



Executive Office  
Budget

**EXECUTIVE OFFICE**

FY12 Final Current Expense Budget EXECUTIVE DIVISION						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 395,729	\$ 412,602	\$ 422,374	\$ 405,923	\$ (16,451)	-3.9%
OVERTIME	-	-	-	-	-	-
ONGOING MAINTENANCE	-	-	-	-	-	-
TRAINING & MEETINGS	-	-	-	700	700	-
PROFESSIONAL SERVICES	165,949	160,031	154,323	154,932	609	0.4%
OTHER MATERIALS	3,474	4,575	4,231	3,585	(646)	-15.3%
OTHER SERVICES	452,881	457,955	454,552	439,134	(15,418)	-3.4%
<b>TOTAL</b>	<b>\$ 1,018,033</b>	<b>\$ 1,035,163</b>	<b>\$ 1,035,480</b>	<b>\$ 1,004,274</b>	<b>\$ (31,206)</b>	<b>-3.0%</b>

FY12 Final Current Expense Budget EXECUTIVE DIVISION by Department						
DEPARTMENT	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
EXECUTIVE OFFICE / BOARD OF DIRECTORS	\$ 402,381	\$ 420,339	\$ 430,528	\$ 413,621	\$ (16,907)	-3.9%
ADVISORY BOARD / OTHER COMMITTEES	615,652	614,823	604,952	590,653	(14,299)	-2.4%
<b>TOTAL</b>	<b>\$ 1,018,033</b>	<b>\$ 1,035,162</b>	<b>\$ 1,035,480</b>	<b>\$ 1,004,274</b>	<b>\$ (31,206)</b>	<b>-3.0%</b>

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

The Executive Office has direct oversight of the Office of Emergency Preparedness, Internal Audit, Public Affairs, and the Affirmative Action and Compliance Unit (AACU) Department.

**FY12 Goals:**

- 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.
- Provide overall management of the agency and ensure adherence to all applicable policies and regulations.
- Continue to aggressively pursue renewable and sustainable energy resources to reduce the environmental impacts of daily operations, increase energy efficiencies and reduce overall operating costs.
- Garner support from key constituents for MWRA programs.

The Executive Office budget supports the Executive Director's Office (which includes the Board of Directors cost center), the MWRA Advisory Board, and Advisory Committees cost centers. 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 FY12 Final Budget.

**Budget Highlights:**

- Total FY12 Final Budget of \$1.0 million, a decrease of \$31,000 or 3.0% from FY11 Actual spending.
- \$406,000 for **Wages and Salaries**, a decrease of \$16,000 or 3.9% as compared to FY11 Actual spending. The final budget includes funding for four positions.
- \$434,000 or 43.2% of the Executive Office final budget is for the MWRA Advisory Board staff. The budget supports its operating expenses, including wages and salaries, space rental, and general administrative office materials and supplies.
- \$155,000 or 15.4% of the Executive Office final budget is for **Professional Services** to fund the Water Supply Citizens’ Advisory Committee and the Wastewater Advisory Committee.

**OFFICE OF EMERGENCY PREPAREDNESS**

FY12 Final Current Expense Budget OFFICE OF EMERGENCY PREPAREDNESS						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 335,281	\$ 401,615	\$ 476,285	\$ 441,730	\$ (34,555)	-7.3%
ONGOING MAINTENANCE	425,531	412,907	223,758	383,883	160,125	71.6%
TRAINING & MEETINGS	-	1,989	-	-	-	-
PROFESSIONAL SERVICES	1,838,392	1,526,557	1,473,337	1,605,947	132,610	9.0%
OTHER MATERIALS	39,583	64,892	42,642	57,549	14,907	35.0%
OTHER SERVICES	9,305	13,477	20,563	22,020	1,457	7.1%
<b>TOTAL</b>	<b>\$ 2,648,092</b>	<b>\$ 2,421,437</b>	<b>\$ 2,236,585</b>	<b>\$ 2,511,129</b>	<b>\$ 274,544</b>	<b>12.3%</b>

The **Office of Emergency Preparedness (OEP)** was created in November 2005 to consolidate Authority-wide security and emergency response functions. It is responsible for oversight of the MWRA’s security and emergency response plans, policies and procedures; implementation and training for the Emergency Response Plan; and management, training, and outfitting of the Emergency Service Unit, which will respond to any intentional or accidental contamination of the water supply.

The Director of Emergency Preparedness reports directly to the Executive Director with a matrix reporting relationship to the Chief Operating Officer and the Director of Administration and Finance. In addition, the Safety/Security Manager for Deer Island will continue to report to the Deer Island Director with a matrix reporting relationship to the Director of Emergency Preparedness to include this major facility in all Authority-wide emergency-planning efforts.

**FY11 Accomplishments:**

- Purchased and outfitted a new 18 foot boat for use as a boom deployment tool at open reservoirs.
- Outfitted a surplus Wastewater TV truck for use as a spill response truck for MWRA water and wastewater facilities.
- Conducted three training classes for ESU, FOD and TRAC personnel to receive Coast Guard/EPA OPA-90 certification for spill response.

**FY12 Goals:**

- Develop and implement policies and programs to provide security, critical infrastructure protection, and emergency planning for the MWRA’s water and wastewater systems.
- Equip, train, and command the Emergency Service Unit (ESU).
- Develop and exercise emergency plans and procedures.
- Manage and direct contract security guard and system maintenance contracts.

### **FY12 Initiatives:**

- Continue to enhance Emergency Response Plans for all Water and Wastewater facilities.
- Begin the procurement process for the new security services contract.
- Increase the Emergency Service Unit (ESU) and internal staff's capabilities to respond to spills inside Water and Wastewater facilities by outfitting a spill control truck, expanding the Metro Boom Deployment teams, and offering the Environmental Protection Agency (EPA)/Coast Guard OPA-90 training and certification program.
- Complete work on changing the MWRA radio system to new frequencies as part of the national frequency reallocation program.
- Continue the process of ensuring that new construction and rehabilitation of facilities include an integrated security and surveillance system improvement component. This will affect the Gillis Pump Station, the new Stoneham tank, and the Headworks Upgrade projects.

### **Budget Highlights:**

- Total FY12 Final Budget of \$2.5 million, an increase of \$275,000 or 12.3% from FY11 Actual spending.
- \$442,000 for **Wages and Salaries**, a decrease of \$35,000 or 7.3% from FY11 Actual spending. The budget includes funding for five positions.
- \$384,000 for **Ongoing Maintenance**, an increase of \$160,000 or 71.6% from FY11 Actual spending, mainly due to lower than projected use of security systems maintenance service contracts in FY11. The final budget includes funding of \$259,000 to cover the MWRA-wide security systems preventative maintenance and repair service, \$104,000 for MWRA-wide Security systems maintenance materials and equipment, including cameras, intrusion detection, card readers, and \$22,000 for the Intrusion alarm annual and semi-annual monitoring services contracts.
- \$1.6 million for **Professional Services**, an increase of \$133,000 or 9.0% from the FY11 Actual spending, primarily due to underspending in professional services security line item in FY11. The FY12 Final Budget includes \$524,000 for security services contract for the Chelsea facility, \$591,000 for DITP facility, \$334,000 for the Carroll Water Treatment Plant, and \$28,000 for the CNY facility plus shared costs of \$111,000.
- \$58,000 for **Other Materials**, an increase of \$15,000 or 35.0% from FY11 Actual spending, primarily due to underspending in health and safety materials in FY11. The final budget includes a level-funding of \$27,000 for Health and Safety equipment needs and \$25,000 for the annual operation and maintenance of equipment assigned to the Mobile Emergency Laboratory.
- \$22,000 for **Other Services**, an increase of \$1,500 or 7.1% from FY11 Actual spending. The final budget includes \$20,000 for mandatory monthly testing and inspection of Self-Contained Breathing Apparatus (SCBA).

**PLANNING AND COORDINATION DEPARTMENT**

FY12 Final Current Expense Budget PLANNING AND COORDINATION						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 1,997,711	\$ 1,967,082	\$ 1,786,851	\$ 1,808,067	\$ 21,216	1.2%
OVERTIME	-	211	18	-	(18)	-100.0%
FRINGE BENEFITS	-	-	-	-	-	-
TRAINING & MEETINGS	11,046	4,841	1,478	6,000	4,522	306.0%
PROFESSIONAL SERVICES	44,790	1,975	1,800	3,100	1,300	72.2%
OTHER MATERIALS	139,285	152,250	147,660	155,925	8,265	5.6%
OTHER SERVICES	181,344	77,336	94,793	99,977	5,184	5.5%
<b>TOTAL</b>	<b>\$ 2,374,176</b>	<b>\$ 2,203,695</b>	<b>\$ 2,032,600</b>	<b>\$ 2,073,069</b>	<b>\$ 40,469</b>	<b>2.0%</b>

The **Planning and Coordination Department** provides regulatory, public policy and public health advocacy for MWRA’s drinking water and wastewater programs. It provides decision support on planning, policy and operations matters, using a range of technical and analytical tools. Staff administers financial assistance programs to improve the infrastructure of member communities and to promote water conservation. The Department integrates staff efforts and coordinates MWRA activities related to system and capital planning, infrastructure renewal, and watershed management (in conjunction with the Commonwealth’s Department of Conservation and Recreation, (DCR); strategic business planning; and industry research. The following functions comprise the Department’s primary responsibilities:

**Mapping, Modeling, and Data Analysis** - Technical staff develops and maintains the Geographic Information Systems (GIS) for the water and wastewater systems, including integration of field and engineering records into GIS for access by planning, engineering, and operations staff. Provides demand analysis and forecasting of water and wastewater flows for master planning and system operations; model reservoir operations, performs drought forecasting and planning; evaluates system expansion requests; and develops and maintains water and wastewater system models in support of master planning, system operations, and optimization.

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

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

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

financial and technical assistance, water pipeline rehabilitation financial assistance, water distribution systems technical assistance, water leak detection technical assistance, and water conservation programs.

**FY11 Accomplishments:**

- Completed the Loring Road hydroelectric project.
- Provided information and worked with communities expressing interest in joining the Authority.
- With Engineering and Operations staff, developed a concept design for a pumping station alternative to provide redundancy for the Cosgrove Tunnel, advanced the Metropolitan Area Redundancy Plan, and advanced the concept plan for Northern Intermediate High (NIH) redundancy through the completed MEPA review process.
- Distributed \$12.3 million (grants and loans) for local sewer rehabilitation projects under the I/I Local Financial Assistance Program and \$17.7 million (loans) for local water quality projects under the Local Pipeline and Water System Assistance Program.
- With MWRA Operations and DCR staff, moved the successful Quabbin Boat Program (developed in response to the discovery of zebra mussels in Laurel Lake) into a well received and successful regular operating program.
- Continued to assist local communities to advance water conservation education and water system leak detection and repair.
- Effectively communicated water quality information to customers and health officials through MWRA's website, e-mails, staff contact, and publication and distribution of the annual Consumer Confidence Report.
- In conjunction with Public Affairs, completed and distributed the Five Year Report.

**FY12 Goals:**

- With staff from Engineering and Operations, draft the next iteration of the MWRA Master Plan and MWRA Business Plan.
- Continue to advance other hydroelectric projects toward design, and seek appropriate agreements and certifications to maximize revenue for existing hydro facilities.
- Continue to implement MWRA's water system expansion strategy.
- With staff from Engineering and Operations, procure a consultant and begin work on the North System Hydraulic Optimization study.
- In conjunction with Engineering and Operations staff, continue to advance concept planning, design and environmental review for capital projects, including storage, treatment and pipeline projects and development of long-term transmission and system redundancy options.
- Effectively communicate water quality information to customers and health officials.
- Continue to implement the Local Pipeline and Water System Assistance Program (new \$210 million phase added in FY11) to provide interest-free loans for local water projects. Continue outreach assistance for water conservation and water system leak detection and repair programs. Continue implementation of the

Infiltration/Inflow (I/I) Local Financial Assistance Program to provide grants and interest-free loans for local I/I reduction and sewer system rehabilitation projects.

**Budget Highlights:**

- \$1.8 million is for **Wages and Salaries**, an increase of \$21,000 or 1.2% from FY11 Actual spending. The FY12 CEB includes funding for 22 positions.
- \$6,000 is for **Training and Meetings** to cover participation in training and conferences primarily focused on water quality regulations and geographic information systems (GIS).
- \$3,000 is for **Professional Services**, an increase of \$1,300 or 72.2% from FY11 Actual spending for assistance in improving the GIS user interface.
- \$156,000 is for **Other Materials**, an increase of \$8,300 or 5.6% from FY11 Actual spending mainly to fund the postage costs associated with the Consumer Confidence Report (CCR). The FY12 CEB includes \$128,500 for postage and mailing of the CCR, \$15,000 for water conservation kits, and \$10,000 for mapping supplies.
- \$100,000 is for **Other Services**, which includes \$76,000 for printing the CCR, \$10,000 for printing lead in tap water brochures, and \$10,000 for reprinting water conservation bill stuffers.

**AFFIRMATIVE ACTION and COMPLIANCE**

FY12 Final Current Expense Budget AFFIRMATIVE ACTION & COMPLIANCE UNIT						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 591,924	\$ 605,065	\$ 550,862	\$ 539,081	\$ (11,781)	-2.1%
OVERTIME	-	-	-	-	-	-
TRAINING & MEETINGS	180	0	2,420	2,000	(420)	-17.4%
OTHER MATERIALS	1,176	1,018	1,347	1,500	153	11.4%
OTHER SERVICES	397	387	308	632	324	105.2%
<b>TOTAL</b>	<b>\$ 593,677</b>	<b>\$ 606,470</b>	<b>\$ 554,937</b>	<b>\$ 543,213</b>	<b>\$ (11,724)</b>	<b>-2.1%</b>

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

**FY11 Accomplishments:**

- Provided management guidance in 27 selection committee interviews, sourced 79 outreach contacts, and referred 17 qualified candidates to Human Resources for underutilized positions.
- Conducted oversight of 77 construction and professional projects including 61 site visits, and 1 compliance audit to ensure contractor compliance with the MWRA's MBE/WBE Program.

**FY12 Goals:**

- 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 into its work force.
- Maintain internal audit and reporting systems adequate to monitor MWRA's accomplishments of goal attainment in identified underutilized job groups for female and minority representation.
- Communicate to managers and supervisors MWRA's commitment to its equal opportunity policies and affirmative action programs.
- Assist the Human Resources department in the coordination and oversight of all external/internal recruitment and selection activities including interviewing, hiring, transfers and promotions of protected class candidates.
- Provide for the equitable participation of minority and women-owned businesses in procurement opportunities and ensure that minorities and women are represented in the labor force on construction contracts, and coordinate with other public entities regarding state and federal requirements.
- Assist divisions and departments in the understanding and implementation of MBE/WBE program policies and practices and monitor and report on contractor compliance and expenditures.

**Budget Highlights:**

- Total FY12 Final Budget of \$543,000, a decrease of \$12,000 or 2.1%.
- \$539,000 is for **Wages and Salaries** a decrease of \$12,000 or 2.1% from FY11 Actual spending, primarily due to the elimination of a vacant position. The final budget includes funding for seven positions.

## INTERNAL AUDIT

FY12 Final Current Expense Budget INTERNAL AUDIT						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 581,055	\$ 579,202	\$ 615,777	\$ 627,939	\$ 12,162	2.0%
OVERTIME	-	-	-	-	-	-
TRAINING & MEETINGS	3,306	3,872	6,267	7,738	1,471	23.5%
OTHER MATERIALS	2,050	2,157	1,880	2,400	520	27.7%
OTHER SERVICES	1,105	789	1,126	1,062	(64)	-5.7%
<b>TOTAL</b>	<b>\$ 587,516</b>	<b>\$ 586,020</b>	<b>\$ 625,050</b>	<b>\$ 639,139</b>	<b>\$ 14,089</b>	<b>2.3%</b>

The **Internal Audit Department** monitors the efficiency and integrity of MWRA operations by auditing financial and program operations; reviewing compliance with accounting and management control systems, laws and regulations; and coordinates the formulation and revisions to MWRA policies and procedures. Internal Audit also monitors MWRA contracts through its contract audit program, including approval of provisional consultant indirect cost rates and subsequent audit of consultant billings; performs labor burden reviews, construction change orders and claim audits, and vendor and other contract audits.

### FY11 Accomplishments:

- Identified \$3.8 million in savings related to: contractor task order unit pricing of \$1.7 million, a settlement with an electricity supplier of \$723,000, Boston Water and Sewer Commission and City of Cambridge CSO force account billings of \$595,000, consultant audits of \$520,000, internal audits of \$152,000 and construction labor burden and vendor audits of \$107,000.
- Issued final audit reports on Warehouse Practices, BWSC, and City of Cambridge CSO Financial Assistance Agreement force account billings, and completed eight incurred cost assignments, nine preliminary construction reviews, and audits of task order pricing for the Hultman Aqueduct joint repairs, block energy pricing by Constellation New Energy, a true-up of CY2009 billings by Harbor Energy Electric Company and a review of New England Fertilizer Company's financial results from its operation of the Pelletizing Plant.

