONS			
	8250030	GRAPHICS TECHNICIAN			
	8250031	PUBLIC ACCESS COORDINATOR			
	8250032	PUBLIC ACCESS COORDINATOR			
	8250035	FILE CLERK			
SUB COST CENTER	Total Positions:	18	Vacants:	1	Filled Positions: 17
COST CENTER	Total Positions:	18	Vacants:	1	Filled Positions: 17

DEPARTMENT	PCR #	POSITION TITLE			
08260	82600	EDUCATION PROGRAM			
	8260001	PROJECT MANAGER, SCHOOL ED			
	8260002	ADMINISTRATIVE COORDINATOR			
SUB COST CENTER	Total Positions:	2	Vacants:	0	Filled Positions: 2
COST CENTER	Total Positions:	2	Vacants:	0	Filled Positions: 2
DEPARTMENT	Total Positions:	20	Vacants:	1	Filled Positions: 19

AFFIRM ACTION	SUPPORT SERVS
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08410	84100	AFFIRMATIVE ACTION			
	8410001	SPECIAL ASST FOR AFFIR ACTION			
	8410002	MBE/WBE PROGRAM MANAGER			
	8410003	ASSOC SPECIAL ASST FOR AFFIR			
	8410004	COMPLIANCE MONITOR			
	8410005	WORKFORCE DEV. COORDINATOR			
	8410006	EXECUTIVE SECRETARY			
	8410008	PROGRAM MNGR, MONITOR & COMPLN			
	8410009	COMPLIANCE MONITOR			
	8410010	JR COMPLIANCE MONITOR			
	8410011	SR COMPLIANCE MONITOR			
SUB COST CENTER	Total Positions:	10	Vacants:	1	Filled Positions: 9
COST CENTER	Total Positions:	10	Vacants:	1	Filled Positions: 9
DEPARTMENT	Total Positions:	10	Vacants:	1	Filled Positions: 9

HUMAN RESOURCES	SUPPORT SERVS
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08510	85100	EMPL/COMP/BEN			
	8510001	DIRECTOR, HUMAN RESOURCES			
	8510002	EXECUTIVE SECRETARY			
	8510003	EMPLOYMENT MANAGER			
	8510005	SR RECRUITER			
	8510006	SR BENEFITS & HRIS ANALYST			
	8510008	SECRETARY I			
	8510010	SR COMP & BENEFITS ANALYST			
	8510011	MANAGER, COMPENSATION			
	8510012	MANAGER, BENEFITS AND HRIS			
	8510014	EMPLOYEE BENEFITS ASSISTANT			
	8510015	ADMINISTRATIVE MANAGER			
	8510016	SR COMP & BENEFITS ANALYST			
SUB COST CENTER	Total Positions:	12	Vacants:	2	Filled Positions: 10
COST CENTER	Total Positions:	12	Vacants:	2	Filled Positions: 10

08520	85200	LABOR RELATIONS			
	8520001	MANAGER, LABOR RELATIONS			
	8520002	ASST MANAGER, LABOR RELATIONS			
	8520003	ASST MANAGER FOR WORKERS COMP			
	8520004	ADMINISTRATIVE SECRETARY			
	8520005	ASST MANAGER, LABOR RELATIONS			
	8520007	PROGRAM MANAGER, SECURITY/SAFE			
	8520008	PROGRAM MANAGER, OSHU			
SUB COST CENTER	Total Positions:	7	Vacants:	1	Filled Positions: 6

DEPARTMENT	PCR #	POSITION TITLE					
COST CENTER		Total Positions:	7	Vacants:	1	Filled Positions:	6
08530	85300	TRAINING					
	8530001	MANAGER, TECHNICAL TRAINING					
	8530003	TRAINING SPECIALIST					
	8530006	MANAGER, HR DEVELOPMENT					
	8530007	PROGRAM MANAGER, TRAINING					
	8530009	TRAINING SPECIALIST					
SUB COST CENTER		Total Positions:	5	Vacants:	0	Filled Positions:	5
COST CENTER		Total Positions:	5	Vacants:	0	Filled Positions:	5
DEPARTMENT		Total Positions:	24	Vacants:	3	Filled Positions:	21