### FY12 Goals:

- Encourage more economical and efficient operations, adhere to sound management procedures, and use controls designed to safeguard MWRA assets.
- Assure that automated and supporting manual management information systems have secure data control environments and to provide accurate and useful management information.
- Assure that contractors and consultants doing business with MWRA have adequate accounting and billing systems to provide current, complete, and accurate cost and price information and project invoicing.

### Budget Highlights:

- Total FY12 Final Budget of \$639,000, an increase of \$14,000 or 2.3% from FY11 Actual spending.
- \$628,000 for **Wages and Salaries**, an increase of \$12,000 or 2.0% from FY11 Actual spending, mostly due to the increase in the number of hours being worked by a part-time auditor. The final budget includes funding for eight positions.

**PUBLIC AFFAIRS**

FY12 Final Current Expense Budget PUBLIC AFFAIRS						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 1,024,857	\$ 1,098,755	\$ 1,080,485	\$ 1,091,093	\$ 10,608	1.0%
OVERTIME	-	27	67	-	(67)	-100.0%
TRAINING & MEETINGS	1,747	1,226	5,327	315	(5,012)	-94.1%
PROFESSIONAL SERVICES	1,630	3,085	2,328	1,050	(1,278)	-54.9%
OTHER MATERIALS	37,585	20,784	29,453	20,550	(8,903)	-30.2%
OTHER SERVICES	51,796	35,323	16,974	59,399	42,425	249.9%
<b>TOTAL</b>	<b>\$ 1,117,615</b>	<b>\$ 1,159,200</b>	<b>\$ 1,134,634</b>	<b>\$ 1,172,407</b>	<b>\$ 37,773</b>	<b>3.3%</b>

The **Public Affairs Department** is the institutional link to all MWRA constituencies. 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 **Community Relations Section** deals directly with cities and towns in the service area, responds to inquiries about MWRA, proactively incorporates community concerns into MWRA project work, coordinates outreach and education initiatives to highlight MWRA programs, and provides technical expertise for specific projects and initiatives. Community Relations staff also work in conjunction with Planning and Coordination Department staff to ensure compliance with state and local regulations and restrictions.

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 on water quality, water conservation, wastewater topics, and environmental issues.

**FY12 Goals:**

- Enhance overall public understanding of MWRA’s mission, goals, and benefits to the public through extensive 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, projects and progress, and promote understanding for associated costs.
- 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, and provide input to regulatory agencies in order to ensure MWRA interests are recognized during the development of regulations.

**Budget Highlights:**

- Total FY12 Final Budget of \$1.2 million, an increase of \$38,000 or 3.3% from FY11 Actual spending.
- \$1.1 million for **Wages and Salaries**, an increase of \$11,000 or 1.0% from FY11 Actual spending. The final budget includes funding for 13 positions.
- \$21,000 for **Other Materials**, a decrease of \$9,000 or 30.2% from FY11 Actual spending.
- \$59,000 for **Other Services**, an increase of \$42,000 or 249.9% from FY11 Actual spending, mainly due to underspending for printing/duplicating during FY11. This budget supports the printing needs of the department, which cannot always be anticipated in advance.



Operations Division  
Budget

**OPERATIONS DIVISION**

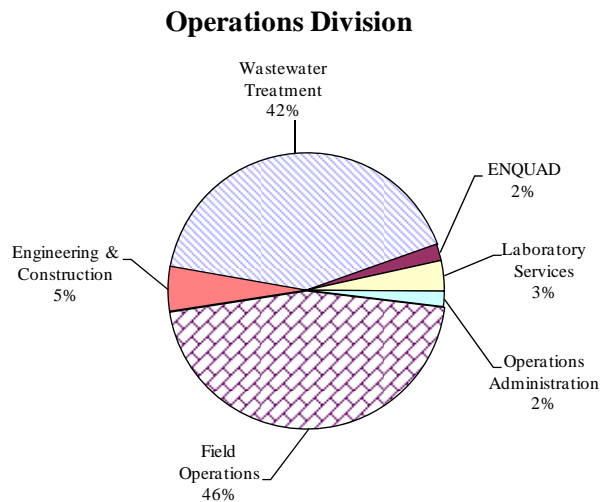
FY12 Final Current Expense Budget OPERATIONS DIVISION						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 66,546,039	\$ 67,744,764	\$ 66,794,330	\$ 68,456,226	\$ 1,661,896	2.5%
OVERTIME	2,932,713	3,893,234	3,850,545	3,450,152	(400,393)	-10.4%
FRINGE BENEFITS	51,742	69,620	67,373	69,200	1,827	2.7%
CHEMICALS	9,867,555	8,998,799	8,697,048	9,047,275	350,227	4.0%
UTILITIES	24,294,274	25,855,089	21,839,172	22,516,405	677,233	3.1%
ONGOING MAINTENANCE	23,025,086	22,575,229	24,604,384	25,530,909	926,525	3.8%
TRAINING & MEETINGS	106,025	48,987	74,268	172,000	97,732	131.6%
PROFESSIONAL SERVICES	3,401,482	3,451,755	3,079,940	2,644,036	(435,904)	-14.2%
OTHER MATERIALS	3,303,935	3,250,608	3,237,254	3,376,695	139,441	4.3%
OTHER SERVICES	19,162,518	19,006,986	18,227,609	19,070,335	842,726	4.6%
<b>TOTAL</b>	<b>\$ 152,691,369</b>	<b>\$ 154,895,071</b>	<b>\$ 150,471,923</b>	<b>\$ 154,333,233</b>	<b>\$ 3,861,310</b>	<b>2.6%</b>

FY12 Final Current Expense Budget OPERATIONS DIVISION by Department						
DEPARTMENT	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
OPERATIONS ADMINISTRATION	\$ 3,338,066	\$ 2,729,340	\$ 2,692,130	\$ 2,776,173	\$ 84,043	3.1%
WASTEWATER TREATMENT	67,870,718	68,821,838	61,246,913	64,515,922	3,269,009	5.3%
FIELD OPERATIONS	64,484,723	65,926,123	69,613,689	70,450,483	836,794	1.2%
LABORATORY SERVICES	5,094,203	5,272,058	5,400,095	5,505,379	105,284	1.9%
ENQUAD	3,805,918	3,822,093	3,637,549	3,022,132	(615,417)	-16.9%
ENGINEERING & CONSTRUCTION	8,097,741	8,323,619	7,881,547	8,063,144	181,597	2.3%
<b>TOTAL</b>	<b>\$ 152,691,369</b>	<b>\$ 154,895,071</b>	<b>\$ 150,471,923</b>	<b>\$ 154,333,233</b>	<b>\$ 3,861,310</b>	<b>2.6%</b>

The **Operations Division** integrates wastewater and water system operations and maintenance, treatment, laboratory services, and engineering and construction functions, including implementation of the Combined Sewer Overflow (CSO) plan. The existing Operations Division is described below:

The **Wastewater Treatment Department**, which accounts for 42% of the Operations Division budget, operates and maintains the Deer Island (DITP) and Clinton wastewater treatment plants and the Residuals Processing Facility at Fore River Staging Area (FRSA).

The **Field Operations Department (FOD)**, which accounts for 46% 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, including the Carroll Water Treatment Plant (CWTP).



The **Engineering and Construction Department** provides in-house engineering, consultant management, drafting, surveying, construction management, and other technical assistance required for the maintenance, repair, and rehabilitation of wastewater and waterworks systems.

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

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

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

### **FY11 Accomplishments:**

#### **Emergencies**

- ***Water Main Break and Leak:*** On August 26, 2010 MWRA discovered a leak adjacent to Shaft 5A in Weston. The leak appears to be related to the major water main break that occurred on May 1, 2010. Although MWRA successfully handled the water break and swiftly restored the pipe into service within 72 hours, management continued to investigate the cause of the break, accelerate the rehabilitation of the back-up Hultman Aqueduct, and monitor the operations of the repaired pipe. MWRA also stabilized the subsequent leak site, developed a repair plan, and implemented a monitoring program to ensure service reliability until the pipe could be taken out of service for repair. Work on both of these issues during FY11 included;
  - Convened an expert panel charged with investigating the cause of the major water main break. Staff provided analysis and information to support the panel's work.
  - Discussed panel's recommendations and commenced legal action regarding cost recovery.
  - Procured numerous contracts to provide services for recovery and analysis of the broken coupling, site restoration, field investigations, and pipe repairs.
  - Developed and implemented plan to accelerate the rehabilitation of the Hultman Aqueduct. MWRA staff procured and executed several change orders to the existing construction contract to expedite the work.
  - Developed and launched a plan to recover the failed coupling.
- ***Spring 2010 Storms*** - MWRA's service area experienced an unprecedented rainfall total of more than 21 inches during a 36-day period between February 24 and April 1, 2010. MWRA incurred significant operating costs during the period to transport and treat the unusually high wastewater flow and to deal with localized system overflows. MWRA applied to the Federal Emergency Management Agency (FEMA) for partial cost-recovery for the additional expense of the federally-declared disaster. As a result of this effort, the Federal Emergency Management Agency awarded MWRA approximately \$1.4 million in grants.

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

- Completed audit of Southborough HVAC system and commenced audits in 14 more facilities. Staff continued to evaluate the audit reports and commence implementation of recommendations from previously completed audits.

- Assisted the Procurement Department with the procurement of contracts to supply and deliver chemicals including aqua ammonia and hydrofluosilicic acid for CWTP; sodium hypochlorite and ferric chloride for DITP; and Nitrazyme and VX456 for the Framingham Pump Station.
- Generated revenue at two water hydroelectric facilities: \$797,000 at the Oakdale Station and \$242,000 at the Cosgrove Station.
- Continued to leverage MWRA's self-generation assets and participation in the competitive energy market to offset operating costs. The combined impact of participation in the Independent System Operators of New England (ISO-NE) load response program and the non-rate revenue from the sale of Renewable Portfolio Standards Program (RPS) resulted in \$1.26 million in revenue for FY11. Deer Island also self-generated 23% of the plant's total required power during that period.
- Procured new contract for the purchase and supply of natural gas for the Carroll Water Treatment Plant (CWTP) and the Chelsea facility which resulted in approximate savings of \$80,000. Also procured new electricity supply contracts for DITP and MWRA's smaller facilities.
- Oversaw installation of hydroelectric turbine generator at Loring Road facility.
- Completed feasibility study of hydroelectric power at the Wachusett Dam.
- Completed feasibility study of photovoltaics at Carroll Water Treatment Plant.
- Processed 104 average tons per day of sludge at the Pelletization Plant during FY11.

**Maintenance:**

- The Operations Division spent \$24.6 million on maintenance of which \$12.9 million was for materials and \$11.7 million was for services.
- Completed numerous major maintenance projects including the following:
  - Procured and implemented numerous contracts for maintenance services including: combustion turbine generators service (DITP); instrumentation maintenance for water and wastewater facilities; electrical equipment maintenance (DITP); flow testing services for water meters; janitorial services for the CWTP and other facilities; paving services; repair services for wastewater flow meters; crane maintenance services; electrical systems maintenance services for the CWTP; and elevator maintenance and repair services for numerous facilities.
  - Procured and implemented numerous contracts for maintenance projects including: Carbon Absorber Tank Repairs and Coating, Phase 1; Rebuilding of Pump Gearboxes 1, 2, and 3 at Cottage Farm; Quabbin Spillway Repointing; and Concrete/Steel Restoration Phase II for DITP.
  - Completed maintenance tasks for dam maintenance at the Norumbega Reservoir to continue to protect integrity of the structures.
  - Cleared water and wastewater easements in addition to clearing grounds at numerous MWRA facilities.
- In the water system, exercised 1,065 and replaced 30 mainline valves; exercised 539 blow-off valves; and surveyed 241 miles of water mains for leaks.
- In the wastewater system, inspected 36.34 miles and cleaned 39.33 miles of pipeline. Also inspected 703 structures and rehabilitated 129 manholes.

## **Engineering, Construction, and Planning:**

- Award of contracts or Notice to Proceed for numerous contracts including the following major projects:
  - Water System
    - CWTP Ultraviolet Disinfection Construction
    - Northern Intermediate High Redundancy and Storage Section 89/29 Design
    - Lynnfield/Saugus Pipeline Construction 2
    - WASM Section 36 Design
    - Valve Replacement Construction 7
  - Wastewater System
    - CSO North Dorchester Outfall Design
    - Braintree-Weymouth Relief Sewer Rehabilitation of Section 624 Construction
    - Headworks Upgrades Design/Construction Administration
    - Prison Point HVAC Upgrades
    - Facility Asset Protection NI Electrical and Grit/Screens Conveyance Design
    - Facility Asset Protection Section 156 Design/Build
    - DITP Asset Protection Digester Modules 1&2 Pipe Replacement
    - DITP As-Needed Design
    - DITP Asset Protection Expansion Joint Repair Construction 2
    - DITP Asset Protection PICS Replacement Construction
    - DITP Fire Alarm System Replacement Design
  
- Substantially completed numerous projects including the following:
  - Water System
    - Wachusett Reservoir Spillway Improvements/Winsor Dam Repairs Phase 2 PCB Material Remediation
    - Northern Intermediate High Redundancy and Storage Concept Plan
    - WASM Section 28, Arlington CP1
    - Loring Road Hydro Construction
    - Rehab of Other Pump Stations Design
  
  - Wastewater System
    - CSO East Boston Branch Relief Sewer, Sections 38 and 207 Replacement
    - CSO East Boston Branch Relief Sewer Construction
    - CSO Bulfinch Triangle Sewer Separation Design and Construction
    - CSO Cambridge Interconnections Relief and Floatables Control
    - CSO North Dorchester Bay Dewatering Pump Station and Sewers
    - CSO North Dorchester Bay Ventilation Building Construction
    - CSO Fort Point Channel Sewer Design
    - Fort Point Channel Sewer Separation
    - Wastewater Central Monitoring Design and Integration Services
    - Braintree-Weymouth Rehabilitation of Section 624
    - West Roxbury Tunnel Design
    - DITP Asset Protection Heat Loop Pipe Replacement Construction 3
    - DITP Asset Protection STG System Modifications Design and Construction
    - DITP Asset Protection Roof Replacements
    - DITP Asset Protection Electrical Upgrades 3

## **Environmental:**

- The TRAC Department completed the following Environmental Protection Agency (EPA)-required work for significant industrial users: 218 inspections, 185 monitoring events, and 358 sampling of connections. This department also issued or renewed 197 permits (significant industrial users SIU and non-SIU).
- The TRAC Department submitted the Industrial Pretreatment Program Annual Report to the EPA for FY10.
- The TRAC Department commenced review of local limits at the Clinton Wastewater Treatment Plant as required under the NPDES permit renewal process.
- At DITP, treated 99% of flow through secondary and met secondary permit limits at all times. Operated DITP without any NPDES Permit violations in FY11.
- EnQuad carried out required environmental monitoring of Boston Harbor and Massachusetts Bay water column, sediments, fish and shellfish, and CSO receiving water quality, finalizing 27 technical reports and presenting results to state and federal agencies, the Outfall Monitoring Science Advisory Panel, and the public.
- EnQuad staff provided documentation regarding endangered species issues to the National Marine Fisheries Service and EPA which led to the approval of monitoring requirements. On December 6, 2010, EPA and Department of Environmental Protection (DEP) issued formal approval of MWRA's revised monitoring plan.
- Awarded and implemented two contracts to conduct Harbor and Outfall Monitoring of outfall effects as required by MWRA's discharge permit for Deer Island Treatment Plant (DITP).
- Met all water quality and treatment standards for giardia and cryptosporidium in the drinking water system during FY11.
- The Department of Lab Services (DLS) provided routine laboratory services and analysis for approximately 210,218 tests and also provided as-needed analytical support for numerous projects including the following: drinking water Lead and Copper Rule testing, Somerville Marginal CSO facility special project, NACWA review of EPA's proposed testing revisions, and DEP audit of MWRA's central lab.

## **FY12 Goals:**

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

## **FY12 Initiatives:**

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

- First full year operations for the North Dorchester Bay odor control facility.
- Continue to implement and optimize SCADA in Wastewater Operations facilities.
- Continue to identify, assess, and implement initiatives to reduce energy demand and increase energy self-generation in MWRA's system. Pursue grant-funding and cost-sharing arrangements to defray costs of implementing these initiatives.
- Self-generate 27% of Deer Island's required power through optimization of power generation assets, including the wind turbines and the STG back pressure system modifications.

### **Engineering & Construction:**

- Award numerous contracts and/or issue Notices To Proceed including the following major contracts:
  - Water System
    - Spot Pond Storage Facility Design/Build
    - WASM Supply Main 3 Design
    - MetroWest Tunnel CP6B Upper Hultman Rehabilitation
    - Long Term Redundancy Sudbury Aqueduct Preliminary Design
    - Long Term Redundancy Cosgrove Tunnel Pump Station Design
    - Quabbin UVWTP Construction
    - NIH Redundancy & Storage, Gillis Pump Station Improvements
    - Dam Projects Safety Modifications and Repairs, Construction
  - Wastewater System
    - DITP Clarifier Rehabilitation Phase 2
    - DITP Asset Protection North Main Pump Station VFD Replacement Construction
    - DITP Asset Protection Cryogenics Plant – Equipment Replacement Construction
    - DITP Asset Protection NMPS Motor Control Center Design & Construction
    - DITP Asset Protection Switchgear Replacement Construction
    - Braintree-Weymouth Relief Pump Station Improvements
    - Facility Asset Protection Headworks Upgrade CM Services
- Substantially complete numerous CIP design and construction phases including the following:
  - Water System
    - Southern Spine Distribution Section 107 Phase 2 Construction
    - New Connecting Mains Northeast Segment Construction Project 5
    - CWTP Solar Construction
    - Central Monitoring System SCADA Implementation
    - Spot Pond Storage Facility Early Construction Water Connection
  - Wastewater System
    - DITP Asset Protection Primary and Secondary Clarifier Rehabilitation Construction
    - DITP PICS Replacement Construction
    - DITP Electrical Equipment Upgrade Construction 3
    - Braintree-Weymouth Relief Facilities Design 2
    - Alternative Energy Initiatives Charlestown Wind Project Construction
    - Facility Asset Protection Prison Point HVAC Upgrades

- Charles River CSO Controls Brookline Connection Controls Construction

**Maintenance:**

- Optimize staff resources, overtime, service contract scopes and use, and use of as-needed design contracts to complete routine and major maintenance projects.
- Continue work on numerous major projects at Deer Island including facility repainting and coating repairs, lighting equipment retrofits, Zurn boiler maintenance and repairs, electrical system maintenance, motor bearing overhauls, carbon absorber replacements, reactor gearbox rebuilds, and critical equipment maintenance.
- Work on numerous projects in Field Operations including meter inspection and repairs, Bellevue roof replacement, HVAC and lighting efficiency upgrades in metro facilities, dam appurtenances inspections, and water tank inspections.

**Environmental:**

- Pending approval by regulators, plan for and implement requirements of new NPDES Permits for DITP (assume new permit as of July 2013) and Clinton Wastewater Treatment Plant (assume new permit as of January 2012).
- Continue to implement the revised Ambient Monitoring Plan. The reduced scope went into effect in FY11.
- Continue work on other harbor and outfall monitoring initiatives including; calculating revised thresholds, working with the Department of Conservation and Recreation to implement appropriate beach management practices in South Boston, and improving instrumentation on NOAA's weather buoy.
- Continue to optimize the new environmental information systems in TRAC and the Central Laboratory.
- Plan and implement the new round of NPDES-required Local Limit testing in TRAC to reassess industrial discharge limits. This work can commence after EPA issues the new NPDES permits.
- Conduct invasive species removal and monitoring at water reservoirs.

**Budget Highlights:**

- Total FY12 Current Expense Budget is \$154.3 million, which is \$3.9 million or 2.6% more than FY11 Actual spending. The FY12 CEB continues to reflect efforts to contain rate increases by curtailing spending on less critical items or services wherever possible and implementing energy efficiency improvements that will result in long-term, sustainable reductions to the Operations Division's budget.
- Significant increases from FY11 Actual spending include:
  - Net increase of \$1.7 million or 2.5% for **Wages and Salaries** primarily due to fewer than planned filled positions in FY11 and more employees in IA status or on leave during the year versus what was budgeted. The FY12 CEB funds 934 filled positions on average during the year.
  - Net increase of \$927,000 or 3.8% for **Maintenance** primarily due to new service contracts; increases in the price and/or scope of several contracts to be re-bid before or during FY12; annual fluctuations in the maintenance component of the sludge pelletization contract; and additional projects required to rehabilitate aging facilities throughout the wastewater and water systems.
  - Net increase of \$843,000 or 4.6% for **Other Services** primarily due to increases for lease payments and taxes for the Chelsea facility; the restoration of funds for membership in the American Water Works Association Research Foundation; and inflation adjustments and quantity assumptions for the Residuals processing contract as compared to FY11 levels. The FY12 CEB is based on an average of 105.5 tons of

sludge per day (TPD) which is consistent with historical averages since the start-up of the Braintree-Weymouth Tunnel. FY11 actual quantities were 104 tons per day.

- Net increase of \$677,000 or 3.1% for **Utilities**. The \$22.5 million FY12 Utilities budget, which is 15% of the Operations Division's total budget, includes \$16.3 million for electricity, \$3.7 million for diesel fuel, \$1.8 million for water, and \$549,000 for natural gas. The increase from FY11 Actual spending is due to higher Diesel fuel of \$1.9 million offset by lower electricity of \$1.3 million. Diesel fuel increases because DITP did not use the CTGs as often as expected in FY11 so fuel purchases were delayed to FY12 due to sufficient inventory and high market prices. Electricity decreases due to more favorable contract prices, expected wind and hydro self-generation, and savings from energy conservation initiatives.
- Net increase of \$350,000 or 4.0% for **Chemicals** primarily due to price increases. The price increases are offset by decreases for lower doses and quantities for hydrofluosilicic acid due to changes in regulatory requirements and lower quantities for liquid oxygen due to actual history and preparation for UV start-up.
- Net increase of \$139,000 or 4.3% for **Other Materials** primarily due to plans to replace more vehicles in FY12 than in FY11 to invest in an aging fleet. Approximately 50% of the active fleet will be seven years or older by FY12.
- Significant decreases from FY11 Actual spending include:
  - Net decrease of \$436,000 or 14.2% for **Professional Services** primarily due to the full-year impact of scope reductions in the Harbor and Outfall monitoring program. FY11 Actual spending reflects a half year of implementation versus the full year in FY12.
  - Net decrease of 400,000 or 10.4% for **Overtime** primarily because FY11 Actual spending includes approximately \$400,000 of emergency overtime related to the 2010 water break and leak.
- The FY12 Budget is subject to risk in the following areas: timing of the implementation of Deer Island's new NPDES permit, chemical and utility usage and prices, sludge quantities, and more than expected emergency-related maintenance and overtime needs

**OPERATIONS ADMINISTRATION**

<b>FY12 Final Current Expense Budget OPERATIONS ADMINISTRATION</b>						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 1,798,240	\$ 1,789,319	\$ 1,865,867	\$ 1,734,337	\$ (131,530)	-7.0%
OVERTIME	526	798	238	-	(238)	-100.0%
FRINGE BENEFITS	-	-	-	-	-	-
ONGOING MAINTENANCE	171	-	-	-	-	-
TRAINING & MEETINGS	-	468	2,287	3,700	1,413	61.8%
PROFESSIONAL SERVICES	23,844	6,500	5,467	50,000	44,533	814.6%
OTHER MATERIALS	1,238,916	831,973	713,187	802,000	88,813	12.5%
OTHER SERVICES	276,369	100,282	105,084	186,136	81,052	77.1%
<b>TOTAL</b>	<b>\$ 3,338,066</b>	<b>\$ 2,729,340</b>	<b>\$ 2,692,130</b>	<b>\$ 2,776,173</b>	<b>\$ 84,043</b>	<b>3.1%</b>

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

**Budget Highlights:**

- \$1.7 million for **Wages and Salaries**, which represents 62% of the FY12 Current Expense Budget (CEB). The budget includes funding for 23 positions. The FY12 Budget is \$132,000 or 7.0% less than FY11 Actual spending primarily due to leave balance accrual adjustments and the discontinuation of funding in FY12 for a temporary employee hired in FY11 to provide support for the May 2010 water pipeline break review process.
- \$50,000 for **Professional Services** which covers energy consulting services to support energy procurements and evaluation of energy projects. The increase from FY11 to FY12 is primarily due to the expected use of energy consulting services in FY12 to support on-going energy initiatives.
- \$802,000 for **Other Materials**, of which \$800,000 is for replacement of aged vehicles in MWRA’s fleet. This funding level continues to reflect efforts to contain rate increases by curtailing purchases. The FY12 CEB will allow MWRA to replace only the high priority vehicles that meet the eligibility criteria. Actual spending for vehicle purchases for FY02-FY11 is as follows:

FY02:           \$ 622,000	FY06:           \$ 717,381	FY10: \$826,513
FY03:           \$ 120,000	FY07:           \$1,846,396	FY11: \$706,368
FY04:           \$1,580,000	FY08:           \$1,425,758	
FY05:           \$1,237,289	FY09:           \$1,134,779	

From FY00 to FY03, MWRA limited replacement of vehicles pending completion of an extensive fleet review. In FY03 MWRA reduced the active fleet by more than 10% (from 561 to 496 vehicles) as a result of this initiative. For example, staff identified opportunities to meet the needs of the new waterworks system facilities through redeployment of existing vehicles rather than adding to the fleet. Approximately 50% of MWRA’s active, operable fleet is seven years or older.

- \$186,000 is for **Other Services** of which the majority is for Authority-wide memberships including the American Waterworks Association Research Foundation (AWWARF), National Association of Clean Water Agencies, Association of Metropolitan Water Agencies, American Waterworks Association, and the Boston Harbor Association marine debris program. The significant increase from FY11 to FY12 is due to the restoration of funding for partial year costs of MWRA’s membership in AWWARF.

**WASTEWATER TREATMENT**

FY12 Final Current Expense Budget WASTEWATER TREATMENT						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 17,114,724	\$ 17,553,076	\$ 16,976,936	\$ 17,576,246	\$ 599,310	3.5%
OVERTIME	798,752	1,379,720	950,892	997,886	46,994	4.9%
FRINGE BENEFITS	15,664	28,799	19,075	20,300	1,225	6.4%
CHEMICALS	3,280,345	2,887,823	2,271,711	2,598,920	327,209	14.4%
UTILITIES	14,946,585	16,184,157	12,296,072	12,932,806	636,734	5.2%
ONGOING MAINTENANCE	14,459,802	13,737,428	12,772,381	13,926,750	1,154,369	9.0%
TRAINING & MEETINGS	55,088	23,581	1,787	45,100	43,313	2423.8%
PROFESSIONAL SERVICES	387,342	353,516	346,189	340,200	(5,989)	-1.7%
OTHER MATERIALS	403,706	515,596	504,686	528,276	23,590	4.7%
OTHER SERVICES	16,408,710	16,158,142	15,107,184	15,549,438	442,254	2.9%
<b>TOTAL</b>	<b>\$ 67,870,718</b>	<b>\$ 68,821,838</b>	<b>\$ 61,246,913</b>	<b>\$ 64,515,922</b>	<b>\$ 3,269,009</b>	<b>5.3%</b>

FY12 Final Current Expense Budget WASTEWATER TREATMENT by Facility						
FACILITY	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
DEER ISLAND	\$ 49,020,875	\$ 50,400,723	\$ 44,246,489	\$ 46,843,467	\$ 2,596,978	5.9%
RESIDUALS	17,315,292	16,918,753	15,539,049	16,008,892	469,843	3.0%
CLINTON	1,534,551	1,502,362	1,461,375	1,663,563	202,188	13.8%
<b>TOTAL</b>	<b>\$ 67,870,718</b>	<b>\$ 68,821,838</b>	<b>\$ 61,246,913</b>	<b>\$ 64,515,922</b>	<b>\$ 3,269,009</b>	<b>5.3%</b>

The **Deer Island Treatment Plant**, the **Residuals Management Program**, and the **Clinton Treatment Plant** comprise the Wastewater Treatment Department. Together, the budgets for these programs represent 42% of the Operations Division’s FY12 Current Expense Budget (CEB) and 31% of MWRA’s FY12 CEB direct expenses.

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

**DEER ISLAND TREATMENT PLANT**

FY12 Final Current Expense Budget DEER ISLAND TREATMENT PLANT						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 16,446,940	\$ 16,854,157	\$ 16,278,877	\$ 16,851,813	\$ 572,936	3.5%
OVERTIME	751,401	1,316,066	916,406	942,887	26,481	2.9%
FRINGE BENEFITS	15,028	27,911	18,716	19,300	584	3.1%
CHEMICALS	3,042,991	2,710,193	2,066,352	2,301,258	234,906	11.4%
UTILITIES	14,618,424	15,887,447	11,985,464	12,621,324	635,860	5.3%
ONGOING MAINTENANCE	12,854,386	12,300,411	11,736,526	12,774,031	1,037,505	8.8%
TRAINING & MEETINGS	55,088	22,999	1,127	40,000	38,873	3449.2%
PROFESSIONAL SERVICES	362,425	263,157	344,215	320,500	(23,715)	-6.9%
OTHER MATERIALS	296,823	450,148	397,774	385,329	(12,445)	-3.1%
OTHER SERVICES	577,369	568,234	501,032	587,025	85,993	17.2%
<b>TOTAL</b>	<b>\$ 49,020,875</b>	<b>\$ 50,400,723</b>	<b>\$ 44,246,489</b>	<b>\$ 46,843,467</b>	<b>\$ 2,596,978</b>	<b>5.9%</b>

**Program Description and Goals:**

The **Deer Island Treatment Plant** budget accounts for 30% of the Operations Division’s FY12 Current Expense Budget (CEB). DITP has a primary treatment peak capacity of 1.27 billion gallons per day (bgd) and secondary treatment peak capacity of 700 million gallons per day (mgd).

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

North system flows pass through grit channels and bar screens at the Headworks that remove grit and screenings for disposal in an off-island landfill. South system flows are pre-treated for grit at Nut Island and the Braintree-Weymouth Intermediate Pump Station. Flow is routed to primary treatment clarifiers, which remove about half of the pollutants brought to the plant in typical wastewater (removes 50-60% of total suspended solids and up to 50% of pathogens and toxic contaminants). In the clarifiers, gravity separates sludge and scum from the wastewater.

In secondary treatment, reactors and clarifiers remove non-settleable solids through biological and gravity treatment. The biological process is a pure oxygen-activated sludge system, using microorganisms to consume organic matter that remains in the wastewater flow. Secondary treatment raises the level of pollution removal to over 85%. More than 150 tons of pure oxygen is manufactured each day at Deer Island's cryogenic facility to support the biological treatment process.

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

## **Organizational Structure:**

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

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

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

## Operating Assumptions

Deer Island's FY12 CEB assumes treatment of an average flow of 365 mgd based on ten years of historical data. The projected quantity of digested sludge to be pumped to FRSA (TSS basis) is 105.5 TPD. This is based on data from the six years after the discontinuation of the DSL centrifuges and the start-up of the Braintree-Weymouth tunnel.

Deer Island's FY12 CEB accounts for the impact of self-generation of electricity from the steam turbine generator, combustion turbine generators, hydroelectric generators, wind turbine generators, and photovoltaic panels. In total, these assets will meet approximately 27% of the total energy requirements resulting in net cost savings of approximately \$2.1 million.

Deer Island continues to comply with the conditions of the current NPDES Permit which expired in FY06. Given the uncertainty regarding the timing of the permit renewal from EPA, Deer Island's FY12 CEB assumes the new permit will not go into effect until FY13. When the new permit is issued, Deer Island's treatment process will be required to kill enterococcus in addition to fecal coliform to comply with the new regulations.

## Budget Highlights:

- \$16.9 million for **Wages and Salaries**, an increase of \$573,000 or 3.5% from FY11 Actual spending. The FY12 CEB funds on average 233 filled permanent positions and two part-time temporary employees. The FY12 CEB also includes \$122,000 for stand-by pay to support operational and maintenance needs primarily during storms and emergencies.
- \$943,000 for **Overtime** for operational coverage, critical maintenance projects, and regulatory requirements (i.e. inspections). The FY12 CEB is \$26,000 or 2.9% more than FY11 Actual spending.
- \$2.3 million for **Chemicals**, which is \$235,000 or 11.4% more than FY11 Actual spending. The FY12 CEB reflects management's expectation that a new NPDES permit will not be in effect for Deer Island until FY13. The budget includes \$985,000 for sodium hypochlorite, \$324,000 for ferric chloride, \$299,000 for activated carbon, \$240,000 for polymer, and \$119,000 for sodium bisulfite. The increase from FY11 to FY12 is primarily due to expected price changes and usage adjustments. FY12 usage estimates for disinfection chemicals are based on a multi-year average whereas actual FY11 usage was lower than typical due to lower than average flows.
- \$12.6 million for **Utilities**, an increase of \$636,000 or 5.3% from FY11 Actual spending. The increase is primarily due to planned purchase of diesel fuel in FY12 versus minimal purchases in FY11, offset by decreases in electricity due to price reductions and lower power purchases. The FY12 CEB includes \$9.6 million for electricity, \$1.7 million for diesel fuel, and \$1.3 million for water. The FY12 CEB reflects several years of historic power usage and self-generation. It also assumes a significant increase in renewable self-generation primarily from additional solar panels and the new back pressure STG, which contributes to a \$975,000 decrease in electricity costs from FY11 Actual spending to the FY12 CEB.
- \$12.8 million for **Maintenance**, which is \$1.0 million or 8.8% more than FY11 actual spending due to numerous planned projects. The FY12 CEB includes \$5.1 million for materials and \$7.7 million for services. Of the total, 59% or \$7.6 million is for plant and machinery services and materials, \$2.8 million is for electrical system maintenance, and \$1.3 million is for building and grounds work.
- \$321,000 for **Professional Services**, a decrease of \$24,000 or 6.9% from FY11 Actual spending. The decrease is primarily due to expected spending for as-needed design contracts to support the development of major maintenance projects. Please note the FY12 CEB does not include \$50k for a beach nourishment study because management is reevaluating the need for this work.