MIS	SUPPORT SERVS
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08610	86100	MIS
	8610001	DIRECTOR, MIS
	8610002	INFORMATION CENTER MANAGER
	8610003	ADMINISTRATIVE COORDINATOR
	8610004	SR SYSTEMS ANALYST
	8610005	PROGRAM MGR, TECH SERVICES
	8610006	TECHNICAL SUPPORT ANALYST
	8610007	DATABASE ANALYST PROGRAMMER
	8610008	DATABASE ANALYST PROGRAMMER
	8610009	SR SYSTEMS ANALYST
	8610010	DATABASE ANALYST PROGRAMMER
	8610011	SR SYSTEMS ANALYST
	8610012	IS CUSTOM SUPPORT MANAGER
	8610013	USER HELPLINE SUPERVISOR
	8610015	SR SYSTEMS ANALYST
	8610016	ACTING DATABASE/ANALYST PROG
	8610017	SECRETARY I
	8610019	COMPUTER OPERATOR II
	8610020	TECHNICAL OPERATIONS MANAGER
	8610024	NETWORK AND SYSTEMS MANAGER
	8610025	IS DEVELOPMENT SPECIALIST
	8610027	HARDWARE MAINTENANCE SPECIAL
	8610028	IS DEVELOPMENT SPECIALIST
	8610030	DATABASE ANALYST PROGRAMMER
	8610031	SR CEB ANALYST
	8610032	SECURITY MONITOR
	8610033	DATA RESOURCE MANAGER
	8610034	PROGRAMMER ANALYST II
	8610035	IS DEVELOPMENT SPECIALIST
	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

DEPARTMENT	PCR #	POSITION TITLE
	8610049	DATABASE ANALYST
	8610050	DATABASE ANALYST PROGRAMMER
	8610051	TECHNICAL SUPPORT ANALYST
	8610052	FILE CLERK
	8610053	PROGRAM MANAGER, MIS
	8610054	SR SYSTEMS ANALYST
	8610055	DATABASE ANALYST PROGRAMMER
	8610056	SR OPERATOR/E-MAIL ADMINISTRAT
	8610057	COMPUTER OPERATOR I
	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
	8610069	DATABASE ANALYST PROGRAMMER
	8610071	INFORMATION SPECIALIST
	8610072	LIBRARIAN/RECORDS MGR
	8610073	LIBRARY SUPERVISOR
	8610074	INFORMATION SPECIALIST
	8610075	SR SYSTEMS ANALYST
	8610076	MIS COORDINATOR
	8610077	SR SYSTEMS MANAGER
	8610078	TECHNICAL SUPPORT ANALYST
	8610080	DATABASE ANALYST PROGRAMMER
	8610081	SR SYSTEMS ANALYST
	8610082	APPLICATION SUPPORT SUPERVISOR
	8610083	DATABASE ANALYST/PROGRAMMER
	8610084	SR SYSTEMS ANALYST
	8610085	SR SYSTEMS MANAGER
	8610086	IS PROJECT LEADER
SUB COST CENTER	Total Positions: 72	Vacants: 0 Filled Positions: 72
COST CENTER	Total Positions: 72	Vacants: 0 Filled Positions: 72
DEPARTMENT	Total Positions: 72	Vacants: 0 Filled Positions: 72

CENTRAL SUPPORT		SUPPORT SERVS
08310	83100	VECHICLE MGMT & MAINT
	8310001	MANAGER, VEH MAINT/DATA SUPPRT
	8310002	MOTOR EQUIPMENT REPAIR FOREMAN
	8310003	MOTOR EQUIPMENT REPAIR FOREMAN
	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
	8310011	MOTOR EQUIPMENT REPAIRMAN
	8310012	ADMINISTRATIVE SYSTEMS COORD
	8310013	AUTOMOTIVE REPAIRMAN ASSIST
	8310014	MOTOR EQUIPMENT REPAIRMAN