- \$385,000 for **Other Materials**, a decrease of \$12,000 or 3.1% from FY11 Actual spending. The FY12 CEB includes \$114,000 for work clothes, \$110,000 for health and safety materials, and \$68,000 for vehicles expenses (tolls, mileage, and gas).
- \$587,000 for **Other Services**, an increase of \$86,000 or 17.2% from FY11 Actual spending. The FY12 Budget includes the ambulance service contract \$250,000, permit fees \$70,000, telephones \$48,000, fax/copier leasing and servicing \$42,000, HAZmat/safety services \$40,000, and freight charges \$20,000.

## RESIDUALS MANAGEMENT

FY12 Final Current Expense Budget RESIDUALS MANAGEMENT PROGRAM						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 103,200	\$ 119,702	\$ 107,382	\$ 109,414	\$ 2,032	1.9%
OVERTIME	-	-	-	-	-	-
FRINGE BENEFITS	-	-	-	-	-	-
UTILITIES	-	-	-	-	-	-
ONGOING MAINTENANCE	1,398,551	1,226,841	843,858	941,678	97,820	11.6%
TRAINING & MEETINGS	-	582	-	1,000	1,000	-
PROFESSIONAL SERVICES	-	-	-	13,000	13,000	-
OTHER MATERIALS	-	-	-	80	80	-
OTHER SERVICES	15,813,541	15,571,628	14,587,809	14,943,720	355,911	2.4%
<b>TOTAL</b>	<b>\$ 17,315,292</b>	<b>\$ 16,918,753</b>	<b>\$ 15,539,049</b>	<b>\$ 16,008,892</b>	<b>\$ 469,843</b>	<b>3.0%</b>

### Program Description and Goals:

The **Residuals Management Program** manages the processing and disposal of approximately 105 to 106 dry tons per day (TSS) of sludge from the anaerobic digestion process at Deer Island, as well as the disposal of grit and screenings from all MWRA facilities. MWRA seeks to dispose of all sludge and grit and screenings in a reliable, economical, and environmentally sensitive manner.

- MWRA contracts with the New England Fertilizer Company (NEFCo) to operate the sludge processing facility, and to market and distribute sludge products. A 15-year contract with NEFCo became effective March 1, 2001 and will expire on December 31, 2015. Liquid sludge from Deer Island is pumped through the Braintree-Weymouth cross-harbor tunnel to the Fore River processing facility where it is dewatered, dried, and shipped by either rail or truck for use as fertilizer or to other appropriate disposal. MWRA is committed to the beneficial reuse of biosolids to the greatest extent practicable.

In FY05, major operational changes occurred regarding sludge processing at Deer Island. The Braintree-Weymouth cross-harbor tunnel came on-line in April 2005. The previous practice of thickening and barging sludge from Deer Island to Fore River ceased. Deer Island began pumping a much lower concentration of sludge (2.0% to 2.5% average total suspended solids) to the Residuals Processing Facility.

- In FY11, MWRA completed a third-party independent condition assessment of the NEFCo facility. The report found the facility in excellent condition and recommended only minor modifications to several control system devices.
- The budget is based on 105.5 tons per day (TPD based on TSS), consistent with historical actual annual tonnage since the start-up of the Braintree-Weymouth tunnel.
- Grit and screenings (minor residuals) from MWRA's headworks and certain pump stations are collected and disposed of in landfills. MWRA contracts with a third party operator for this service. Minor residuals are by-products of wastewater pre-treatment and primary/secondary treatment processes and include grit, screenings and scum screenings. The current contract commenced in June 2011.

**Budget Highlights:**

- The \$110,000 for **Wages and Salaries** supports one position. This department also receives on-going management oversight and staff support from other departments of the MWRA including Deer Island, Treasury, and Operations Administration.
- \$942,000 is for **Maintenance**, an increase of \$98,000 or 11.6% from FY11 Actual spending. The maintenance funding supports the capital repair, replacement, and improvement component of the NEFCo contract, which includes a specific level per year adjusted to account for inflation. The change from FY11 to FY12 is due to a higher contractual amount for calendar year 2012 and also increases in inflation based on market indices.
- \$14.1 million or 88% of the FY12 CEB is for the **Sludge Pelletization** portion of the NEFCo contract. The FY12 budget is \$497,000 or 3.6% more than FY11 Actual spending due to sludge quantities and inflation increases, primarily for maintenance and labor. The FY12 budget is based on an average of 105.5 tons per day (TPD), consistent with historical trends since the start-up of the Braintree-Weymouth tunnel, whereas actual quantities were 104 tons per day in FY11.
- \$784,000 of the FY12 budget is for **Grit and Screenings** disposal, a decrease of \$114,000 or 12.7% versus FY11 Actual spending. The decrease is primarily due to lower prices associated with a new processing and disposal contract.
- \$3,000 of the budget is for **Permit Fees**, as required by the Department of Environmental Protection.

## CLINTON WASTEWATER TREATMENT PLANT

FY12 Final Current Expense Budget CLINTON WASTEWATER TREATMENT PROGRAM						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 564,583	\$ 579,217	\$ 590,677	\$ 615,019	\$ 24,342	4.1%
OVERTIME	47,352	63,654	34,485	55,000	20,515	59.5%
FRINGE BENEFITS	636	888	359	1,000	641	178.6%
CHEMICALS	237,353	177,630	205,359	297,662	92,303	44.9%
UTILITIES	328,161	296,710	310,608	311,482	874	0.3%
ONGOING MAINTENANCE	206,865	210,177	191,997	211,040	19,043	9.9%
TRAINING & MEETINGS	-	-	660	4,100	3,440	521.2%
PROFESSIONAL SERVICES	24,917	90,358	1,973	6,700	4,727	239.6%
OTHER MATERIALS	106,883	65,448	106,913	142,868	35,955	33.6%
OTHER SERVICES	17,801	18,280	18,344	18,692	348	1.9%
<b>TOTAL</b>	<b>\$ 1,534,551</b>	<b>\$ 1,502,362</b>	<b>\$ 1,461,375</b>	<b>\$ 1,663,563</b>	<b>\$ 202,188</b>	<b>13.8%</b>

### Program Description and Goals:

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

The plant provides secondary treatment using an activated sludge process in combination with advanced nutrient removal and dechlorination. The major facilities include a headworks, primary settling tanks, digesters, sludge processes, trickling filters, aeration tanks, secondary tanks, and a chemical addition building. The plant discharges its effluent into the South Nashua River in accordance with the discharge limits of the facility's NPDES permit which limits effluent flow to 3.01 mgd. The plant has a potential peak flow rate of 12 mgd and a 6 mgd peak 24 hour rate. Residual materials are pressed and transported to an MWRA-owned landfill for disposal. Staff also performs regular monitoring of the landfill site.

### Budget Highlights:

- \$615,000 for **Wages and Salaries**, an increase of \$24,500 or 4.1% from FY11 Actual spending. Wages and Salaries represents 37% of the FY12 Current Expense Budget. This funds eight positions and one part-time temporary contract clerical position.
- \$55,000 for **Overtime**, an increase of \$21,000 or 59.4% from FY11 Actual spending primarily due to less need in FY11 for emergency coverage. Overtime is used to meet the 24 hour, 7 day per week emergency coverage requirement and to provide increased maintenance resulting from an aging facility.
- \$298,000 for **Chemicals**, an increase of \$92,000 or 44.9% from FY11 Actual spending. Chemicals are used for sludge processing and disposal and wastewater treatment. The change from FY11 to FY12 reflects projected increases in chemical use for wastewater treatment due to the additional requirements expected in the new NPDES permit. The FY12 budget assumes start-up as of January 2012.
- \$311,000 for **Utilities** which is primarily level funded with FY11 Actual spending. Utilities represent 19% of the FY12 CEB. The budget includes \$233,000 for electricity, \$63,000 for fuel oil, and \$15,000 for water.

- \$211,000 for **Maintenance**, an increase of \$19,000 or 9.9% from FY11 Actual spending. Maintenance represents 13% of the FY12 CEB. The budget includes \$65,000 for major projects and the remainder for routine materials and services.
- \$143,000 for **Other Materials**, an increase of \$36,000 or 33.6% from FY11 Actual spending. The Other Materials budget includes \$131,000 for clean fill for the landfill operation. Clean fill quantities are expected to increase in FY12 due to the additional sludge quantities expected when the new NPDES permit goes into effect.

**FIELD OPERATIONS**

FY12 Final Current Expense Budget FIELD OPERATIONS						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 34,567,080	\$ 34,959,350	\$ 34,976,521	\$ 35,945,406	\$ 968,885	2.8%
OVERTIME	2,001,173	2,333,975	2,655,359	2,234,270	(421,089)	-15.9%
FRINGE BENEFITS	35,498	39,919	47,180	47,200	20	0.0%
CHEMICALS	6,587,210	6,110,976	6,425,336	6,448,356	23,020	0.4%
UTILITIES	9,327,360	9,654,098	9,526,403	9,559,966	33,563	0.4%
ONGOING MAINTENANCE	8,341,580	8,606,906	11,596,068	11,348,857	(247,211)	-2.1%
TRAINING & MEETINGS	35,326	23,160	62,590	113,800	51,210	81.8%
PROFESSIONAL SERVICES	458,458	618,254	405,450	581,500	176,050	43.4%
OTHER MATERIALS	767,292	943,143	1,020,769	962,542	(58,227)	-5.7%
OTHER SERVICES	2,363,746	2,636,342	2,898,013	3,208,586	310,573	10.7%
<b>TOTAL</b>	<b>\$ 64,484,723</b>	<b>\$ 65,926,123</b>	<b>\$ 69,613,689</b>	<b>\$ 70,450,483</b>	<b>\$ 836,794</b>	<b>1.2%</b>

FY12 Final Current Expense Budget FIELD OPERATIONS by Program						
PROGRAM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
TOXIC REDUCTION & CONTROL	\$ 3,410,288	\$ 3,436,145	\$ 3,504,134	\$ 3,546,688	\$ 42,554	1.2%
WASTEWATER OPERATIONS	11,399,949	11,624,424	12,120,182	12,153,051	32,869	0.3%
WATER OPERATIONS & MAINT	21,527,412	21,110,594	26,266,665	25,882,485	(384,180)	-1.5%
METRO MAINTENANCE	16,765,543	17,732,922	14,402,762	14,912,501	509,739	3.5%
OPERATIONS SUPPORT	7,235,436	7,803,765	8,617,057	9,143,520	526,463	6.1%
FOD ADMIN	4,146,095	4,218,273	4,702,889	4,812,238	109,349	2.3%
<b>TOTAL</b>	<b>\$ 64,484,723</b>	<b>\$ 65,926,123</b>	<b>\$ 69,613,689</b>	<b>\$ 70,450,483</b>	<b>\$ 836,794</b>	<b>1.2%</b>

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

**The Toxic Reduction and Control (TRAC) Department** operates a multi-faceted program to minimize and control the inflow of hazardous or toxic materials into the MWRA sewer system. TRAC operates MWRA's Environmental Protection Agency (EPA) approved Industrial Pretreatment Program and is responsible for all associated activities which include conducting inspections (approximately 700 annually), issuing permits (300 annually), conducting sampling (more than 2,000 events annually), and carrying out enforcement activities (approximately 400 annually). The program tracks more than 1,400 permitted facilities and 4,000 gas/oil separators. TRAC uses a software application, Pre-treatment Information Management System (PIMS), to manage an extensive amount of industrial data on analytical test results, compliance status, and facility sampling and permitting requirements.

**Wastewater Operations** operates MWRA's wastewater transport facilities, including four continuously staffed Headworks facilities; 12 fully automated pumping stations; and six CSO facilities which are similarly un-staffed. The wastewater system is monitored and controlled from the operations control center (OCC) in Chelsea.

**Water Operations and Maintenance** is responsible for the treatment and delivery of approximately 207 mgd (three year average) 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 Lynnfield, Wakefield, Marblehead, Norwood and Canton in the metropolitan area. This unit operates and maintains MWRA's western waterworks facilities, including the Carroll Water Treatment Plant, the MetroWest Tunnel, the Ware Water Treatment Plant, the Cosgrove Intake Facility, the Norumbega Reservoir, and the covered storage facilities. 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) is located at MWRA's Chelsea facility and the Western Operations Center is located at the Carroll Water Treatment Plant.

**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 approximately 300 miles of water mains, 4,900 valves, 18 miles of deep rock tunnels, ten pump stations, eight tunnel shafts, eleven distribution storage tanks; and a wastewater network of 240 miles of wastewater interceptors and appurtenances, 12 pump stations, four headworks, and six CSO facilities. In addition, this unit performs TV inspections of the wastewater interceptor system and leak detection.

**Operations Support** provides technical support to FOD in the areas of engineering, quality assurance, data management, metering, and monitoring. Engineering staff coordinates all engineering issues related to the operation of the water and wastewater systems. The Quality Assurance Unit monitors water treatment effectiveness, identifies treatment issues, and develops recommendations for water treatment improvements. Data management activities include performance reporting on water quality, development and maintenance of water quality treatment and optimization models, and tracking and analyzing chemical and hydraulic flow data. The Metering and Monitoring unit maintains 179 revenue water meters, 26 master water meters, 187 revenue wastewater meters, and 35 other wastewater monitoring sites. This unit collects meter data for operational and revenue generating purposes from the water and wastewater systems. It is also responsible for the maintenance of the water and wastewater Supervisory Control and Data Acquisition (SCADA) systems.

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

#### **Budget Highlights:**

- \$35.9 million is for **Wages and Salaries**, which is \$969,000 or 2.8% higher than the FY11 Actual spending primarily due to more filled positions expected in FY12 than in FY11. The Wages and Salaries line item accounts for 51% of the FY12 Current Expense Budget (CEB) of which \$35.4 million or 98% is for regular pay to fund 512 positions. Of the remaining budget, \$374,000 is for stand-by pay to support operational and maintenance needs; \$147,000 for temporary employees including two temporary SCADA Technicians and one Engineering Aide, and \$43,000 for interns for water quality analysis, grounds maintenance, and engineering assistance to augment engineering staff.
- \$2.2 million or 3% of the FY12 CEB is for **Overtime**, which includes \$1.0 million for emergency related overtime, \$622,000 for operational coverage needs, and \$581,000 for planned overtime for scheduled maintenance and training. The FY12 Overtime budget is \$421,000 or 15.9% less than FY11 Actual spending primarily due to the higher levels of overtime used in FY11 for work related to the 2010 water pipeline break and leak at Shaft 5.