DEPARTMENT	PCR #	POSITION TITLE			
	8310016	MOTOR EQUIPMENT REPAIRMAN			
SUB COST CENTER		Total Positions: 15	Vacants: 4	Filled Positions: 11	
COST CENTER		Total Positions: 15	Vacants: 4	Filled Positions: 11	
08320	83200	FORE RIVER STAGING AREA			
	8320007	SR FIRE & SAFETY WARDEN			
	8320011	FIRE & SAFETY WARDEN			
	8320012	SENIOR FIRE & SAFETY WARDEN			
	8320014	MAINTENANCE/HOUSEKEEPER			
	8320016	SENIOR FIRE & SAFETY WARDEN			
	8320021	SKILLED LABORER			
	8320025	ACTING SITE OPS SUPERVISOR			
SUB COST CENTER		Total Positions: 7	Vacants: 3	Filled Positions: 4	
COST CENTER		Total Positions: 7	Vacants: 3	Filled Positions: 4	
08730	87300	FACILITIES MANAGEMENT(CNY			
	8730001	MANAGER, FACILITY & ADMIN			
	8730003	ACTING FACILITY COORDINATOR			
	8730004	EXECUTIVE SECRETARY			
	8730006	SKILLED LABORER			
	8730010	ASSISTANT TO DIRECTOR, CENTRAL			
	8730011	SR FINANCIAL ANALYST			
SUB COST CENTER		Total Positions: 6	Vacants: 2	Filled Positions: 4	
08730	87350	FACILITIES MANAGEMENT(NMF			
	8735002	SKILLED LABORER			
	8735005	SKILLED LABORER			
SUB COST CENTER		Total Positions: 2	Vacants: 0	Filled Positions: 2	
COST CENTER		Total Positions: 8	Vacants: 2	Filled Positions: 6	
08740	87400	ADMIN SUPPORT SERVICES			
	8740004	MESSENGER/COURIER			
	8740005	ACTING INVENTORY CNTRL SPEC			
	8740007	ADMIN SERVICES MANAGER			
	8740010	SUPERVISOR, TRANSPORT/COURIER			
	8740011	MESSENGER/COURIER			
	8740012	DISPATCHER/COURIER			
	8740015	SECRETARY II - SHARE			
	8740016	SECRETARY II			
	8740017	SECRETARY II - SHARE			
	8740017	SECRETARY II - SHARE			
	8740018	DEPARTMENT ADMINISTRATOR			
	8740019	SECRETARY I			
	8740020	SECRETARY I			
	8740023	MESSENGER/COURIER			
SUB COST CENTER		Total Positions: 13	Vacants: 4	Filled Positions: 9	
COST CENTER		Total Positions: 13	Vacants: 4	Filled Positions: 9	
DEPARTMENT		Total Positions: 43	Vacants: 13	Filled Positions: 30	

PROCUREMENT	SUPPORT SERVS
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08810 88100 **PROCUREMENT**