- \$6.4 million or 9% of the FY12 CEB is for **Chemicals**, of which \$6.1 million is for water treatment and \$342,000 is for wastewater treatment. The budget includes \$3.3 million for soda ash for alkalinity control, \$994,000 for sodium hypochlorite, \$223,000 for aqua ammonia for disinfection, \$761,000 for hydrofluosilicic acid for fluoridation, \$524,000 for liquid oxygen for the CWTP ozone generation, \$316,000 for carbon dioxide to control water pH, \$143,000 for nitrazyme and VX-456 for Framingham Extension Relief Sewer odor and corrosion control, and \$188,000 for sodium bisulfite for dechlorination. The FY12 CEB is \$23,000 or 0.4% higher than FY11 Actual spending primarily due to price increases in soda ash, sodium hypochlorite, and aqua ammonia; offset by expected usage decreases in hydrofluosilicic acid in January 2012 when revised fluoride regulations go into effect.
- \$9.6 million or 14% of the FY12 CEB is for **Utilities**, including \$6.5 million for electricity, \$2.0 million for diesel fuel, \$549,000 for natural gas, and \$434,000 for water. The FY12 utility budget reflects an increase of \$34,000 or 0.4% from FY11 Actual spending primarily due to price increases in water, diesel fuel and propane offset by decreased electricity unit pricing.
- \$11.3 million or 16% of the FY12 CEB is for **Maintenance**, including \$3.7 million in major projects, \$3.6 million in day-to-day projects, \$3.4 million for services, and \$570,000 for energy initiatives. The FY12 CEB for Maintenance is \$247,000 or 2.1% lower than FY11 Actual spending primarily due to the completion of several unbudgeted maintenance projects in FY11. Some of the major projects planned for FY12 include;
  - \$500,000 for tree removal at the Wachusett Dikes
  - \$450,000 for rebuilding the pumps at Prison Point
  - \$350,000 for switchgear modifications at Nut Island
  - \$200,000 for replacement of incline screws at Chelsea Creek, Ward Street, and Columbus Park
  - \$175,000 for Channel modifications at the Headworks, and
  - \$570,000 for energy efficiency initiatives such as HVAC and lighting efficiency upgrades for Chelsea, Southboro, and various metropolitan facilities.
- \$114,000 for **Training and Meetings** primarily to cover training required for job duties, health and safety compliance, and job-related licensures and certifications. The \$51,000 increase from FY11 Actual spending to the FY12 CEB reflects lower attendance at training in FY11 due to the work required to address the 2010 water pipeline break and leak.
- \$582,000 or 1% of the FY12 CEB is for **Professional Services**, including \$548,000 for engineering, which is made up of \$300,000 for as-needed engineering services; \$93,000 for dam inspection and engineering work related to dam repairs; \$40,000 for the NPDES related Local Limits Study which was started in FY11, but will continue into FY12; and \$5,000 to develop an emergency response plan for invasives control. The budget also includes \$25,000 for energy audits at various metropolitan facilities; \$5,000 for lab and testing services related to water quality; and \$4,000 for the Dig Safe program. The FY12 CEB for Professional Services is \$176,000 or 43.4% more than FY11 Actual spending primarily due to the expected use of as-needed engineering contracts to support the design of maintenance projects.
- \$963,000 or 1% of the budget is for **Other Materials**, including \$330,000 for vehicle expenses for gas, mileage reimbursements, and tolls; \$235,000 for health and safety supplies; \$190,000 for work clothes; and \$125,000 for lab and testing supplies. The FY12 CEB for Other Materials is \$58,000 or 5.7% lower than FY11 Actual spending due to several unbudgeted expenditures in FY11.
- \$3.2 million or 5% is for **Other Services**, including \$1.7 million for annual lease payments for the Chelsea office building, \$577,000 for telephone and SCADA needs at various facilities, \$369,000 for Other Services of which the majority support invasives control, and \$350,000 for police details. The FY12 CEB for Other Services is \$311,000 or 10.7% more than FY11 Actual spending primarily due to increases in the Chelsea rent

and taxes, the addition of \$120,000 in communications fees to support the new contaminant monitoring system at the reservoirs, and \$65,000 for deployment of an aquatic harvester to clear invasive growth from the Chestnut Hill Reservoir.

## LABORATORY SERVICES

FY12 Final Current Expense Budget LABORATORY SERVICES							
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12		
WAGES & SALARIES	\$ 3,853,465	\$ 4,000,086	\$ 4,029,511	\$ 4,043,016	\$ 13,505	0.3%	
OVERTIME	51,864	64,595	61,556	50,442	(11,114)	-18.1%	
FRINGE BENEFITS	387	423	405	1,200	795	196.3%	
UTILITIES	20,329	16,834	16,697	23,633	6,936	41.5%	
ONGOING MAINTENANCE	209,999	222,466	233,054	245,902	12,848	5.5%	
TRAINING & MEETINGS	832	989	206	2,000	1,794	870.9%	
PROFESSIONAL SERVICES	112,729	118,528	97,446	104,936	7,490	7.7%	
OTHER MATERIALS	762,158	771,432	870,872	946,096	75,224	8.6%	
OTHER SERVICES	82,440	76,705	90,348	88,154	(2,194)	-2.4%	
<b>TOTAL</b>	<b>\$ 5,094,203</b>	<b>\$ 5,272,058</b>	<b>\$ 5,400,095</b>	<b>\$ 5,505,379</b>	<b>\$ 105,284</b>	<b>1.9%</b>	

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

Most MWRA laboratory testing is done in-house. Certain highly specialized or low volume tests are outsourced, such as tests for dioxins and radioactivity. In January 2004, MWRA brought most of the laboratory testing for the Harbor and Outfall Monitoring (HOM) in-house including the water column laboratory work and the monthly boat sampling of Massachusetts Bay to collect bacteria samples. In July 2004, MWRA brought laboratory testing of Quabbin and Wachusett Reservoirs and their tributaries for the Department of Conservation and Recreation in-house, including operation of the Quabbin Laboratory. In December 2010 EPA and DEP approved reductions to the HOM program. These reductions were already reflected in the DLS CEB since FY10.

### Budget Highlights:

- \$4.0 million is for **Wages and Salaries**, an increase of \$14,000 or 0.3% from FY11 Actual spending. Wages and Salaries account for 73% of the FY12 Current Expense Budget (CEB) of which \$3.9 million covers regular pay for 54 positions. The FY12 Budget also includes \$107,000 for up to three temporary employee positions primarily to cover peak workload and Harbor and Outfall Monitoring and Carroll Water Treatment Plant special testing.
- \$24,000 is for **Utilities**, which consists of gases and cryogenic liquids used for various lab instruments.

- \$246,000 is for **Maintenance** which includes \$175,000 for equipment service contracts, \$40,000 for Laboratory modifications, and \$4,000 for HVAC services to annually certify the fume hoods.
- \$105,000 is for **Professional Services** which covers lab and testing analysis services. The Lab contracts out a variety of complex and/or low volume tests. Outside labs are used for emergencies, “second opinions”, capacity constraints, and unavailability of specialized equipment or economic justification.
- \$946,000 is for **Other Materials** which includes \$573,000 for laboratory and testing supplies and \$330,000 for replacement of obsolete or older equipment. The FY12 Budget is \$75,000 or 8.6% more than FY11 Actual spending primarily due to planned replacement of older equipment.
- \$88,000 is for **Other Services** and primarily covers boat rental service on an as-needed basis, boat dockage for two boats, removal of hazardous waste, and courier service for shipping samples between laboratories.

## ENVIRONMENTAL QUALITY

FY12 Final Current Expense Budget ENVIRONMENTAL QUALITY						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 1,371,796	\$ 1,451,658	\$ 1,405,236	\$ 1,431,869	\$ 26,633	1.9%
OVERTIME	2,400	1,233	465	2,633	2,168	466.2%
FRINGE BENEFITS	-	-	-	-	-	-
ONGOING MAINTENANCE	951	390	142	-	(142)	-100.0%
TRAINING & MEETINGS	1,668	43	1,644	1,000	(644)	-39.2%
PROFESSIONAL SERVICES	2,418,808	2,354,958	2,225,388	1,567,400	(657,988)	-29.6%
OTHER MATERIALS	4,002	9,951	2,104	15,030	12,926	614.4%
OTHER SERVICES	6,293	3,860	2,570	4,200	1,630	63.4%
<b>TOTAL</b>	<b>\$ 3,805,918</b>	<b>\$ 3,822,093</b>	<b>\$ 3,637,549</b>	<b>\$ 3,022,132</b>	<b>\$ (615,417)</b>	<b>-16.9%</b>

The **Environmental Quality Department (ENQUAD)** reports on environmental findings that may be linked to MWRA operations and projects. The department's main activities are monitoring sewage influent and effluent quality; monitoring the water quality of Boston Harbor, its tributary rivers, and Massachusetts Bay; managing data and entering quality data; and complying with the reporting requirements of MWRA's NPDES permits. MWRA submits these permit reports to state and federal regulators, the Outfall Monitoring Science Advisory Panel and its subcommittees, and several libraries; and, as required by the permits, MWRA posts many of these reports on its website. All technical reports and several reports on water quality in the harbor and the bay are also posted on the website.

### Budget Highlights:

- \$1.4 million or 47% of the FY12 Current Expense Budget (CEB) is for **Wages and Salaries** for 17 positions. The FY12 Budget is \$27,000 or 1.9% more than FY11 Actual spending.
- \$1.6 million or 52% is for **Professional Services** for outside laboratory testing and analysis associated with the Harbor and Outfall Monitoring (HOM) Program. This includes \$1.3 million for the HOM7 and HOM8 contracts, which will be completed by several vendors. The balance of the budget covers the following contracts. Except for the biotoxicity testing, these projects are co-funded through cost-sharing arrangements with other organizations:
  - o Biotoxicity testing for Deer Island Treatment Plant, Clinton Treatment Plant, and CSO facilities
  - o National Oceanic and Atmospheric Administration's National Data Buoy Center for required continuous monitoring
  - o University of Maine's buoy off Cape Ann
  - o Algae monitoring off Cape Ann on buoy
  - o Cape Cod Bay water quality monitoring
  - o Bays Eutrophication Model
  - o Study of trace organic chemicals (such as personal care products, pharmaceuticals, and endocrine disruptors).

The significant decrease \$658,000 from FY11 Actual spending to the FY12 CEB reflects the reduction in scope of HOM monitoring based on the favorable findings of nine years of monitoring data and regulatory approval. MWRA will save approximately \$800,000 per year in monitoring costs due to the changes.

## ENGINEERING AND CONSTRUCTION

<b>FY12 Final Current Expense Budget ENGINEERING AND CONSTRUCTION</b>						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 7,840,735	\$ 7,991,274	\$ 7,540,258	\$ 7,725,354	\$ 185,096	2.5%
OVERTIME	77,998	112,912	182,036	164,920	(17,116)	-9.4%
FRINGE BENEFITS	193	479	713	500	(213)	-29.9%
ONGOING MAINTENANCE	12,583	8,039	2,739	9,400	6,661	243.2%
TRAINING & MEETINGS	13,110	745	5,757	6,400	643	11.2%
PROFESSIONAL SERVICES	300	-	-	-	-	-
OTHER MATERIALS	127,861	178,514	125,635	122,750	(2,885)	-2.3%
OTHER SERVICES	24,961	31,656	24,409	33,820	9,411	38.6%
<b>TOTAL</b>	<b>\$ 8,097,741</b>	<b>\$ 8,323,619</b>	<b>\$ 7,881,547</b>	<b>\$ 8,063,144</b>	<b>\$ 181,597</b>	<b>2.3%</b>

The **Engineering and Construction Department (ECD)** manages and coordinates the planning, design, and construction of system improvements that ensure a safe and adequate water supply and a reliable wastewater collection and treatment. Staff is organized into three units including Wastewater Engineering, Water Engineering, and Construction.

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

### **Budget Highlights:**

- \$7.7 million for **Wages and Salaries** represents 96% of the FY12 Current Expense Budget (CEB) and includes funding for 86 positions.
- \$165,000 for **Overtime** to cover resident inspection at construction sites after regular work hours to ensure monitoring of construction projects. Overtime is also used for unplanned design or survey needs, attendance at evening public meetings, and meeting deadlines.
- \$9,000 for **Maintenance** which covers service contracts for the DISC Unit's specialized printers and plotters. The FY12 Budget includes \$7,200 in maintenance services for a specialized copier that came off warranty at the beginning of FY12.
- \$123,000 for **Other Materials**, which includes \$104,000 for vehicle expense for staff traveling to construction sites, \$11,000 for office supplies, and \$4,000 for work clothes.
- \$34,000 for **Other Services** which includes \$17,000 for printing of in-house design plans and specifications, \$8,200 for memberships and dues, \$8,000 for telephone expenses, and \$1,000 for police details.



Law Division  
Budget

## LAW DIVISION

FY12 Final Current Expense Budget LAW DIVISION						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 1,657,976	\$ 1,653,543	\$ 1,612,193	\$ 1,617,550	\$ 5,357	0.3%
OVERTIME	-	-	-	-	-	-
TRAINING & MEETINGS	570	221	845	2,000	1,155	136.7%
PROFESSIONAL SERVICES	126,256	23,882	67,544	146,000	78,456	116.2%
OTHER MATERIALS	7,952	4,301	4,095	7,314	3,219	78.6%
OTHER SERVICES	22,294	26,042	25,702	29,147	3,445	13.4%
<b>TOTAL</b>	<b>\$ 1,815,048</b>	<b>\$ 1,707,989</b>	<b>\$ 1,710,379</b>	<b>\$ 1,802,011</b>	<b>\$ 91,632</b>	<b>5.4%</b>

The Law Division provides legal counsel to the Board of Directors, the Executive Director, and staff on compliance with federal and state laws, regulations, court cases, and administrative orders. Staff also handle and provide assistance with respect to litigation matters, real estate matters, labor/employment issues, procurement, and construction issues. The General Counsel interprets the MWRA Enabling Act and provides advice on conflict of interest and Code of Conduct issues. Division attorneys monitor the work of outside counsel when it is necessary to retain such services. The budget for the Division accounts for less than 1% of MWRA's FY12 Proposed Budget.

Law Division staff, though usually representing MWRA in a defensive posture, also work with Operations Division staff to effectuate cost recovery claims for design errors and omissions by MWRA design professionals. In addition, the Law Division assists in the early resolution of contractor and vendor claims prior to litigation so as to resolve them as favorably and early as possible thereby reducing or eliminating litigation costs and interest payable upon such claims were they to be litigated.

### FY12 Goals:

- Timely and cost effective resolution of legal disputes involving MWRA, through litigation or alternative means of dispute resolution.
- High quality legal services to support the business and operational needs of MWRA in the areas of real estate, labor and employment, regulatory compliance, litigation, construction, and business law.
- Advocacy of MWRA interests in new and developing regulatory issues.
- Continue to exhaust all opportunities to shift cost of legal representation to insurers and indemnitors and to litigate insurance coverage disputes as they arise, all in the interest of cost savings.

### Budget Highlights:

- The FY12 Final Budget is \$1.8 million, an increase of \$92,000 or 5.4% from FY11 Actual spending.
- \$1.6 million for **Wages and Salaries**, an increase of \$5,000 or 0.3% from FY11 Actual spending. The budget funds 18 positions.
- \$146,000 for **Professional Services**, an increase of \$78,000 or 116.2% from FY11 Actual spending due to lower than projected spending on outside legal counsel during FY11.



Administration & Finance Division  
Budget

**ADMINISTRATION AND FINANCE DIVISION**

FY12 Final Current Expense Budget ADMINISTRATION AND FINANCE						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 15,493,876	\$ 15,494,376	\$ 15,166,542	\$ 15,331,403	\$ 164,861	1.1%
OVERTIME	57,887	72,528	48,666	58,478	9,812	20.2%
FRINGE BENEFITS	16,527,910	15,925,897	17,289,695	17,884,876	595,181	3.4%
WORKERS' COMPENSATION	1,841,638	2,226,082	2,228,175	2,100,000	(128,175)	-5.8%
UTILITIES	134,173	127,177	138,122	138,526	404	0.3%
ONGOING MAINTENANCE	3,993,104	2,573,184	3,135,984	3,555,228	419,244	13.4%
TRAINING & MEETINGS	34,642	33,728	36,965	60,797	23,832	64.5%
PROFESSIONAL SERVICES	778,629	922,605	859,070	1,337,376	478,306	55.7%
OTHER MATERIALS	1,095,752	1,310,988	858,898	1,139,965	281,067	32.7%
OTHER SERVICES	2,937,756	2,859,420	4,709,830	3,601,370	(1,108,460)	-23.5%
<b>TOTAL</b>	<b>\$ 42,895,367</b>	<b>\$ 41,545,985</b>	<b>\$ 44,471,947</b>	<b>\$ 45,208,019</b>	<b>\$ 736,072</b>	<b>1.7%</b>

FY12 Final Current Expense Budget ADMINISTRATION AND FINANCE						
DEPARTMENT	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
DIR OFFICE (FINANCE)	\$ 204,016	\$ 233,550	\$ 322,759	\$ 329,586	\$ 6,827	2.1%
RATES AND BUDGET	698,082	746,584	741,029	739,890	(1,139)	-0.2%
TREASURY	986,388	1,099,772	904,827	939,611	34,784	3.8%
CONTROLLER	1,488,219	1,533,605	1,538,224	1,521,253	(16,971)	-1.1%
RISK MANAGEMENT	344,036	395,661	393,035	387,900	(5,135)	-1.3%
DIVISION DIR (SUPP SER)	238,307	174,138	-	-	-	-
HUMAN RESOURCES	20,372,112	20,142,549	21,606,094	22,235,031	628,937	2.9%
MIS	9,059,021	8,810,393	8,532,999	10,090,080	1,557,081	18.2%
FACILITIES MANAGEMENT	2,514,224	2,438,926	2,551,180	2,574,543	23,363	0.9%
FLEET SERVICES	1,883,704	1,770,528	1,872,739	1,986,991	114,252	6.1%
PROCUREMENT	4,415,886	3,435,592	3,516,243	3,718,743	202,500	5.8%
REAL PROPERTY / ENVIRONMENTAL MGMT	691,372	764,687	2,492,818	684,392	(1,808,426)	-72.5%
<b>TOTAL</b>	<b>\$ 42,895,367</b>	<b>\$ 41,545,985</b>	<b>\$ 44,471,947</b>	<b>\$ 45,208,019</b>	<b>\$ 736,072</b>	<b>1.7%</b>

The **Administration and Finance Division** is responsible for managing the finance and support service functions of the Authority.