DEPARTMENT	PCR #	POSITION TITLE			
	8810001	DIRECTOR, PROCUREMENT			
	8810002	ACTING 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			
	8810022	ASST CONTRACTS MANAGER			
	8810024	DEPUTY CONTRACTS MANAGER			
	8810025	DEPUTY CONTRACTS MANAGER			
	8810026	CONTRACTS COORDINATION MANAGER			
	8810028	ASST CONTRACTS MANAGER			
	8810031	DEPUTY CONTRACTS MANAGER			
	8810032	SECRETARY I			
	8810033	DOCUMENT COORDINATOR			
	8810034	DATA & INFO COORDINATOR			
	8810035	ASST CONTRACTS MANAGER			
	8810039	ASST CONTRACTS MANAGER			
	8810040	DEPUTY CONTRACTS MANAGER			
	8810043	SECRETARY I			
	8810044	ASST CONTRACTS MANAGER			
SUB COST CENTER	Total Positions:	27	Vacants:	1	Filled Positions: 26
COST CENTER	Total Positions:	27	Vacants:	1	Filled Positions: 26
08820	88200	MATERIALS MANAGEMENT			
	8820001	ACTING MATERIALS MANAGER			
	8820002	WAREHOUSE INVENTORY COORD.			
	8820003	SECRETARY I			
	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			
	8820014	WAREHOUSE MATERIALS HANDLER			
	8820015	INVENTORY CONTROL SUPERVISOR			
	8820016	WAREHOUSE MATERIALS HANDLER			
	8820017	WAREHOUSE MATERIALS HANDLER			
	8820018	SHIPPING/RECEIVING SUPERVISOR			
	8820019	INVENTORY CONTROL SPECIALIST			
	8820020	INVENTORY CONTROL SPECIALIST			
	8820023	MGR, ANALYSIS & TECH SUPPORT			
	8820025	WAREHOUSE MATERIALS HANDLER			
	8820026	SHIPPING/RECEIVING SUPERVISOR			
	8820027	WAREHOUSE MANAGER			
	8820028	WAREHOUSE MATERIALS HANDLER			
	8820029	WAREHOUSE MATERIALS HANDLER			

DEPARTMENT	PCR #	POSITION TITLE			
	8820030	INVENTORY CONTROL SPECIALIST			
	8820031	WAREHOUSE MATERIALS HANDLER			
	8820032	PRINCIPAL CLERK			
	8820033	INVENTORY CONTROL SPECIALIST			
SUB COST CENTER	Total Positions:	28	Vacants:	3	Filled Positions: 25
COST CENTER	Total Positions:	28	Vacants:	3	Filled Positions: 25
DEPARTMENT	Total Positions:	55	Vacants:	4	Filled Positions: 51

REAL PROP	SUPPORT SERVS
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08850	88500	REAL PROP & ENV MGMT			
	8850001	REAL PROPERTY PROJECT MANAGER			
	8850002	DIRECTOR, REAL PROPERTY & ENV			
	8850003	ENVIRONMENTAL MANAGER			
	8850004	PROGRAM MANAGER, ENVIRONMENTAL			
	8850005	PROGRAM MANAGER, PERMITS			
	8850006	PROJECT MANAGER			
	8850007	PROGRAM MANAGER/REG COMPLIANCE			
	8850008	ADMINISTRATIVE SYSTEMS COORD			
	8850009	SECRETARY II			
SUB COST CENTER	Total Positions:	9	Vacants:	1	Filled Positions: 8
COST CENTER	Total Positions:	9	Vacants:	1	Filled Positions: 8
DEPARTMENT	Total Positions:	9	Vacants:	1	Filled Positions: 8
DIVISION	Total Positions:	247	Vacants:	24	Filled Positions: 223
AUTHORITY	Total Positions:	1490	Vacants:	165	Filled Positions: 1325

APPENDIX D

BUDGET PROCESS AND TIMETABLE

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

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

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

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

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

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

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

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

APPENDIX E

MASSACHUSETTS WATER RESOURCES AUTHORITY BUDGET AND ASSESSMENT POLICIES AND PROCEDURES

(Revised September 2000)

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

ASSESSMENT POLICIES AND PROCEDURES

Basis of MWRA Assessments

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

Costs Recovered

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

Sources of Current Revenue

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

Coverage Requirements

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

Budget Surpluses

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

Budgeting and Assessment Objectives

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

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

Allocation of Costs and Revenue to Systems

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

Allocation of Rate Revenue Requirements to User Assessments

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

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

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

Schedule and Procedure for Adoption of Assessments

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

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

Review and Dispute Resolution Process

MWRA annually determines preliminary and final assessments for water and sewer services in February and June prior to the beginning of the new fiscal year. These assessments must satisfy the requirement that MWRA fully recover its water and sewer costs by apportioning total costs as assessments among its wholesale water and sewer customers pursuant to its water and sewer assessment 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 assessments, customers are strongly encouraged to review this data closely upon receipt and to 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, the community may submit a written objection to the Executive Director with a copy to the Finance Division. 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.

All objections 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 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.

Water and Sewer Assessment Payment Schedule

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

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

Interest Charge on Delinquent Payments

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

Retail Rates

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

MWRA encourages its customers to establish retail rates which:

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

CAPITALIZATION POLICY

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

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

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

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

RESERVES FUNDED FROM CURRENT REVENUE

Operating Reserve

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

Insurance Reserve

The insurance reserve has been established to provide funds to restore, replace, or reconstruct lost or damaged property or facilities of the water or sewer system. It provides funds reserved against risks for which MWRA does not currently maintain insurance. This self-insurance reduces the cost MWRA might otherwise incur for purchased insurance policies. MWRA periodically evaluates the level of its insurance reserve and every three years a consulting engineer or an insurance consultant recommends an appropriate insurance reserve fund requirement. During FY2000, based on the recommendation of its insurance consultant, MWRA reduced the size of the insurance reserve to \$18 million from \$20 million.

Renewal and Replacement Reserve

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

CURRENT EXPENSE BUDGET MANAGEMENT POLICIES AND PROCEDURES

A. Budget Allocations

Budget Contingency Holdbacks

After the Board of Directors adopts the Current Expense Budget each year, the Executive Director, the Chief Operating Officer, or a division director may reserve between two percent and four percent of a division's approved budget as a budget contingency to be expended only upon approval of the Executive Director. The contingency holdback may be from any line item or cost center or combinations thereof, and any amount reserved as a budget contingency is not 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 Finance Division staff, 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 Finance Division prepares MWRA financial statements and 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 Finance Division. 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. Finance Division staff review 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 Finance Division in accordance with the schedule promulgated at the beginning of the fiscal year. Each month Finance Division staff prepare a summary of budget variances for inclusion in the Management Indicators Report (Yellow Notebook). Staff also prepare 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, Finance Division staff report 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 or reallocation from any expense line item (subsidiary account) of 15 percent or more if that line item is at least 2.5 percent of total current expenses.
4. An addition or deletion of a specific new program or initiative, the cost of which is greater than one percent of total current expenses, unless the addition or deletion has been specifically recommended by the Advisory Board.

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

CAPITAL BUDGET MANAGEMENT POLICIES AND PROCEDURES

Capital Budget Spending Cap

Each year in June, as part of approval of the final Capital Improvement Program, the Board of Directors establishes a ten-year capital budget spending cap and annual caps for the first three years of the budget period. In each succeeding year a new ten-year cap is calculated by removing the just completed year, adding any unspent funds from the just completed year to the next year, and adding a new tenth year in the amount of \$100 million adjusted for inflation.

Capital Budget Contingency

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

Expenditures in Excess of the Spending Cap

In the event of unanticipated spending requirements, the Executive Director may recommend to the Board of Directors that expenditures exceed the CIP spending cap in a single year. In such an event, a proposed plan for the current year and for reductions to budgets for subsequent years to keep spending within the ten-year cap will be presented to the Board. Any proposed change will be submitted to the MWRA Advisory Board for review and comment for a period of 30 days. At the end of the 30-day period, the Board of Directors may take action on the proposed plan.

Capital Budget Monitoring and Reporting

The progress of capital projects is continually monitored for purposes of managerial control and decision-making and for financial planning and management. Each division is responsible for monitoring and reporting on the projects for which it is responsible, including explanations for both schedule and expenditure variances. Finance Division staff monitor revenue variances and prepare monthly capital expenditure variance reports.