The Administration and Finance (A&F) Division is comprised of eleven departments: Director’s Office; Rates and Budget; Treasury; Controller; Risk Management; Human Resources; Management Information Systems (MIS); Facilities Management; Fleet Services; Procurement; and Real Property and Environmental Management.

The Administration and Finance Division performs a multitude of functions that support the daily operations and ensure the implementation of the Authority’s long term goals and strategies.

The Administration and Finance Division ensures that a variety of fiscal management systems are in place to monitor and control the Current Expense Budget (CEB) and Capital Improvement Program (CIP).

## **FY11 Accomplishments**

- Continued providing more up-to-date, streamlined financial information to the Board of Directors and external constituencies on both the Current Expense Budget and Capital Improvement Program.
- Managed FY11 spending to allow for a \$32.1 million defeasance which will be used to reduce the Rate Revenue Requirement in targeted future years, as part of the Authority's multi-year rate strategy.
- Managed MWRA investment portfolio to maximize returns in a low yield environment.
- Developed the FY12 Budget consistent with the multi-year rate strategy and the FY11 planning estimates.
- Successfully applied for and received \$1.4 million in reimbursement from the Federal Emergency Management Agency (FEMA) for expenses relating to the rain storms of mid and late March 2010.
- Successfully procured \$525.4 million in replacement Standby Bond Purchase Agreements increasing MWRA's diversity across banks.
- Commenced rolling out electronic time sheet approval functions to seventeen Authority departments and automated the employee leave balance calendars.
- Successfully supported Authority's efforts in defending itself in several personnel arbitration hearings.
- Successfully supported the procurement, selection, and execution of the consultant contract for an agency-wide Staffing Assessment Study, and awarded an IT contract for the development of a five-year Strategic Information Technology Plan.
- Successfully negotiated a one year extension to the MWRA Dental Program with no increase in insurance premiums.
- Commenced contract negotiations for successor agreements with each of the Authority's five collective bargaining units.
- Replaced 7+ year old personal computers with energy efficient models which contributes to the green computing model. Additionally, began upgrading computers to Microsoft Office 2007.
- Completed Reverse 911 enhancements including creating three scenarios (all water communities, all wastewater communities, and all communities) for initiating Reverse 911 calls.
- Completed Phase I of the Green Data Center Initiatives using VMware's virtualization software to eliminate the need for 10 new development servers which reduced power consumption, cooling, and carbon footprint in the MIS datacenter.
- Completed implementation of energy efficiency improvements at CNY headquarters based on recommendations of NSTAR energy audits.
- Awarded the following major contracts in FY11: Purchase and Supply of Electricity Interval Accounts; Remote Headworks Upgrade Design; Deer Island Treatment Plant (DITP) Thermal Power Plant Dump Condenser; Site Work and Excavation Shaft 5; Emergency Repair of 120 Inch Pipe Shaft 5; Harbor and Outfall Monitoring; Lynnfield/Saugus Pipelines; Section 36 Watertown Waltham Connection Design; Carroll Water Treatment

Plant Ultraviolet Disinfection Facilities; DITP Human Machine Interface; CWTP Second Gaseous Oxygen Line; Staffing Study; Liquidity Facility for Variable Rate Bonds; Northern Intermediate High (NIH) Redundant Pipeline Design; DITP Digested Sludge Overflow Piping; Fore River Railroad License and Operating Agreement; Agency-wide Insurance; Meter 70 Water Main; Dam Repairs Sudbury et al.; Purchase and Supply of Electric Power DITP; and Section 156 Sewer Rehab (Everett) Design Build.

- Advertised or received bids/proposals/statements for the following: Spot Pond Storage Facility Design Build; DITP North Main Pump Station (NMPS) Variable Frequency Drives; DITP Air Emissions Testing; NIH Stoneham-Reading Connection; and Five Year Strategic Information Technology Plan.
- Revised Authority's standard insurance terms for construction contracts. Also, reviewed and revised methods for determining insurance requirements on construction and non-professional services contracts. These changes continue to appropriately protect and indemnify the Authority while improving clarity and increasing competition.
- Arranged for emergency and expedited contracts for MetroWest Shaft 5 and 5A repairs.
- Purchasing developed a "Purchasing Procedures Quick Reference Guide" and distributed it to staff in departments involved in the purchasing process.

#### **FY12 Goals:**

- Ensure the fiscal strength of MWRA through judicious, informed, and farsighted allocation of resources.
- Develop strategies for minimizing increases in community assessments and charges.
- Ensure uniform contract language, standard safeguards, and competitive bids for the MWRA.
- Maintain favorable credit ratings for MWRA's revenue bonds.
- Provide upgrades and enhancements to the integrated Management Information Systems (MIS) to ensure efficiency, based on the IT Study recommendations.
- Ensure effective, coordinated operating and capital budget planning throughout MWRA.
- Maintain effective relationships with the unions representing the MWRA workforce while protecting and enhancing management flexibility.

#### **FY12 Initiatives**

- Continue implementation and documentation of new computer application to support the Capital Improvement Program.
- Continue close monitoring of financial markets to better position the Authority to take advantage of any opportunities to maximize investment income, refund bonds for savings, and reduce debt financing obligations.
- Continue assessment and evaluation of sustainable cost savings opportunities throughout the organization.

- Manage the process for negotiating successor collective bargaining agreements with all five unions. Upon Board ratification, implement collective bargaining agreements.
- Participate in the evaluation of the impact of the Staffing Study recommendations and work with senior management and collective bargaining units to implement as needed specific recommendations adopted by the Board of Directors.
- Development of a long term, detailed Strategic Information Technology Plan based on the IT Study recommendations.

**ADMINISTRATION AND FINANCE DIVISION DIRECTOR'S OFFICE**

FY12 Final Current Expense Budget ADMINISTRATION AND FINANCE DIVISION DIRECTOR'S OFFICE							
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12		
WAGES & SALARIES	\$ 203,243	\$ 229,685	\$ 316,476	\$ 321,915	\$ 5,439	1.7%	
TRAINING & MEETINGS	75	2,228	1,764	2,286	522	29.6%	
OTHER MATERIALS	465	1,204	3,922	3,500	(422)	-10.8%	
OTHER SERVICES	233	433	597	1,885	1,288	215.7%	
<b>TOTAL</b>	<b>\$ 204,016</b>	<b>\$ 233,550</b>	<b>\$ 322,759</b>	<b>\$ 329,586</b>	<b>\$ 6,827</b>	<b>2.1%</b>	

The **Administration and Finance (A&F) Division Director's Office** oversees a multitude of functions that support the daily operations and ensure the implementation of the Authority's long-term goals and strategies.

The Director's Office is responsible for the centralized financial functions of rates development, revenue collection, budgeting, capital financing, debt and investment management, accounting, payroll processing, and risk management as well as the support functions of procurement, human resources, management information systems, fleet services, facilities management, and real property and environmental management. Additionally, the Director's Office ensures that transactions comply with all rules, regulations, Authority policies and procedures, and contract terms. The Director's Office manages the development and implementation of policies to uphold the efficient utilization of resources and control of all monies. The Director's Office provides advice and analysis to the Executive Director and the Board of Directors on all administrative and financial issues.

The division's continuing challenge in FY12 will be maintaining agency-wide focus on balancing the competing needs to minimize rate increases while ensuring the provision of critical MWRA services.

**FY12 Goals:**

- Manage and coordinate the Authority's finance and support service functions.
- Guide and coordinate division activities to support MWRA's goals and objectives.
- Continuously improve processes and performance for greater efficiency.
- Develop and implement long-term strategies to ensure reasonable rate increases to MWRA's communities.

**Budget Highlights:**

- The FY12 Final Budget includes \$322,000 for **Wages and Salaries**, an increase of \$5,000 or 1.7% from FY11 Actual spending. The FY12 Final Budget funds three positions.



## RATES & BUDGET

FY12 Final Current Expense Budget RATES AND BUDGET						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 690,966	\$ 744,737	\$ 739,705	\$ 739,178	\$ (527)	-0.1%
TRAINING & MEETINGS	-	-	-	-	-	-
PROFESSIONAL SERVICES	0	0	0	0	-	-
OTHER MATERIALS	589	447	468	400	(68)	-14.5%
OTHER SERVICES	6,527	1,400	856	312	(544)	-63.6%
<b>TOTAL</b>	<b>\$ 698,082</b>	<b>\$ 746,584</b>	<b>\$ 741,029</b>	<b>\$ 739,890</b>	<b>\$ (1,139)</b>	<b>-0.2%</b>

The **Budget Department** provides the financial analysis that allows MWRA to translate its goals, and legal and financial commitments into cost-effective annual and multi-year programs and budgets. Department staff works closely with divisional staff to coordinate development of the long-term Capital Improvement Program (CIP) and monitor the progress of capital projects compared to projected schedules and budgeted spending. Staff also coordinates development of MWRA's annual Current Expense Budget (CEB) and monitors spending compared to budget throughout the year. The Budget Department also manages the annual process of establishing water and sewer assessments to be paid by MWRA's member communities and develops planning estimates of future rate projections.

### FY11 Accomplishments:

- Developed the FY12 Final Budget consistent with the FY11 planning estimates, for both the Current Expense Budget and the Capital Improvement Program.
- Started the documentation of the new system application for the CIP.
- Developed new reporting for explaining the impacts of various elements of community assessments.

### FY12 Goals:

- Continually enhance processes and the management of resources to deliver the final CIP and CEB timely and accurately.
- Adhere to all MWRA policies, procedures, and administrative practices as well as all relevant statutory and regulatory authority, accounting, and budgeting principles.
- Improve the quality and presentation of budget documents and regularly required reports while working to develop new reports that will aid the Authority's Board of Directors, Management, and the MWRA Advisory Board.

### FY12 Initiatives:

- Continue to develop staff skills for cross functionality between CIP and CEB.
- Continue assessment and evaluation of sustainable cost savings opportunities throughout the organization.

**Budget Highlights:**

- The FY12 Final Budget is \$740,000, a decrease of \$1,000 or 0.2% from FY11 Actual spending.
- \$739,000 for **Wages and Salaries**, a decrease of \$1,000 or 0.1%, from FY11 Actual spending. The FY12 Final budget funds eight positions.
- \$312 for **Other Services**, a decrease of \$1,000 or 63.6% from FY11 Actual spending, due to a reduction in Printing and Duplicating services. Duplication of the Budget documents is being done in-house instead of being sent out to a printing service.

**TREASURY**

<b>FY12 Final Current Expense Budget TREASURY</b>						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 748,751	\$ 725,927	\$ 641,248	\$ 673,135	\$ 31,887	5.0%
OVERTIME	197	122	309	-	(309)	-100.0%
ONGOING MAINTENANCE	0	0	0	0	-	-
TRAINING & MEETINGS	33	0	0	0	-	-
PROFESSIONAL SERVICES	228,793	366,400	257,329	259,056	1,727	0.7%
OTHER MATERIALS	2,175	614	1,041	300	(741)	-71.2%
OTHER SERVICES	6,439	6,709	4,900	7,120	2,220	45.3%
<b>TOTAL</b>	<b>\$ 986,388</b>	<b>\$ 1,099,772</b>	<b>\$ 904,827</b>	<b>\$ 939,611</b>	<b>\$ 34,784</b>	<b>3.8%</b>

The **Treasury Department** secures funds for ongoing operations and capital programs in addition to processing cash disbursements. Department staff collects revenue, disburses funds, and manages grant and loan programs in addition to debt issuance and investments.

**FY11 Accomplishments:**

- In cooperation with the Operations Division, successfully applied for and received \$1.4 million in reimbursement from the Federal Emergency Management Agency (FEMA) for the expenses relating to the rain events in the Spring 2010.
- Successfully procured \$525.4 million in replacement Standby Bond Purchase Agreements increasing MWRA's diversity across banks and further diversifying the expiration dates. The strong interest from proposers validates MWRA's strong credit quality.
- Managed MWRA's investment portfolio to maximize investment returns in a low yield environment given the necessary liquidity and security constraints.
- Amended the two-part swap agreement with Barclays Capital changing to the London Interbank Offered Rate (LIBOR) from the Securities Industry and Financial Markets Association (SIFMA) index. This change resulted in an estimated \$7.3 million in total debt service savings to the end of the swap in 2037.

**FY12 Goals:**

- Manage MWRA's debt portfolio to contribute to the achievement of sustainable and predictable rate increases.
- Maximize investment return while maintaining compliance with the General Revenue Bond Resolution requirements regarding security and liquidity.

**Budget Highlights:**

- The FY12 Final Budget is \$940,000, an increase of \$35,000 or 3.8% from FY11 Actual spending.
- \$673,000 for **Wages and Salaries**, an increase of \$32,000 or 5.0% from FY11 Actual spending. The final budget funds nine positions.
- \$259,000 for **Professional Services**, an increase of \$2,000 or 0.7% from FY11 Actual spending. The Professional Services budget includes \$58,000 for the Triennial Consulting Engineer's Report required by Section 714 (c) of the General Revenue Bond Resolution which must be performed during FY12.

## CONTROLLER

FY12 Final Current Expense Budget CONTROLLER							
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12		
WAGES & SALARIES	\$ 1,285,844	\$ 1,343,518	\$ 1,348,206	\$ 1,359,103	\$ 10,897	0.8%	
OVERTIME	-	-	-	-	-	-	
ONGOING MAINTENANCE	14	-	-	-	-	-	
TRAINING & MEETINGS	350	10	-	-	-	-	
PROFESSIONAL SERVICES	198,124	189,211	189,000	160,000	(29,000)	-15.3%	
OTHER MATERIALS	2,809	79	109	300	191	175.2%	
OTHER SERVICES	1,078	787	909	1,850	941	103.5%	
<b>TOTAL</b>	<b>\$ 1,488,219</b>	<b>\$ 1,533,605</b>	<b>\$ 1,538,224</b>	<b>\$ 1,521,253</b>	<b>\$ (16,971)</b>	<b>-1.1%</b>	

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

### FY11 Accomplishments:

- Rolled out electronic time sheet approval to seventeen Authority departments.
- Converted 45 person department to self-service time entry.
- Replaced manually prepared employee leave calendar with automated product.

### FY12 Goals:

- Implement process efficiencies in all department units.
- Enhance controls to safeguard Authority assets and ensure accurate and timely reporting.

### FY12 Initiatives:

- Complete implementation of electronic timesheet approval to continue paperless initiative.
- Implement electronic vendor remittances.

### Budget Highlights:

- The FY12 Final Budget is \$1.5 million, a decrease of \$17,000 or 1.1%, from FY11 Actual spending.
- \$1.4 million for **Wages and Salaries**, an increase of \$11,000 or 0.8% from FY11 Actual spending. The final budget funds 19 positions.
- \$160,000 for **Professional Services**, a decrease of \$29,000 or 15.3% from FY11 Actual spending due to a new contract for audit services at a reduced fee. The FY12 Final Budget reflects anticipated costs associated with

the annual financial statement audit, the A-133 Single Audit related to the receipt of federal funds, and the actuarial services related to GASB 45 Other Post Employment Benefits.

## RISK MANAGEMENT

FY12 Final Current Expense Budget RISK MANAGEMENT						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 315,369	\$ 338,558	\$ 351,829	\$ 357,450	\$ 5,621	1.6%
OVERTIME	-	147	566	-	(566)	-100.0%
TRAINING & MEETINGS	-	-	-	-	-	-
PROFESSIONAL SERVICES	28,145	56,032	40,134	30,000	(10,134)	-25.3%
OTHER MATERIALS	53	21	(214)	-	214	-100.0%
OTHER SERVICES	469	903	720	450	(270)	-37.5%
<b>TOTAL</b>	<b>\$ 344,036</b>	<b>\$ 395,661</b>	<b>\$ 393,035</b>	<b>\$ 387,900</b>	<b>\$ (5,135)</b>	<b>-1.3%</b>

The **Risk Management Department** is responsible for all MWRA insurance and risk management functions. Department staff manages all administrative functions relating to the initial reporting, processing, and resolution of construction contract claims and self-insured auto, general liability, and property damage claims. Department staff is responsible for annual procurement, renewals, and maintenance of all Authority-wide insurance policies and programs and also for managing all aspects of MWRA's Contractor Insurance Certificate program. Department staff serves as a liaison to insurance industry participants including brokers, insurers, insurance consultants, attorneys, and all MWRA departments.