Reports on capital budget performance and variances are included in the monthly Management Indicators Report (Yellow Notebook) and the quarterly Board of Directors Report on Key Indicators of MWRA Performance (Orange Notebook). Two capital budget performance reports are provided to the Board of Directors, one for the first six months of the year and one at year-end. The reports include summaries and analyses of planned project schedules, revenues, and expenditures compared to actual performance. A schedule variance occurs when actual project schedules are three or more months behind or ahead of planned timetables.

ATTACHMENT F

MWRA Planning Estimates FY2004 to FY2013										
	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013
EXPENSES										
Direct Expenses	\$173,911	\$179,931	\$186,723	\$189,672	\$191,880	\$197,857	\$202,711	\$207,837	\$212,971	\$218,295
Indirect Expenses	31,369	32,163	34,596	41,118	36,264	37,256	38,265	41,485	44,685	43,821
Capital Financing	308,180	320,408	341,078	360,059	393,595	411,215	459,454	475,849	494,139	513,273
Debt Service Assistance	0	0	0	0	0	0	0	0	0	0
Total Expenses	\$513,460	\$532,502	\$562,397	\$590,849	\$621,738	\$646,328	\$700,430	\$725,170	\$751,794	\$775,388
REVENUE & INCOME										
Non-Rate Revenue & Income										
Interest Income/Other Charges	\$44,462	\$50,357	\$45,128	\$44,653	\$46,564	\$47,593	\$49,271	\$50,332	\$50,454	\$51,081
Non-Recurring Revenue	33,170	20,337	27,644	27,046	0	0	0	0	0	0
Total Non-Rate Revenue	\$77,632	\$70,693	\$72,773	\$71,699	\$46,564	\$47,593	\$49,271	\$50,332	50,454	51,081
Rate Revenue	\$435,828	\$461,809	\$489,624	\$519,150	\$575,174	\$598,735	\$651,159	\$674,839	\$701,340	\$724,308
Rate Revenue Increase	3.9%	6.0%	6.0%	6.0%	10.8%	4.1%	8.8%	3.6%	3.9%	3.3%
Estimated Annual Household Charge **										
Charge based on DEP data (weighted)	\$548	\$578	\$610	\$645	\$700	\$731	\$784	\$816	\$852	\$915
Charge based on 90,000 gal. (weighted)	\$809	\$853	\$901	\$951	\$1,032	\$1,078	\$1,157	\$1,204	\$1,257	\$1,306
WASTEWATER										
EXPENSES										
Direct Expenses	\$127,742	\$127,564	\$129,305	\$130,078	\$131,506	\$136,039	\$139,256	\$142,309	\$145,341	\$149,437
Indirect Expenses	9,074	8,760	8,634	8,511	8,391	7,822	7,365	7,209	7,614	8,506
Capital Financing	227,220	232,530	246,532	259,381	274,071	284,313	317,951	318,914	341,484	357,957
Debt Service Assistance	0	0	0	0	0	0	0	0	0	0
Total Expenses	\$364,036	\$368,854	\$384,471	\$397,970	\$413,968	\$428,174	\$464,572	\$468,432	\$494,439	\$515,900
REVENUE & INCOME										
Non-Rate Revenue & Income										
Interest Income/Other Charges	\$27,443	\$30,686	\$27,080	\$26,099	\$26,413	\$26,586	\$27,098	\$27,216	\$27,397	\$27,767
Non-Recurring Revenue	24,546	16,295	24,338	22,947	0	0	0	0	0	0
Total Non-Rate Revenue	\$51,989	\$46,981	\$51,418	\$49,046	\$26,413	\$26,586	\$27,098	\$27,216	27,397	27,767
Rate Revenue	\$312,048	\$321,873	\$333,053	\$348,924	\$387,555	\$401,588	\$437,474	\$441,216	\$467,042	\$488,134
Rate Revenue Increase	2.6%	3.1%	3.5%	4.8%	11.1%	3.6%	8.9%	0.9%	5.9%	4.5%
Estimated Annual Household Sewer Charge **										
Charge based on DEP data (weighted)	\$335	\$347	\$361	\$378	\$414	\$430	\$464	\$473	\$500	\$540
Charge based on 90,000 gal. (weighted)	\$495	\$513	\$533	\$558	\$611	\$635	\$685	\$698	\$738	\$772
WATER										
EXPENSES										
Direct Expenses	\$46,169	\$52,367	\$57,417	\$59,594	\$60,374	\$61,818	\$63,455	\$65,528	\$67,630	\$68,858
Indirect Expenses	22,295	23,402	25,962	32,607	27,872	29,434	30,900	34,276	37,072	35,315
Capital Financing	80,960	87,878	94,546	100,678	119,524	126,902	141,503	156,935	152,654	155,316
Debt Service Assistance	0	0	0	0	0	0	0	0	0	0
Total Expenses	\$149,424	\$163,648	\$177,926	\$192,879	\$207,770	\$218,154	\$235,858	\$256,738	\$257,356	\$259,488
REVENUE & INCOME										
Non-Rate Revenue & Income										
Interest Income/Other Charges	\$17,019	\$19,671	\$18,048	\$18,554	\$20,151	\$21,008	\$22,173	\$23,116	\$23,057	\$23,314
Non-Recurring Revenue	8,624	4,041	3,306	4,099	0	0	0	0	0	0
Total Non-Rate Revenue	\$25,643	\$23,712	\$21,355	\$22,653	\$20,151	\$21,008	\$22,173	\$23,116	\$23,057	\$23,314
Rate Revenue	\$123,781	\$139,936	\$156,571	\$170,226	\$187,619	\$197,147	\$213,685	\$233,622	\$234,299	\$236,174
Rate Revenue Increase	7.3%	13.1%	11.9%	8.7%	10.2%	5.1%	8.4%	9.3%	0.3%	0.8%
Estimated Annual Household Water Charge **										
Charge based on DEP data (weighted)	\$213	\$231	\$249	\$266	\$286	\$300	\$320	\$343	\$352	\$374
Charge based on 90,000 gal. (weighted)	\$314	\$341	\$368	\$393	\$422	\$443	\$472	\$506	\$519	\$535

** 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. For reference the unweighted 90,000 FY03 estimated household charge was \$827 for the "core" communities. The annual household charge based on DEP data for FY03 reflects actual residential consumption for calendar year 2001. Estimated household charges based on DEP data for FY04 to FY14 are based on average residential consumption of 61,000 gallons per year. The ratio of MWRA to local charge is assumed to be 38% local, 62% MWRA in FY03.

APPENDIX G

GLOSSARY OF FINANCIAL AND OPERATING TERMS

8M permit: Permission granted by MWRA to persons who wish to construct property improvements on land either adjoining or overlapping MWRA property interests. Permission may be conditioned on various operational and/or engineering concerns.

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

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

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

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

Aerobic: In the presence of oxygen.

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

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

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

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

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

BGD: Billion gallons per day.

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

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

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

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

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

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

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

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

CAC: Citizens' Advisory Committee.

CADD: Computer aided drafting and design.

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

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

CDF: Cosgrove Disinfection Facility

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Department: A sub-unit of an MWRA division.

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

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

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

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

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

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

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

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

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

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

Effluent: Treated wastewater discharged from a treatment plant.

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

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

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

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

EOC: Emergency Operations Center

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

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

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

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

2) LT1ESWTR primarily extends the IESWTR to smaller systems

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

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

Expenditures: Payments for goods and services received.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MGD: Million gallons per day.

MIS: Management Information Systems

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Seeding: The initial filling of sludge into digesters.

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

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

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

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

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

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

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

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

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

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

Suspended Solids: The particulate matter contained in wastewater.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

WOCC: Western Operations Control Center.