### FY12 Goals:

- Process self-insured automobile, general liability, property damage and construction contract claims in an efficient and timely manner.
- Secure the timely, cost effective renewal of Authority-wide insurance contracts.
- Minimize MWRA's exposure to financial loss stemming from contractor and vendor activities by establishing insurance requirements and monitoring compliance.

### Budget Highlights:

- The FY12 Final Budget is \$388,000, a decrease of \$5,000 or 1.3% from FY11 Actual spending.
- \$357,000 is for **Wages & Salaries**, an increase of \$6,000 or 1.6% from FY11 Actual spending. The final budget funds four positions.
- \$30,000 for **Professional Services**, a decrease of \$10,000 or 25.3% from FY11 Actual spending. This line item includes funds for an insurance consultant.

## HUMAN RESOURCES

FY12 Final Current Expense Budget HUMAN RESOURCES						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 1,640,764	\$ 1,654,665	\$ 1,686,848	\$ 1,678,937	\$ (7,911)	-0.5%
OVERTIME	298	-	-	-	-	-
FRINGE BENEFITS	16,526,977	15,924,991	17,289,376	17,883,876	594,500	3.4%
WORKERS' COMPENSATION	1,841,638	2,226,080	2,228,175	2,100,000	(128,175)	-5.8%
ONGOING MAINTENANCE	-	-	18	-	(18)	-100.0%
TRAINING & MEETINGS	4,886	2,692	2,323	3,963	1,640	70.6%
PROFESSIONAL SERVICES	323,568	310,962	372,608	537,820	165,212	44.3%
OTHER MATERIALS	13,802	14,489	15,099	16,170	1,071	7.1%
OTHER SERVICES	20,179	8,670	11,647	14,265	2,618	22.5%
<b>TOTAL</b>	<b>\$ 20,372,112</b>	<b>\$ 20,142,549</b>	<b>\$ 21,606,094</b>	<b>\$ 22,235,031</b>	<b>\$ 628,937</b>	<b>2.9%</b>

FY12 Final Current Expense Budget HUMAN RESOURCES by Area						
AREA	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
EMPLOYEE/COMP/BEN	\$ 593,013	\$ 628,993	\$ 657,772	\$ 799,175	\$ 141,403	21.5%
LABOR RELATIONS	992,591	995,472	1,035,454	1,024,822	(10,632)	-1.0%
TRAINING	389,848	329,468	361,952	397,158	35,206	9.7%
CENTRALIZED FRINGE BENEFITS	18,396,660	18,188,616	19,550,916	20,013,876	462,960	2.4%
<b>TOTAL</b>	<b>\$ 20,372,112</b>	<b>\$ 20,142,549</b>	<b>\$ 21,606,094</b>	<b>\$ 22,235,031</b>	<b>\$ 628,937</b>	<b>2.9%</b>

The **Human Resources Department** is comprised of the following three units:

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

### FY11 Accomplishments:

- Developed the strategy for negotiating successor collective bargaining agreements with MWRA's five bargaining units. Oversaw the development of proposals and presented information to the Board to obtain parameters for contract negotiations.
- Successfully supported the Authority's efforts in defending itself in several arbitration hearings.

- Supported the procurement, selection, and execution of the consultant contract for an agency-wide staffing assessment study.
- Implemented a full enrollment of all employees for GIC Health Insurance.
- Performed the training, design, and testing activities needed to implement a new module in the Lawson System which allows for elimination of the standalone software package formerly used by the Training group.
- Negotiated a one year extension of the MWRA Dental Program with no increase to insurance premiums.
- Delivered Administrative Certification Program (ACP) training and Productivity Improvement Program (PIP) training.
- Worked with MIS, collected the required acknowledgement of the State Ethics Commission's Summary of the Conflict of Interest Law from all employees.
- Provided a variety of technical training to MWRA employees including Confined Space Entry, Tower Climbing Safety, Spill Containment, Crane and Derrick Rigging and Signal person training, and OSHA Annual Refresher training.

**FY12 Goals:**

- Attract and retain a qualified high-performance workforce, hire and promote qualified minority and female employees, and offer competitive total compensation packages (salary and benefits) to all employees.
- Maintain effective relationships with the unions representing the MWRA workforce while protecting and enhancing management flexibility. Ensure that collective bargaining objectives are met, support MWRA initiatives by designing and implementing appropriate labor relations strategies, create an environment that fosters safety consciousness and productive work, maximize the number of early returns to work by employees who have incurred on-the-job injuries or illnesses, and aggressively manage the Workers' Compensation Program to reduce costs.

**FY12 Initiatives:**

- Support the collective bargaining negotiation process with data analysis, costing analysis, and wage and benefit survey data collection and analysis.
- Conduct Harassment Prevention Training for all employees and supervisors.
- Provide additional training for Administrative Certificate Program (ACP) and Productivity Improvement Program (PIP) training. Provide supervisory training for employees seeking to develop and enhance their supervisory skills.
- Organize compliance with the bi-annual online State Ethics Training for all employees and maintain training compliance documentation as required by the State Ethics Commission.
- Continue to automate and streamline Human Resources processes including recruitment and hiring processes.
- Procure and select vendors for MWRA's Employee Assistance Program, medical services program, and the MWRA dental program.

### **Budget Highlights:**

- \$1.7 million for **Wages and Salaries**, a decrease of \$8,000 or 0.5% from FY11 Actual spending. Funding supports 21 positions.
- \$17.9 million for **Fringe Benefits**, an increase of \$595,000 or 3.4% from FY11 Actual spending. The budget includes \$15.5 million for health insurance costs, \$1.2 million for Medicare taxes, \$988,000 for dental insurance costs and union health and welfare fund contributions, \$175,000 for unemployment insurance payments, and \$31,000 for tuition reimbursement.

Health Insurance and Dental Insurance budgets increased 2.7% and 9.5% respectively from FY11 Actual spending due to anticipated contractual increases. Unemployment Insurance increased 58% from FY11 Actual spending based on historical spending.

- \$2.1 million for **Workers' Compensation** budget reflects a decrease of \$128,000 or 5.8% from FY11 Actual spending. The Human Resource Department is responsible for the management of this program and the coordination with the third-party administrator and legal counsel.
- \$538,000 for **Professional Services**, an increase of \$165,000 or 44.3%, from FY11 Actual spending. The FY12 Final Budget includes \$155,000 for MWRA's staffing study, \$155,000 for professional development and technical training, \$119,000 for workers' compensation claims administration and legal services, \$55,000 for arbitrators and arbitration expenses, \$30,000 for medical evaluation services, \$12,000 for the Employee Assistance Program, and \$12,000 for Specialized Investigation Services.

**MANAGEMENT INFORMATION SYSTEMS (MIS)**

FY12 Final Current Expense Budget MANAGEMENT INFORMATION SYSTEM						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 5,072,951	\$ 5,052,192	\$ 4,972,127	\$ 5,119,644	\$ 147,517	3.0%
OVERTIME	2,704	4,968	3,510	2,678	(832)	-23.7%
FRINGE BENEFITS	-	6	-	-	-	-
ONGOING MAINTENANCE	2,736,556	2,201,339	2,581,022	2,785,578	204,556	7.9%
TRAINING & MEETINGS	19,403	24,348	26,311	43,823	17,512	66.6%
PROFESSIONAL SERVICES	-	-	-	350,000	350,000	-
OTHER MATERIALS	395,277	687,062	141,503	389,882	248,379	175.5%
OTHER SERVICES	832,130	840,478	808,526	1,398,475	589,949	73.0%
<b>TOTAL</b>	<b>\$ 9,059,021</b>	<b>\$ 8,810,393</b>	<b>\$ 8,532,999</b>	<b>\$ 10,090,080</b>	<b>\$ 1,557,081</b>	<b>18.2%</b>

The **MIS Department** provides MWRA with the information processing services 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.

**FY11 Accomplishments:**

- **Infrastructure:**
  - Replaced 7+ year old PCs with energy efficient PCs contributing to the green computing model.
  - Upgraded PC's to Microsoft Office 2007.
  - Designed a LAN network solution as part of Phase I of Net2020 project. Researched, identified, and purchased Cisco equipment to match the updated infrastructure.
  - Upgraded LANDesk Software and trained staff. LANDesk is used for remote access, software pushes, and security and reporting.
  - Implemented Active Directory infrastructure to enable PCs to be managed through Group Policy Settings.
  - Completed Phase One of the Green Data Center initiatives using VMware's virtualization software to eliminate the need for 10 new development servers which reduced power consumption, cooling, and carbon footprints in the MIS datacenter.
  - Deployed new Virtual servers at Carroll Water Treatment Plant, Southborough, and Clinton which will host Local Domain Controllers File and Print servers.
  - Networked the Advisory Board at CNY. Dismantled old network connectivity at previous location.
  - Upgraded Active Directory schema to Windows Server 2008 R2.
  
- **Applications:**
  - Time Entry enhancements including Electronic Time Sheets approvals supporting a more paperless office.
  - Reverse 911 enhancements including, creating three Scenarios (all water communities, all sewer communities, and all communities) for initiating Reverse 911 calls.
  - Performed changes to reflect MWRA's new Divisional structure that impact Finance and Human Resource system rollup; reports were implemented for new fiscal year.
  - Completed the implementation phase of the Pretreatment Information Management System after successfully running the Annual Reports.

## **FY12 Goals:**

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

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

## **FY12 Initiatives:**

- Continue to explore and implement new technologies for security of desktop and mobile devices; network infrastructure, operating systems, and cyber security.
- Upgrade to Windows 7 operating system.
- Implement Lawson Mobile Supply Chain Module (MSCM). MSCM will be used by warehouse personnel to scan inventory items when they are received into and issued out of the warehouse, increasing staff efficiency.
- Continue to implement “green computing” initiatives including server consolidations through server virtualization and Storage Area Network (SAN) technology.
- Explore new technologies for future implementation considerations including new networking technologies for upcoming network upgrade, web and mobile platforms for business and information services, and Voice Over IP (VOIP) for communications.
- Implement enhancements/upgrades to existing applications including Maximo, GIS, CUES, and Pretreatment Information Management System (PIMS) and Lawson.
- Review Core Switches for Phase 2 of Net2020 Project; Implement Exchange 2010; Upgrade Sonicwall VPNs and Websense Gateway.
- Begin implementing Print Management Services.

## **Budget Highlights:**

- The FY12 Final Budget of \$10.1 million, an increase of \$1.6 million or 18.2%, as compared to FY11 Actual spending.
- \$5.1 million for **Wages and Salaries**, an increase of \$148,000 or 3.0%, as compared to the FY11 Actual spending. The budget includes funds for 60 positions.

- \$2.8 million for **Ongoing Maintenance**, an increase of \$205,000 or 7.9%, as compared to FY11 Actual spending. Maintenance spending is for license and maintenance fees to support administrative, operations, and database applications used by MWRA staff.
- \$44,000 for **Training and Meetings**, an increase of \$18,000 or 66.6% as compared to FY11 Actual spending. Funding will support staff training in various computer applications.
- \$350,000 is budgeted for **Professional Services**, to support the continued development of an MIS Strategic Plan and implementation services requested by the Board of Directors.
- \$390,000 for **Other Materials**, an increase of \$248,000 or 175.5%, as compared to FY11 Actual spending primarily due to specialized hardware needs.
- \$1.4 million for **Other Services**, an increase of \$590,000 or 73.0%, as compared to FY11 Actual spending primarily due to the Global Positioning Software (GPS) services for Authority's assets.

**FACILITIES MANAGEMENT**

FY12 Final Current Expense Budget FACILITIES MANAGEMENT						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 391,067	\$ 426,137	\$ 477,655	\$ 402,856	\$ (74,799)	-15.7%
OVERTIME	21,347	20,268	16,019	23,000	6,981	43.6%
FRINGE BENEFITS	301	162	42	-	(42)	-100.0%
UTILITIES	132,126	125,725	136,412	135,526	(886)	-0.6%
ONGOING MAINTENANCE	15,549	23,377	69,965	45,900	(24,065)	-34.4%
TRAINING & MEETINGS	67	-	60	-	(60)	-100.0%
PROFESSIONAL SERVICES	-	-	-	-	-	-
OTHER MATERIALS	108,177	118,851	74,792	89,133	14,341	19.2%
OTHER SERVICES	1,845,590	1,724,406	1,776,235	1,878,128	101,893	5.7%
<b>TOTAL</b>	<b>\$ 2,514,224</b>	<b>\$ 2,438,926</b>	<b>\$ 2,551,180</b>	<b>\$ 2,574,543</b>	<b>\$ 23,363</b>	<b>0.9%</b>

FY12 Final Current Expense Budget FACILITIES MANAGEMENT SUPPORT by Area						
AREA	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
FRSA	\$ -	\$ -	\$ -	\$ -	\$ -	-
FACILITIES MANAGEMENT	2,097,649	1,992,825	2,055,084	-	(2,055,084)	-100.0%
ADMINISTRATIVE SERVICES	416,575	446,101	496,096	2,574,543	2,078,447	419.0%
<b>TOTAL</b>	<b>\$ 2,514,224</b>	<b>\$ 2,438,926</b>	<b>\$ 2,551,180</b>	<b>\$ 2,574,543</b>	<b>\$ 23,363</b>	<b>0.9%</b>

The **Facilities Management Department** provides a range of support services to MWRA staff located at the Charlestown Navy Yard (CNY).

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

In addition, staff provides administrative and office support services that facilitate efficient use of MWRA resources. These responsibilities include providing and managing the motor pools at Chelsea and CNY, general office equipment repairs, transportation, mail, and courier services. Staff coordinates MWRA parking programs and corporate MBTA pass programs.

**FY11 Accomplishments:**

- Continued work with the landlord to implement facility improvements as provided in our lease agreements for Charlestown Navy Yard headquarters.
- Completed work with MIS and equipment providers to implement multi-function technology for copiers and printers. By utilizing this technology it was possible to replace up to four individual units (printer, copier, scanner and fax) with one piece of equipment that performs all of these functions providing savings in floor space, power, equipment maintenance, and production costs (cost per page).

## **FY12 Goals:**

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

## **Budget Highlights:**

- The FY12 Final Budget is \$2.6 million, an increase of \$23,000 or 0.9%, as compared to FY11 Actual spending.
- \$403,000 for **Wages and Salaries**, a decrease of \$75,000 or 15.7%, as compared to the FY11 Actual spending. The budget supports seven positions.
- \$23,000 for **Overtime**, an increase of \$7,000 or 43.6% from FY11 Actual spending. This line item is for coverage of facility maintenance and support services.
- \$136,000 for **Utilities**, a decrease of \$1,000 or 0.6%, as compared to the FY11 Actual spending. This budget is based on current pricing and average energy use for the past three years.
- \$46,000 for **Ongoing Maintenance**, a decrease of \$24,000 or 34.4%, as compared to the FY11 Actual spending. This line item includes funding for facility and equipment maintenance and services including HVAC, plumbing and electrical services for the CNY headquarters and the Marlboro records center and warehouse.
- \$89,000 for **Other Materials**, an increase of \$14,000 or 19.2%, as compared to FY11 Actual spending. This line item includes funding for postage, supplies, furniture and equipment.
- \$1.9 million for **Other Services**, an increase of \$102,000 or 5.7%, as compared to FY11 Actual spending. This item includes funding for rental and operating costs for CNY headquarters facility and the Marlboro Records Center and Warehouse space. The increase is due to escalation increases in the CNY lease agreements.

## FLEET SERVICES

FY12 Final Current Expense Budget FLEET SERVICES							
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12		
WAGES & SALARIES	\$ 682,909	\$ 692,150	\$ 669,965	\$ 683,200	\$ 13,235	2.0%	
OVERTIME	19,718	14,321	14,157	17,800	3,643	25.7%	
FRINGE BENEFITS	401	136	110	1,000	890	809.1%	
UTILITIES	1,857	1,337	1,582	3,000	1,418	89.6%	
ONGOING MAINTENANCE	724,540	687,044	684,807	723,750	38,943	5.7%	
TRAINING & MEETINGS	-	-	-	-	-	-	
OTHER MATERIALS	451,210	374,876	501,346	553,702	52,356	10.4%	
OTHER SERVICES	3,069	664	772	4,539	3,767	488.0%	
<b>TOTAL</b>	<b>\$ 1,883,704</b>	<b>\$ 1,770,528</b>	<b>\$ 1,872,739</b>	<b>\$ 1,986,991</b>	<b>\$ 114,252</b>	<b>6.1%</b>	

The **Fleet Services Department** manages and maintains MWRA's motor vehicle and equipment fleet. The goal of the Fleet Services Department is to maintain MWRA's vehicle and equipment fleet to minimize downtime and extend the life of the assets. Fleet Services also manages the Chelsea fuel facility, the gas card program and the development and processing of specifications for new vehicles and equipment.

### FY11 Accomplishments:

- Developed specifications for 25 new replacement vehicles or pieces of equipment. Eighteen (18) of these units are alternative fuel or hybrid models, consistent with the Authority's goal of purchasing environmentally friendly products.
- As part of the Authority's environmental goals, four large diesel powered units were retrofitted with Diesel Oxidation Catalyst (DOC) devices. This project will help reduce the authority's carbon footprint.
- MWRA is rated as one of the largest bio-fuel users by the Massachusetts Alternative Fuel Coalition (MAFC). The Authority continues to fuel diesel powered vehicles/equipment with bio-diesel.
- Prepared the documentation for the surplus sale of 65 vehicles and pieces of equipment and worked with the Procurement Department for the auction and disposal of 40 + of these vehicles/equipment.
- Continue to work with MIS & Operations staff on the Maximo system upgrade which includes a transportation module specifically designed for a fleet environment.

Developed and continued implementing the Federal Communications Commission (FCC) mandated frequency re-banding project with Motorola and Nextel.

### FY12 Goals:

- Continue to cost effectively maintain Authority fleet of vehicles and pieces of equipment.

**Budget Highlights:**

- The FY12 Final Budget is \$2.0 million, an increase of \$114,000 or 6.1%, as compared to the FY11 Actual spending.
- \$683,000 for **Wages & Salaries**, an increase of \$13,000 or 2.0%, as compared to the FY11 Actual spending. The budget supports 11 positions.
- \$724,000 for **Ongoing Maintenance**, an increase of \$39,000 or 5.7%, as compared to FY11 Actual spending. The budget includes funds for automotive materials and services to maintain MWRA's vehicle fleet.
- \$554,000 for **Other Materials**, an increase of \$52,000 or 10.4%, as compared to FY11 Actual spending. The FY12 Budget includes funds for vehicle/equipment fueling which is based on historical fuel usage. Fleet Services procures bulk fuels from state contracts while continuing to meet all governmental alternative fuel directives. It should be noted that the volatility of fuel pricing could impact this line item.

## PROCUREMENT

FY12 Final Current Expense Budget PROCUREMENT						
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12	
WAGES & SALARIES	\$ 3,695,123	\$ 3,563,732	\$ 3,513,516	\$ 3,538,040	\$ 24,524	0.7%
OVERTIME	13,597	32,689	14,105	15,000	895	6.3%
FRINGE BENEFITS	231	602	167	-	(167)	-100.0%
UTILITIES	189	116	129	-	(129)	-100.0%
ONGOING MAINTENANCE	516,446	(338,576)	(199,828)	-	199,828	-100.0%
TRAINING & MEETINGS	7,184	3,066	4,462	7,725	3,263	73.1%
OTHER MATERIALS	118,932	112,590	120,162	84,608	(35,554)	-29.6%
OTHER SERVICES	64,184	61,373	63,530	73,370	9,840	15.5%
<b>TOTAL</b>	<b>\$ 4,415,886</b>	<b>\$ 3,435,592</b>	<b>\$ 3,516,243</b>	<b>\$ 3,718,743</b>	<b>\$ 202,500</b>	<b>5.8%</b>

The **Procurement Department** includes three units. The Purchasing Unit operates a competitive purchasing system for the procurement of materials, goods, and non-professional services in accordance with MWRA policies and procedures. The Contract Management Unit reviews, drafts, and negotiates contracts, amendments, and change orders for all professional, non-professional, and construction services contracts. Staff directs the bid, review, and selection process, and maintains a contracts database. The Materials Management Unit manages an Authority-wide inventory control and management system for better control, storage, distribution, and accounting of MWRA's inventory. The unit manages three regional warehouses/distribution centers that support all MWRA activities.

### FY11 Accomplishments

- Competitively bid CY10 Renewable Energy Portfolio Standard certificates which resulted in FY11 revenues of \$62,000 (Class I) and \$274,000 (Class II). In addition, received FY11 revenues of \$246,000 from forward marketing of CY10 (Class I) RPS certificates by MWRA's consultant.
- Awarded the following major contracts in FY11: Purchase and Supply of Electricity Interval Accounts; Remote Headworks Upgrade Design; Deer Island Treatment Plant (DITP) Thermal Power Plant Dump Condenser; Site Work and Excavation Shaft 5; Emergency Repair of 120 Inch Pipe Shaft 5; Harbor and Outfall Monitoring; Lynnfield/Saugus Pipelines; Section 36 Watertown Waltham Connection Design; JCWTP Ultraviolet Disinfection Facilities; DITP Human Machine Interface; CWTP Second Gaseous Oxygen Line; Staffing Study; Liquidity Facility for Variable Rate Bonds; Northern Intermediate High (NIH) Redundant Pipeline Design; DITP Digested Sludge Overflow Piping; Fore River Railroad License and Operating Agreement; Agency-wide Insurance; Meter 70 Water Main; Dam Repairs Sudbury et al.; Purchase and Supply of Electric Power DITP; and Section 156 Sewer Rehab (Everett) Design Build.
- Advertised or received bids/proposals/statements for the following: Spot Pond Storage Facility Design Build; DITP NMPS Variable Frequency Drives; DITP Air Emissions Testing; NIH Stoneham-Reading Connection; and Five Year Strategic Information Technology Plan.
- Began posting all contract opportunities on Comm-PASS, the state's internet-based procurement system. Professional service and energy procurement documents are posted on Comm-PASS. In addition, all bids for goods and services are posted on Comm-PASS. Began issuing construction addenda by electronic mail. These changes have contributed to a reduction in mailing expenses during FY11.
- Worked with FOD and utility companies to establish energy conservation programs at FOD facilities, using the Green Communities Act, the utilities' municipal programs, and other programs.

- Revised Authority's standard insurance terms for construction contracts. Also, reviewed and revised methods for determining insurance requirements on construction and non-professional services contracts. These changes continue to appropriately protect and indemnify the Authority while improving clarity and increasing competition.
- Participated in review of and revisions to methods for determining insurance requirements on construction and non-professional services contracts.
- Put in place alternative methods for procuring electricity (reverse auctions) and selling Renewable Portfolio Standard certificates (forward sales).
- Developed a procurement for the purchase of electric power for DITP, resulting in a two year contract.
- Working with DITP, developed a program for testing emerging technologies for treatment of biosolids; issued Request for Letters of Interest and received responses.
- Prepared and issued an RFQ for Spot Pond Storage Facility Design Build and selected firms eligible to submit proposals.
- Arranged for emergency and expedited contracts for MetroWest Shaft 5 and 5A repairs.
- Developed and bid a design/build contract for Section 156 Sewer Rehabilitation (Everett).
- Procured Authority's vehicle purchases at the beginning of Fiscal Year 2011, allowing for ample production and on-time delivery of 26 vehicles.
- Bid the annual copy paper contract and received a more favorable pricing than that listed on the State Blanket contract.
- Processed 9,873 purchase orders in FY11 for a total of \$40,356,878.
- Processed 128 competitive bids, 10 State blanket contracts, 8 contract amendments, 10 critical need and 28 sole source purchases (total 184) for items and services valued over \$25,000.
- Purchasing migrated to a dedicated printer/fax/scanner system that replaced the mechanical three-part colored form Purchase Order printer. Purchase orders will now be printed on plain paper and faxed directly from the machine, rather than mailed to vendors. Estimated cost savings are \$11,000 per year.
- Purchasing staff has worked with Materials Management to develop bid packages for large commodities in order to effectively capture all items in those commodities for bidding purposes. To date this method has been used for office supplies, safety supplies, automotive batteries, and janitorial supplies.
- Purchasing Staff, with the assistance of contract staff, redeveloped the bid package for Deer Island janitorial services into a hybrid contract/PO model.
- Purchasing developed a "Purchasing Procedures Quick Reference Guide" and distributed it to staff in departments involved in the purchasing process.
- Working with the Recycling committee, Purchasing staff continues to seek out environmentally friendly products, among them recycled toners, batteries, copy paper, hybrid vehicles, and bio-fuels.

- Recycled 52 tons of papers, 296 tons of scrap metal, and 7,823 gallons of waste oil, generating \$92,650 in revenues.

#### **FY12 Goals:**

- Procure materials, equipment, supplies, 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, and cost-effective management of spare parts and operating supplies inventory.
- Provide timely and high quality services to initiating divisions to enable MWRA programs to meet their public, production, and schedule responsibilities.
- Maintain a recycling program in order to contain MWRA operating costs by removing recyclable materials from the waste stream.

#### **Budget Highlights:**

- FY12 Final Budget of \$3.7 million, an increase of \$202,000 or 5.8%, as compared to the FY11 Actual spending. After excluding the FY11 effects of the warehouse receipt/disbursement of goods of \$200,000, the actual increase is \$3,000 or 0.1%.
- **Wages and Salaries** funding of \$3.5 million, an increase of \$25,000 or 0.7%, as compared to FY11 Actual spending. The funding supports 47 positions.
- **Other Materials** budget of \$85,000, a decrease of \$36,000 or 29.6% from FY11 Actual spending. This funding mainly supports centralized office supply purchases.
- **Other Services** budget of \$73,000, an increase of \$10,000 or 15.5% from FY11 Actual spending. This funding supports Advertising and Printing/Duplicating for contract documents and specifications.

**REAL PROPERTY and ENVIRONMENTAL MANAGEMENT**

FY12 Final Current Expense Budget REAL PROPERTY / ENVIRONMENTAL MANAGEMENT							
LINE ITEM	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Final	Change FY11 to FY12		
WAGES & SALARIES	\$ 529,345	\$ 549,584	\$ 448,967	\$ 457,946	\$ 8,979	2.0%	
OVERTIME	26	13	-	-	-	-	
TRAINING & MEETINGS	2,643	1,385	2,045	3,000	955	46.7%	
PROFESSIONAL SERVICES	-	-	-	500	500	-	
OTHER MATERIALS	2,264	691	668	1,970	1,302	194.9%	
OTHER SERVICES	157,094	213,014	2,041,138	220,976	(1,820,162)	-89.2%	
<b>TOTAL</b>	<b>\$ 691,372</b>	<b>\$ 764,687</b>	<b>\$ 2,492,818</b>	<b>\$ 684,392</b>	<b>\$ (1,808,426)</b>	<b>-72.5%</b>	

The **Real Property and Environmental Management Department** negotiates the purchase or lease of real estate and land necessary to support MWRA's capital projects and operations and manages the disposition of surplus real property. Staff participates in site selection and negotiates acquisitions or easements. In addition, staff has developed and is maintaining the Real Property database, the compilation of more than 100 years of easements and land rights for the water and sewer systems. Department staff manages environmental regulatory compliance at MWRA facilities and also provide special expertise and assistance to MWRA staff regarding air quality and hazardous material issues. Assistance includes management of oil and hazardous materials site assessment and remediation, air emission permit negotiations, and preparation and submittal of quarterly/annual monitoring reports.

**FY11 Accomplishments**

- Provided ongoing real estate services, including appraisal and negotiation, on projects such as the Fore River Railroad track relocation project, Charlestown Navy Yard lease, and Conley Terminal license.
- Managed nine (9) permit agreements (six at Turkey Hill and three at Walnut Hill). Coordinated with Operations for approval of equipment changes and improving invoicing system for maintenance reimbursements. Total revenue for the nine agreements is \$475,000 of which MWRA and the host community each receive half.
- Manage fee assessment for long term 8M permits on MWRA fee controlled land. 8M fees for these agreements total \$48,000 per year. Also provide assistance to Operations on short term 8M permit agreements in which fees are assessed.
- Staff acquired easements and negotiated licenses and extensions to support projects such as the Hultman Aqueduct Interconnections, Rehabilitation of Braintree-Weymouth Interceptor, Lynnfield-Saugus Pipeline, Southern Spine Distribution System, and Meter 32. At year's end, working on licenses with Berkeley Green (Section 156), Boston University (Brookline Conduit), and Wentworth and Mass College of Art (Ward Street Headworks). Provided real estate support on projects such as Cambridge CSOs and disposition of property at former East Boston Steam and Pump Stations.
- Provided real estate support services including deed research and coordination with Planning's Geographic Information System (GIS) group and Law to develop comprehensive property maps for the Cochituate, Sudbury, Weston Aqueducts, and other projects, such as Shafts 5 and 5A, as they arise. Provide daily assistance in concert with Law and GIS to ongoing inquiries regarding MWRA real estate rights and ownership.
- Completed a 13-year assessment and remediation project for oil contamination at Prison Point CSO Facility. Closed out the project with DEP.

- Continued with remediation and assessment of oil contamination at the FRSA facility.
- Provided technical support for the assessment and remediation of PCBs at the Alewife Brook Pump Station and Remote Headworks facilities in conjunction with ongoing design of facility upgrades.
- Third party inspections of all MWRA underground storage tanks were completed in accordance with 527 CMR 9.00. Completed fuel tank monitoring system upgrades at seven facilities and coordinated with SCADA support staff to provide real-time fuel tank system monitoring at wastewater and water OCC. Coordinated with Operations staff on new underground storage tank operator training requirements.
- Provided technical support and regulatory liaison for preparation and follow-up response to information requests for the Carroll Water Treatment Plant NPDES annual maintenance discharge application.
- Completed updates to Spill Prevention, Control and Countermeasure (SPCC) Plans for eight MWRA facilities and coordinated with Operations and Consultant to complete training of applicable staff. Prepared and implemented an annual inspection procedure for MWRA facilities with SPCC plans.
- Submitted registration applications to DEP for new dry wells for disposal of analyzer test water at Ludlow Monitoring Station and Ware Disinfection Facilities.
- Continued with DEP-required periodic groundwater monitoring around former wastewater holding tank at Clinton.
- Received from EPA the Hydroelectric Facility General Permit for the Cosgrove Intake Facility and Oakdale Power Station and coordinated with Quality Assurance (QA) and TRAC staff to implement monitoring and reporting requirements. In addition, as required by the new permits, completed new Best Management Practices Plans for both facilities.
- Provided technical and environmental regulatory support regarding contaminated soil and groundwater issues on various design and construction projects, including Stoneham Low Service Covered Storage, Charlestown Wind Turbine, Water Pump Station and Remote Headworks Rehabilitation, East Boston Branch Sewer, North Dorchester Bay CSO Tunnel, Contract 6546 Arlington, Section 18, 50, and 51 water line rehabilitation, MWWST Shaft W soil and groundwater evaluation, Dam Repair and Safety Modifications, Quabbin Facility upgrades, Shaft 5 – Weston repair support projects, Deer Island Prototype Wind Turbines, Southern Spine Distribution Mains, West Roxbury Tunnel, Northern Intermediate High Short Term Improvements and Redundancy projects, Section 36 Watertown-Waltham Connection, DITP Underground Storage Tank (UST) Removals, Oakdale Power Station Electrical Upgrade, Phase VII Valve Replacements, Lynnfield/Saugus Pipeline, Sudbury Cosgrove Transformer Replacement, and Cottage Farm Oil Spill Regulatory Follow-up and the related fuel system upgrade project, Section 156 Sewer Rehabilitation, Section 624 Sewer rehabilitation, and scope preparation for an Authority-wide emergency response contract.
- Completed air emissions source testing for the Deer Island North Main Pumping Odor Control facility and the FRSA Biosolids Processing Facility. Submitted comments to EPA and NACWA on the proposed air emissions requirements for boilers. Completed the biennial rideshare survey and annual rideshare report for Deer Island.

**FY12 Goals:**

- Acquire the real property needed to complete MWRA's major capital projects in a timely and cost-effective manner; manage the disposition of surplus real property in an efficient manner; and provide staff and others with current information regarding MWRA's real property rights.

- Manage the centralized environmental management program, providing technical assistance regarding hazardous waste management, air quality compliance, and related issues during all phases of MWRA projects; monitor and provide assistance in maintaining environmental regulatory compliance at MWRA facilities.

#### **FY12 Initiatives**

- Review DEP requirements for underground storage tank operator training and coordinate with Operations staff to complete training and implement associated monitoring and recordkeeping requirements.
- Review new boiler and emergency generator air emissions regulations and coordinate implementation of monitoring, maintenance, and recordkeeping requirements.

#### **Budget Highlights:**

- FY12 Final Budget of \$684,000 represents a decrease of \$1.8 million or 72.5%, as compared to FY11 Actual spending.
- \$458,000 for **Wages and Salaries**, an increase of \$9,000 or 2.0%, as compared to FY11 Actual spending. The budget supports five positions.
- \$221,000 for **Other Services**, a decrease of \$1.8 million or 89.2%, as compared to FY11 Actual spending. This decrease is due to a FY11 year-end accounting adjustment pursuant to GASB49, Financial Reporting for Pollution Remediation Obligation. The FY11 Actual spending includes estimates for future environmental remediation liabilities that have been identified in FY11 but for which costs have not been incurred yet. The FY11 Actual spending for the Other Services line item without GASB49 adjustment totaled \$256,000. The \$221,000 budgeted for FY12 is a decrease of \$35,000 or 13.7%.